



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

**Ohio's
2008 Revised Lead Standard
Recommended Designations and
Nonattainment Boundaries**

Prepared by:
The Ohio Environmental Protection Agency
Division of Air Pollution Control

October 5, 2009

[This page intentionally left blank]

Acknowledgement

The Ohio EPA, Division of Air Pollution Control would like to express appreciation for the extensive efforts, guidance and expertise provided by the Ohio Department of Development, Office of Strategic Research staff, especially Ed Simmons. The level of detailed county-specific information provided in this document would not have been possible without Mr. Simmons' efforts and timely assistance.

[This page intentionally left blank]

Table of Contents

An Explanation of Ohio EPA's Analysis	1
Discussion of Eight-Factor Analyses	3
Factor 1: Emissions in areas potentially included versus excluded from the nonattainment area	3
Factor 2: Air quality in potentially included versus excluded areas	11
Factors 3 and 4: Population density and degree of urbanization including commercial development in included versus excluded areas, and expected growth (including extent, pattern and rate of growth)	12
Factor 5: Meteorology (weather/transport patterns).....	13
Factor 6: Geography/topography (mountain ranges or other air basin boundaries).....	14
Factor 7: Jurisdictional boundaries (e.g., counties, air districts, Reservations, etc.).....	14
Factor 8: Level of control of emission sources.....	14
Factor Analysis	18
Counties with Monitor(s) Exceeding the Lead NAAQS.....	18
Cuyahoga County, OH.....	19
Fulton County, OH	31
Logan County, OH	39
Counties with All Monitors Meeting the Lead NAAQS	49
Butler County, OH.....	50
Columbiana County, OH	52
Franklin County, OH	55
Washington County, OH	57
Counties Currently without Monitors, but with Future Monitors to be Installed for the Lead NAAQS	59
Marion County, OH	60
Stark County, OH.....	61
Trumbull County, OH.....	63
Hamilton County, OH.....	65
Lucas County, OH	66
Mahoning County, OH	67
Montgomery County, OH	68
Summit County, OH.....	70

List of Appendices

- A - Detailed lead emissions inventories
- B - Stationary source categories that have the largest emissions in the 2002 NEI
- C - Air Quality System (AQS) data sheets
- D - SLAMS 2008 lead certification
- E - Population and urbanization maps
- F - Geography and topography maps
- G - Jurisdiction boundary maps
- H - Spatial interpolation analysis for Cuyahoga County
- I - Dispersion modeling and historic monitoring data analysis for Fulton County
- J - Dispersion modeling and historic monitoring data analysis for Logan County
- K - Public notice, public hearing, and response to comments documentation

An Explanation of Ohio EPA's Analysis

Promulgated on October 15, 2008 and effective January 12, 2009, U.S. EPA strengthened the national ambient air quality standard (NAAQS) for lead from 1.5 ug/m³ to 0.15 ug/m³ [73 FR 66964]. Ohio currently has no counties designated nonattainment for lead.

As part of the promulgation of this revised standard, an expanded monitoring network is being deployed by states. Ohio currently has a network of 17 lead monitors that have been in place for a number of years. This expanded monitoring network will contain both:

- Source-specific monitors sited at: facilities with lead actual emissions greater than one ton per year; facilities with less than one ton per year of actual lead emissions where dispersion modeling identified the potential for emissions to contribute to 50 percent of the lead standard in air; and facilities where existing monitors have shown a violation of the new standard, as a three-month rolling average, during 2006, 2007 or 2008; and
- Urban areas with populations greater than 500,000 persons.

In July, 2009, Ohio EPA submitted a proposed monitoring network design plan to U.S. EPA. Of the 17 current lead monitors, Ohio EPA proposed to retain 13¹. In addition to those monitors, Ohio EPA will be adding four new source-specific monitors. These new monitors will begin collecting data in January 2010.

U.S. EPA intends to make initial designations as expeditiously as possible in areas where monitoring data is currently sufficient, or will be sufficient in the immediate future, to accurately characterize the areas as either not attaining or attaining. U.S. EPA also anticipates States may not have sufficient information to make such a determination and advises states to identify such areas as "unclassifiable."

Initial designations are due by October 15, 2009. This submittal is Ohio's recommendation for these initial designations. U.S. EPA will then have one year to promulgate the final initial designations. After the collection of more complete monitoring data based upon the expanded monitoring network, additional designations will occur (must be promulgated by no later than October 15, 2011).

In addition to recommended designations, suggested nonattainment area boundaries are provided with this submittal. U.S. EPA presumptively defines the boundary for a lead nonattainment area as the perimeter of the county associated with a violating air quality monitor. However, U.S. EPA does provide states with the ability to conduct additional area-specific analyses that could lead to a departure from the presumptive county boundary. Such an analysis, or demonstration, must consider the following eight factors:

¹ The Daido facility in Bellefontaine, OH was monitored by five different monitors. The facility is in the process of closing; however, Ohio EPA has suggested to continue monitoring this location using one of the five monitors.

1. Emissions in areas potentially included versus excluded from the nonattainment area;
2. Air quality in potentially included versus excluded areas;
3. Population density and degree of urbanization including commercial development in included versus excluded areas;
4. Expected growth (including extent, pattern and rate of growth);
5. Meteorology (weather/transport patterns);
6. Geography/topography (mountain ranges or other air basin boundaries);
7. Jurisdictional boundaries (e.g., counties, air districts, Reservations, etc.); and
8. Level of control of emission sources.

A demonstration supporting the departure must show both that violations(s) are not occurring in the excluded portions of the county and that the excluded portions are not source areas that contribute to the observed violations. U.S. EPA further provides that states may, in addition to submitting recommendations based on the factor analysis, also choose to recommend lead nonattainment boundaries using any one, or a combination of the following techniques, which will be considered in the process:

- Qualitative analysis;
- Spatial interpolation of air quality monitoring data; or
- Air quality simulation by dispersion modeling.

Each of these three approaches is described more fully in "Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or PM10 Data," December 1986 [57 Fr 13549].

Ohio EPA's analysis is of each county currently containing a lead monitor and each county for which a monitor will be located as part of the expanded monitoring network. For Counties with sufficient monitoring data to demonstrate attainment or nonattainment, Ohio EPA has suggested the appropriate designation based on the monitoring data. For Counties lacking sufficient information, Ohio EPA has suggested such areas be identified as unclassifiable. Where Ohio EPA is not suggesting a boundary of the presumptive county perimeter, analyses of the eight factors (described below), and when necessary, one or more of the three techniques identified above, is included in this document. For Counties not addressed in this document, Ohio EPA is suggesting designations of attainment based on no monitors being located within those Counties and no monitors planned for location within those Counties.

Discussion of Eight-Factor Analyses

Factor 1: Emissions in areas potentially included versus excluded from the nonattainment area

The analysis for factor 1 looks at emissions of lead from Ohio sources contained in the 2005 national emissions inventory (NEI) and 2005 toxics release inventory (TRI) (air emissions only). Also included in this factor are tables showing any stationary source with actual lead emissions greater than 0.50 tons per year (TPY) from either inventory. U.S. EPA has stated that lead emissions do not generally transport over long distances. The county-level presumption is based on a possibility that a number of smaller sources may collectively contribute to an exceedance of the NAAQS. Detailed inventory data are contained in Appendix A.

The detailed factor analysis later in this document discusses emissions for certain specific counties; however, Ohio has provided a summary of all state-wide and national lead emissions information below. These summaries also include sources less than 0.50 TPY.

Based upon Ohio point sources in the 2005 NEI, the following emissions of lead are applicable to each of Ohio's Counties (from largest to smallest emissions):

County	TPY	County	TPY
Cuyahoga	3.48	Wood	0.036
Jefferson	1.35	Ashtabula	0.036
Trumbull	0.27	Richland	0.035
Noble	0.68	Greene	0.031
Lorain	0.66	Carroll	0.026
Auglaize	0.61	Gallia	0.023
Lucas	0.59	Jackson	0.020
Morgan	0.58	Perry	0.019
Summit	0.53	Athens	0.017
Columbiana	0.52	Erie	0.016
Washington	0.48	Medina	0.016
Stark	0.46	Wyandot	0.016
Wayne	0.44	Warren	0.016
Franklin	0.39	Hancock	0.014
Hamilton	0.37	Portage	0.011
Lake	0.32	Preble	0.011
Scioto	0.30	Clark	0.011
Fulton	0.29	Pike	0.010
Coshocton	0.27	Madison	0.010
Paulding	0.17	Harrison	0.009
Logan	0.17	Champaign	0.008
Marion	0.16	Shelby	0.007
Montgomery	0.15	Delaware	0.007
Fairfield	0.12	Sandusky	0.006
Adams	0.11	Union	0.006
Clermont	0.11	Crawford	0.005

County	TPY	County	TPY
Ross	0.10	VanWert	0.004
Defiance	0.44	Putnam	0.003
Pickaway	0.088	Huron	0.002
Tuscarawas	0.087	Mercer	0.002
Butler	0.073	Geauga	0.002
Mahoning	0.072	Miami	0.001
Hocking	0.069	Allen	0.001
Licking	0.062	Lawrence	0.001
Muskingum	0.062	Ashland	0.000
Ottawa	0.059	Knox	0.000
Belmont	0.051	Fayette	0.000
Guernsey	0.050	Darke	0.000
Williams	0.046	Monroe	0.000
Seneca	0.040	Henry	0.000
Clinton	0.040	Hardin	0.000
		Vinton	0.000

Total 2005 NEI point source emissions in Ohio are 15.36 TPY².

Based upon Ohio point sources in the 2005 TRI, the following emissions of lead are applicable to each of Ohio's Counties (from largest to smallest emissions):

County	TPY	County	TPY
Cuyahoga	4.29	Williams	0.046
Trumbull	2.65	Clinton	0.045
Butler	1.63	Guernsey	0.045
Jefferson	1.37	Ashtabula	0.031
Stark	1.24	Seneca	0.027
Lorain	1.22	Carroll	0.026
Gallia	0.41	Jackson	0.020
Washington	0.92	Pike	0.018
Summit	0.83	Greene	0.018
Wayne	0.71	Pickaway	0.016
Noble	0.68	Warren	0.016
Coshocton	0.66	Erie	0.015
Auglaize	0.61	Wyandot	0.015
Morgan	0.57	Medina	0.012
Montgomery	0.52	Preble	0.011
Miami	0.51	Clark	0.011
Franklin	0.51	Portage	0.010
Licking	0.49	Hancock	0.010
Clermont	0.47	Madison	0.010
Lucas	0.47	Paulding	0.010
Adams	0.43	Delaware	0.007
Scioto	0.43	Monroe	0.007

² Ohio has submitted revised NEI numbers for several Ohio facilities as part of the monitoring planning process. These revised numbers may not be reflected in the most current 2005 NEI available on U.S. EPA's website at this time.

County	TPY	County	TPY
Shelby	0.42	Sandusky	0.005
Hamilton	0.41	Crawford	0.005
Fulton	0.38	VanWert	0.004
Defiance	0.37	Union	0.003
Henry	0.35	Mercer	0.002
Lake	0.22	Geauga	0.002
Muskingum	0.20	Huron	0.002
Columbiana	0.17	Allen	0.000
Logan	0.17	Putnam	0.000
Marion	0.16	Champaign	0.000
Ashland	0.15	Hardin	0.000
Ross	0.14	Athens	0.000
Mahoning	0.13	Darke	0.000
Fairfield	0.12	Fayette	0.000
Richland	0.12	Harrison	0.000
Wood	0.11	Knox	0.000
Ottawa	0.089	Lawrence	0.000
Tuscarawas	0.064	Perry	0.000
Hocking	0.060	Vinton	0.000
Belmont	0.053		

Total 2005 TRI point source emissions in Ohio are 25.98 TPY³.

The following table compares the 2005 NEI and TRI lead emissions for each county and provides a state-wide total.

COUNTY	2005 NEI (TPY)	2005 TRI (TPY)	DIFFERENCE (TRI - NEI) (TPY)
Adams	0.108	0.429	0.321
Allen	0.001	0.000	0.000
Ashland	0.000	0.152	0.152
Ashtabula	0.036	0.031	-0.005
Athens	0.017	0.000	-0.017
Auglaize	0.613	0.613	0.000
Belmont	0.051	0.053	0.002
Butler	0.073	1.630	1.557
Carroll	0.026	0.026	0.000
Champaign	0.008	0.000	-0.007
Clark	0.011	0.011	0.000
Clermont	0.106	0.475	0.369
Clinton	0.040	0.045	0.005

³ Ohio has corrected TRI numbers for several Ohio facilities based upon information supplied by the facility provided such corrections were consistent with the NEI corrections noted under footnote 2.

COUNTY	2005 NEI (TPY)	2005 TRI (TPY)	DIFFERENCE (TRI - NEI) (TPY)
Columbiana	0.518	0.174	-0.344
Coshocton	0.273	0.659	0.386
Crawford	0.005	0.005	0.000
Cuyahoga	3.478	4.293	0.816
Darke	0.000	0.000	0.000
Defiance	0.437	0.369	-0.068
Delaware	0.007	0.007	0.000
Erie	0.016	0.015	-0.001
Fairfield	0.124	0.124	-0.001
Fayette	0.000	0.000	0.000
Franklin	0.388	0.506	0.117
Fulton	0.288	0.383	0.094
Gallia	0.023	0.413	0.391
Geauga	0.002	0.002	0.000
Greene	0.031	0.018	-0.013
Guernsey	0.050	0.045	-0.006
Hamilton	0.374	0.410	0.036
Hancock	0.014	0.010	-0.004
Hardin	0.000	0.000	0.000
Harrison	0.009	0.000	-0.009
Henry	0.000	0.346	0.345
Hocking	0.069	0.060	-0.008
Huron	0.002	0.002	0.000
Jackson	0.020	0.020	0.000
Jefferson	1.352	1.373	0.020
Knox	0.000	0.000	0.000
Lake	0.322	0.222	-0.100
Lawrence	0.001	0.000	-0.001
Licking	0.062	0.486	0.424
Logan	0.171	0.171	0.000
Lorain	0.659	1.218	0.559
Lucas	0.586	0.471	-0.115
Madison	0.010	0.010	0.000
Mahoning	0.072	0.134	0.062
Marion	0.164	0.158	-0.006
Medina	0.016	0.012	-0.004
Mercer	0.002	0.002	0.000
Miami	0.001	0.511	0.509
Monroe	0.000	0.007	0.006
Montgomery	0.152	0.525	0.373

COUNTY	2005 NEI (TPY)	2005 TRI (TPY)	DIFFERENCE (TRI - NEI) (TPY)
Morgan	0.576	0.568	-0.008
Muskingum	0.062	0.204	0.142
Noble	0.683	0.683	0.000
Ottawa	0.059	0.089	0.030
Paulding	0.173	0.010	-0.164
Perry	0.019	0.000	-0.019
Pickaway	0.088	0.016	-0.072
Pike	0.010	0.018	0.008
Portage	0.011	0.010	-0.001
Preble	0.011	0.011	0.000
Putnam	0.003	0.000	-0.002
Richland	0.035	0.124	0.089
Ross	0.101	0.140	0.039
Sandusky	0.006	0.005	0.000
Scioto	0.303	0.428	0.126
Seneca	0.040	0.027	-0.013
Shelby	0.007	0.415	0.408
Stark	0.455	1.240	0.785
Summit	0.528	0.832	0.304
Trumbull	0.266	2.649	2.383
Tuscarawas	0.087	0.064	-0.023
Union	0.006	0.003	-0.002
VanWert	0.004	0.004	0.000
Vinton	0.000	0.000	0.000
Warren	0.016	0.016	0.000
Washington	0.483	0.923	0.440
Wayne	0.443	0.714	0.271
Williams	0.046	0.046	0.000
Wood	0.036	0.105	0.069
Wyandot	0.016	0.015	-0.001
TOTALS	15.358	25.980	10.621

As part of the review for the new lead standard, U.S. EPA analyzed sources of lead across the country, primarily based upon the 2002 National NEI⁴. The remainder of this section provides a brief overview of U.S. EPA's findings.

⁴ U.S. EPA's "Review of the National Ambient Air Quality Standard for Lead: Policy Assessment of Scientific and Technical Information," November 2007.

Point source emissions account for about 66% of the national lead emissions in the 2002 NEI. The point source emissions are roughly split between combustion and industrial processes, while mobile and nonroad sources (emissions associated with general aviation aircraft leaded fuel) account for 29%.

The following table summarizes the largest stationary source category emitters nationwide (based upon the 2002 NEI):

Source Category Description	Total Emissions (tpy) ^a
ALL CATEGORIES ^b	1,697 ^b
Mobile sources	491 ^c
Industrial/Commercial/ Institutional Boilers & Process Heaters	190
Utility Boilers	168 ^d
Iron and Steel Foundries	110
Primary Lead Smelting	59
Hazardous Waste Incineration	47
Secondary Lead Smelting	43
Military Installations	33
Municipal Waste Combustors	33
Integrated Iron & Steel Manufacturing	32
Pressed and Blown Glass and Glassware Manufacturing	32
Stainless and Non Stainless Steel Manufacturing: EAF	32
Mining	31
Lead Acid Battery Manufacturing	27
Secondary Nonferrous Metals	24
Portland Cement Manufacturing	22
Primary Copper Smelting	22
Primary Metal Products Manufacturing	21
Industrial and Commercial Machinery Manufacturing	18
Fabricated Metal Products Manufacturing	14
Electrical and Electronics Equipment Manufacturing	12
Waste Disposal - Solid Waste Disposal	11
Industrial Inorganic Chemical Manufacturing	10
Pulp & Paper Production	10
Sewage Sludge Incineration	10
Mineral Products Manufacturing	9
Secondary Aluminum Production	9
Synthetic Rubber Manufacturing	9
Secondary Copper Smelting	8
Transportation Equipment Manufacturing	8
Ferroalloys Production	7
Nonferrous Foundries	7
Stationary Reciprocating Internal Combustion Engines	7
Commercial and Industrial Solid Waste Incineration	6
Primary Nonferrous Metals--Zinc, Cadmium and Beryllium	6
Residential Heating	6
Asphalt Processing and Asphalt Roofing Manufacturing	5

^aSome values here differ from those in the CD (Table 2-8) due to changes in the 2002 NEI subsequent to CD publication. Additionally, values just above 5 tpy have been rounded to 5.
^bIncludes 91 tpy Pb emissions from 109 smaller categories (57 tpy in MACT categories and 34 tpy in non MACT).
^cThis value is not yet reflected in 2002 NEI (vers 3); it will be reflected in version 4, estimated for 2008 release.
^dThis estimate of 168 tons, which is based on the 2002 NEI, has uncertainties and differs from estimates in some other studies and inventories. For example, the estimated lead emissions reported to the U.S. EPA's Toxic Release Inventory for year 2004 is about 90 tons for this sector, and the projected estimate for year 2010 presented in the 1998 EPA Utility Air Toxics Study Report to Congress (U.S. EPA, 1998) is 92 tons.

Source: Table 2-2. Source categories emitting greater than 5 tpy of Pb in the 2002 NEI. U.S. EPA's "Review of the National Ambient Air Quality Standard for Lead: Policy Assessment of Scientific and Technical Information," November 2007.

As can be seen from the above, the main stationary sources of emissions in the 2002 NEI are comprised primarily of combustion-related emissions and industrial process-related emissions. Stationary source categories that have the largest emissions in the 2002 NEI are summarized in Appendix B⁵.

Another source of lead emissions is from certain mobile and nonroad sources. While lead is not added to jet fuel that is used in commercial aircraft, military aircraft, or other turbine engine aircraft, currently lead is still added to aviation gasoline used in most piston-engine aircraft and some types of race cars (which use alkyl-lead additives to boost octane).

Currently, there are two main types of leaded aviation gasoline that differ in lead content (1.12 grams lead per liter (g Pb/L) vs. 0.56 g Pb/L) with the majority used being comprised of the lower lead content aviation gasoline. In 2002 approximately 280 million gallons of aviation gasoline were supplied nationwide contributing an estimated 491 tons of lead to the air and comprising 29% of the national lead inventory. Of the 491 tons of lead nationwide from aviation gasoline, Ohio was apportioned 16.93 TPY in the 2002 NEI. In comparison as seen above, emissions of lead from Ohio's stationary (point) sources comprised 15.36 TPY in 2005 (NEI).

The 2002 NEI apportioned lead emissions to the following Ohio nonroad mobile sources:

Source Classification			Pollutant	Annual Emissions (TPY)
Aircraft	General Aviation	Total	LEAD & COMPOUNDS	16.93
Railroad Equipment	Diesel	Line Haul Locomotives: Class I Operations	LEAD & COMPOUNDS	0.055
Marine Vessels, Commercial	Diesel	Port emissions	LEAD	0.036
Marine Vessels, Commercial	Diesel	Underway emissions	LEAD	0.023
Railroad Equipment	Diesel	Yard Locomotives	LEAD & COMPOUNDS	0.0077
Marine Vessels, Commercial	Residual	Total, All Vessel Types	LEAD	0.0057
Railroad Equipment	Diesel	Line Haul Locomotives: Passenger Trains (Amtrak)	LEAD & COMPOUNDS	0.0015
Railroad Equipment	Diesel	Line Haul Locomotives: Class II / III Operations	LEAD & COMPOUNDS	0.0003

⁵ Appendix 2A of U.S. EPA's "Review of the National Ambient Air Quality Standard for Lead: Policy Assessment of Scientific and Technical Information," November 2007.

The 2002 NEI apportioned lead emissions to the following Ohio nonpoint (or area) sources:

Source Classification				Pollutant	Annual Emissions (TPY)
Stationary Source Fuel Combustion	Residential	Distillate Oil	Total: All Combustor Types	Lead	0.097
Stationary Source Fuel Combustion	Residential	Natural Gas	Total: All Combustor Types	Lead	0.08
Stationary Source Fuel Combustion	Industrial	Distillate Oil	Total: Boilers and IC Engines	Lead	0.07
Stationary Source Fuel Combustion	Commercial/Institutional	Distillate Oil	Total: Boilers and IC Engines	Lead	0.05
Industrial Processes	Mineral Processes: SIC 32	Concrete, Gypsum, Plaster Products	Total	Lead	0.043
Stationary Source Fuel Combustion	Industrial	Natural Gas	Total: Boilers and IC Engines	Lead	0.038
Stationary Source Fuel Combustion	Commercial/Institutional	Natural Gas	Total: Boilers and IC Engines	Lead	0.036
Stationary Source Fuel Combustion	Industrial	Residual Oil	Total: All Boiler Types	Lead	0.029
Stationary Source Fuel Combustion	Residential	Liquified Petroleum Gas (LPG)	Total: All Combustor Types	Lead	0.026
Stationary Source Fuel Combustion	Industrial	Waste oil	Total	Lead	0.02
Stationary Source Fuel Combustion	Commercial/Institutional	Bituminous/Subbituminous Coal	Total: All Boiler Types	Lead	0.02
Stationary Source Fuel Combustion	Residential	Kerosene	Total: All Heater Types	Lead	0.011
Waste Disposal, Treatment, and Recovery	On-site Incineration	Commercial/Institutional	Total	Lead	0.007
Miscellaneous Area Sources	Other Combustion	Cremation	Humans	Lead	0.007
Stationary	Residential	Anthracite	Total: All	Lead	0.0054

Source Classification				Pollutant	Annual Emissions (TPY)
Source Fuel Combustion		Coal	Combustor Types		
Stationary Source Fuel Combustion	Industrial	Kerosene	Total: All Boiler Types	Lead	0.0052
Stationary Source Fuel Combustion	Residential	Bituminous/Subbituminous Coal	Total: All Combustor Types	Lead	0.005
Miscellaneous Area Sources	Other Combustion	Cremation	Animals	Lead & Compound	0.004
Stationary Source Fuel Combustion	Commercial/Institutional	Kerosene	Total: All Combustor Types	Lead	0.0037
Stationary Source Fuel Combustion	Commercial/Institutional	Liquified Petroleum Gas (LPG)	Total: All Combustor Types	Lead	0.00069
Stationary Source Fuel Combustion	Commercial/Institutional	Anthracite Coal	Total: All Boiler Types	Lead	0.00045
Stationary Source Fuel Combustion	Industrial	Anthracite Coal	Total: All Boiler Types	Lead	0
Stationary Source Fuel Combustion	Industrial	Bituminous/Subbituminous Coal	Total: All Boiler Types	Lead	0

U.S. EPA also found another significant source of lead emissions in the resuspension of soil-bound lead particles and contaminated road dust.⁶ Studies of emissions in southern California indicate that lead in resuspended road dust may represent between 40% and 90% of lead emissions in that area. In general, resuspension is typically initiated by vehicular traffic, construction and agricultural operations, and to a lesser extent, the wind. Lead resuspended in soil near roadways that was in place during the use of leaded gasoline may be a notable emissions source if or when such soil is disturbed (e.g., road widening or building construction).

Factor 2: Air quality in potentially included versus excluded areas

The revised lead standard is 0.15 ug/m³. The air quality analysis looks at the rolling three-month average values for each monitor for 2006 to 2008. For each evaluated year, twelve rolling three-month averages are computed starting with November of the preceding year and ending with December of the year being evaluated.

40 CFR Part 50, Appendix R provides the computation methods for the lead standard. This regulation requires individual samples be analyzed and a monthly

⁶ Quantitative estimates of resuspension-related emissions are not included in the 2002 NEI.

mean computed. Under the old lead standard, Ohio EPA analyzed samples using a monthly composite method. Therefore, the historical data represented in this document uses the monthly composite values to compute the rolling three-month values.

Compliance with the lead standard is determined over a three-calendar year period. Any one exceedance of a three-month average during this period indicates an exceedance of the lead standard.

The three-month averages, evaluated over a three-calendar year period, for monitors that are violating the standard are highlighted in red. Monitoring sites that were missing one or months of a composite analysis in any three-month period are highlighted in yellow.

Data is retrieved from the U.S. EPA's Air Quality System (AQS) at <http://www.epa.gov/ttn/airs/airsaqs/> and is presented in $\mu\text{g}/\text{m}^3$ in all tables. AQS data retrieval sheets are provided in Appendix C. The State and local air monitoring stations (SLAMS) data certification report for calendar year 2008 is provided in Appendix D.

Factors 3 and 4: Population density and degree of urbanization including commercial development in included versus excluded areas, and expected growth (including extent, pattern and rate of growth)

Ohio EPA has combined these two factors in the discussions below. Tables presented under factors 3 and 4 show the past, present, and projected population for each county. Population data and expected growth indicate the likelihood of population-based emissions that may contribute to violations. The population data are provided by the Ohio Department of Development, Office of Strategic Research (<http://www.odod.state.oh.us/research/>), the U.S. Census Bureau (<http://www.census.gov/>), and Ohio State University's Exurban Exchange Program (<http://exurban.osu.edu/index.htm>). Appendix E provides more detailed population data for all 88 Counties in Ohio.

Tables presented under factors 3 and 4 show the land use/land cover for each county in percentage of urban (residential, commercial, industrial, transportation, grasses), cropland, pasture, forest, and wetlands (all types). The source of this is the Ohio EPA, Division of Surface Water [ftp://ftp-gis.epa.state.oh.us/gisdepot/gisdata/dsw/LandCover/Statewide Land Cover DSW pub 2005.pdf](ftp://ftp-gis.epa.state.oh.us/gisdepot/gisdata/dsw/LandCover/Statewide_Land_Cover_DSW_pub_2005.pdf). Urbanized area maps are also provided in Appendix E for select Counties. The source of this information is from the U.S. Census Bureau's website <http://www.census.gov/geo/www/maps/ua2kmaps.htm>.

Factor 5: Meteorology (weather/transport patterns)

The meteorology review looks at wind data gathered at stations in and near Ohio by the National Weather Service (NWS). Figures presented for factor 5 indicate the annual average winds for each NWS site. These data may also suggest that emissions in some directions relative to the violation may be more prone to contribute than emissions in other directions.

Ohio is located in what is meteorologically termed the Mid-Latitudes. For pollutant dispersion, the most important meteorological parameter is wind speed and wind direction. In this region, surface weather systems predominantly travel from west to east, guided by either the sub-tropical or polar jet streams. The resulting surface transport winds associated with these systems will generally have a western component with additional southern components in the summer and northern components in the winter, although, on any given day, winds can blow from any direction.

Discussions regarding this factor will show representative wind roses for several locations in-and-around Ohio. The regional nature of mid-latitude wind distributions may best be represented by the Columbus and Dayton airport wind roses. Columbus and Dayton are located in a relatively flat area in the central part of the State, generally unaffected by significant orographic or other surface features (e.g., Lake Erie).

These general wind patterns can be modified by two general geographic features. Ohio is bounded on the north by Lake Erie which can provide localized modifications to the general flow, primarily by the introduction of land breezes and lake breezes along the Lake during periods of low synoptic wind speeds. These effects would best be represented by the Toledo and Cleveland airport wind roses.

The second major geographic feature affecting winds in Ohio is the hilly terrain located in the east, south and southeast portions of the State. While the remainder of the State is primarily agricultural, these portions of the State, which represent the foot hills of the Appalachians, have significant forested areas which modify the surface roughness lengths and can impact wind speed and wind direction. The Covington, Huntington and Pittsburgh airport wind roses best illustrate the range of deviations that can occur, as compared to the Columbus and Dayton examples.

As stated above, at any location within the State, winds can blow from any direction. Any given period could have average winds from any direction, thus making counties in all directions from the urban industrial core area potentially important emission source areas.

Factor 6: Geography/topography (mountain ranges or other air basin boundaries)

The geography/topography analysis looks at physical features that might have an effect on the airshed and, therefore, the distribution of pollutants over an area. Ohio does not have significant topographic features that significantly influence the regional transport of pollutants within the study areas. Maps for this section are provided in Appendix F. The sources for the information provided in this section are:

Ohio Department of Natural Resources, Division of Soil and Water
<http://www.dnr.state.oh.us/default/soils/surveysupplements/tabid/17839/Default.aspx>

Ohio Department of Development, Office of Strategic Research
<http://www.odod.state.oh.us/research/files/s0.htm>

Factor 7: Jurisdictional boundaries (e.g., counties, air districts, Reservations, etc.)

The analysis of jurisdictional boundaries looks at the planning and organizational structure of an area to determine if the implementation of controls in a potential nonattainment area can be carried out in a cohesive manner.

The goals of the Clean Air Act and air quality planning are administered by the Ohio EPA Central Office in conjunction with Ohio EPA District Offices and local air agencies (DO/LAA). The LAAs contract with Ohio EPA to perform the same functions as the DOs, but typically for smaller geographic regions. A map of the DO/LAAs can be found at: <http://www.epa.state.oh.us/dapc/general/dolaa.html>.

A map showing the (Metropolitan Statistical Areas (MSAs) and Combined Statistical Areas (CSAs) in Ohio and a Metropolitan Planning Organization (MPO) map are provided in Appendix G. For information on the metropolitan planning organizations referenced in this document, please see: <http://www.odotnet.net/Planning/ACCESS%20OHIO/Final/AppendixB.pdf>.

However, because U.S. EPA has stated that lead emissions do not generally transport over long distances and there is a county-level presumption, this factor will not require great consideration.

Factor 8: Level of control of emission sources

As part of the review for the new lead standard, U.S. EPA analyzed lead emission trends across the country, primarily based upon the 2002 NEI⁷. This section provides a brief overview of U.S. EPA's findings.

⁷ U.S. EPA's "Review of the National Ambient Air Quality Standard for Lead: Policy Assessment of Scientific and Technical Information," November 2007.

U.S. EPA found there has been a downward trend in lead emissions from the fuel combustion, industrial process and solid waste sectors from 1980 through 2002, as well as the dramatic reduction in lead emissions in the transportation sector due to the removal of lead from gasoline. Thirty-five years ago, combustion of leaded gasoline was the main contributor of lead to the air. In the early 1970s, EPA set national regulations to gradually reduce the lead content in gasoline with a complete ban on the use of leaded gasoline in highway vehicles after December 1995.

While U.S. EPA found the most dramatic reductions occurred prior to 1990, lead emissions were further reduced by about 65% (from approximately 5,000 to approximately 1,700 TPY) between 1990 and 2002 primarily from mobile sources, primary and secondary lead and copper smelting, pulp and paper manufacturing, inorganic paint pigment production and steel wire products.

The following table summarizes the nationwide trends U.S. EPA found from 1980 to 2002.

	1980	1985	1990	1995	1999	2002
Transportation	64,706	18,973	1,197	564	-	491 ^a
Fuel Combustion	4,299	515	500	490	-	377
Industrial Processes	3,938	2,531	2,474	2,271	-	719
Solid Waste	1,210	871	804	604	-	110
Total	74,153	22,890	4,975	3,929	3303	1,697

^a This value is not yet reflected in 2002 NEI (vers 3); it will be reflected in version 4, estimated for 2008 release.

Note: Estimates for 1980-1995 are from <http://www.epa.gov/airtrends/econ-emissions.html>.

Detailed categorization of the 1999 NEI is not available.

Estimates for 2002 are from Version 3 of the 2002 National Emissions Inventory, US EPA (USEPA, 2007a). The estimates for 2002 differ from those in Table 2-8 of the CD due to changes in the 2002 NEI subsequent to publication of the CD.

Source: Table 2-1. Trends in Pb emissions (tpy) from 1980 to 2002. U.S. EPA's "Review of the National Ambient Air Quality Standard for Lead: Policy Assessment of Scientific and Technical Information," November 2007.

Vehicles used in racing are not regulated by the U.S. EPA under the Clean Air Act and can therefore use alkyl-lead additives to boost octane. U.S. EPA formed a voluntary partnership with the National Association for Stock Car Auto Racing (NASCAR) with the goal of permanently removing alkyl-lead from racing fuels used in the Nextel Cup, Busch and Craftsman Truck Series. In January of 2006, NASCAR agreed to switch to unleaded fuel in its race cars and trucks beginning in 2008. NASCAR initiated this switch in 2007.

Ohio has state implementation plan (SIP) approved regulations regarding particulate emissions from stationary sources and regarding emissions of fugitive dust. These programs assist in reducing the potential impact on lead concentrations:

- Ohio Administrative Code (OAC) rule 3745-17-08: Restriction of emission of fugitive dust⁸.

This rule was developed to address reasonably available control measures (RACM) requirements as part of Ohio's plan for attaining the total suspended particulate (TSP) standard. This rule prohibits fugitive dust sources from being operated; or any materials handled, transported, or stored; or a building (or its appurtenances) or road to be used, constructed, altered, repaired, or demolished without taking measures or installing RACM to prevent fugitive dust from becoming airborne. The requirements only apply to fugitive dust sources located within specific geographical areas of Ohio⁹ that encompass all or a portion of 44 of the 88 Ohio counties (unless the director of Ohio EPA invokes his/her authority to require submittal, and implementation, of a control program which will bring the fugitive dust source into compliance with the requirements). These 44 areas were selected based upon Ohio EPA modeling results indicating boundaries in which the TSP standard was not being met.

- Ohio Administrative Code (OAC) rule 3745-17-07: Control of visible particulate emissions from stationary sources¹⁰.

This rule was developed to address reasonably available control technology/reasonably available control measures (RACT/RACM) requirements as part of Ohio's plan for attaining the TSP and PM10 standards. Among other requirements, this rule sets visible emissions (VE) limits for stacks and fugitive dust sources (paved roadways or parking areas, unpaved roadways or parking areas, and material storage piles, material handling operations, coke oven batteries, etc.). More stringent RACT/RACM requirements are required for sources in Cuyahoga County (discussed later in this document) and Jefferson County.

- Ohio Administrative Code (OAC) rule 3745-17-11: Restrictions on particulate emissions from industrial processes¹¹.

This rule addresses particulate emissions from various point sources throughout Ohio by limiting the allowable mass rate of emission of particulate matter.

Ohio EPA also has a SIP-approved major and minor new source review (NSR) program. All new or modified sources must meet Ohio's NSR requirements. The RACM requirements for fugitive dust discussed above are often incorporated into NSR permits for both major and minor sources and also frequently for sources beyond the boundaries of the 44 areas discussed above.

⁸ <http://www.epa.state.oh.us/dapc/regs/3745-17/17-08.pdf>

⁹ <http://www.epa.state.oh.us/dapc/regs/3745-17/3745-17-08App1.pdf>

¹⁰ <http://www.epa.state.oh.us/dapc/regs/3745-17/17-07.pdf>

¹¹ <http://www.epa.state.oh.us/dapc/regs/3745-17/17-11.pdf>

As part of the detailed factor analysis below, where appropriate for a specific county, facility or area, Ohio EPA has identified any specific lead emission control measures beyond what has been discussed above.

Factor Analysis

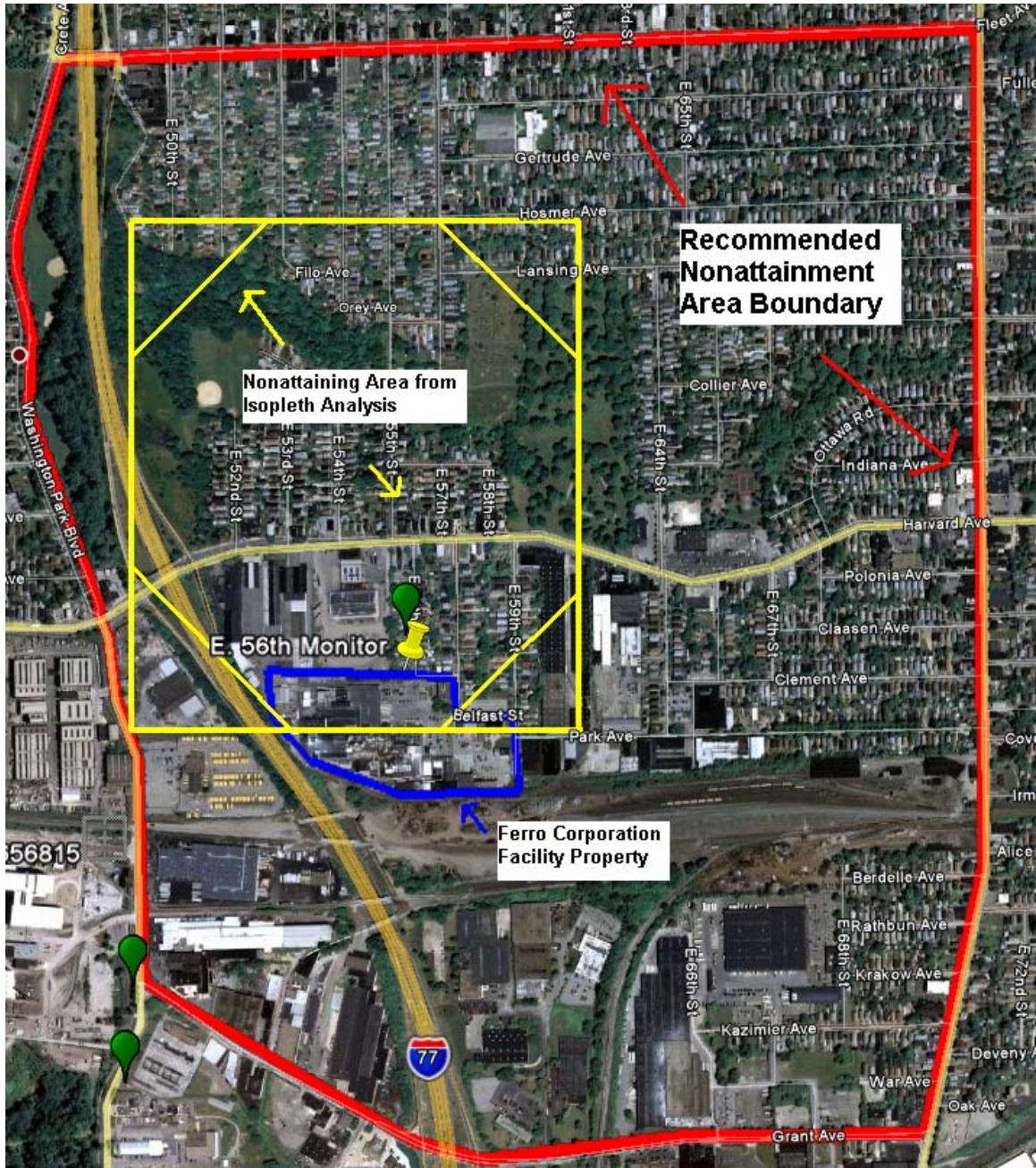
Counties with Monitor(s) Exceeding the Lead NAAQS

**Cuyahoga
Fulton
Logan**

Cuyahoga County, OH

Recommended nonattainment boundary:

Partial Cuyahoga - The area enclosed on the west by Washington Park Boulevard/Crete Avenue/East 49th Street, on the east by East 71st Street, on the north by Fleet Avenue, and on the south by Grant Avenue.



Discussion:

Ohio EPA is recommending partial nonattainment of Cuyahoga County, as indicated in the map above, based upon both an analysis of the eight factors and on additional spatial interpolation analysis of monitoring data. This discussion summarizes the results of these analyses.

As seen under factor 1 below there are only three facilities located in Cuyahoga County with emissions greater than 0.50 TPY. Total lead air emissions in Cuyahoga County range from 3.48 TPY (NEI) to 4.29 TPY (TRI). The emissions from all sources in Cuyahoga County can be viewed in the map under factor 1. As indicated in the map, the majority of the smaller sources that make up the total county-wide emissions are located within the City of Cleveland area. As seen under the map in factor 2 below, the City of Cleveland area is well monitored with five monitors. Therefore, these monitors would accurately reflect emissions from these smaller sources that may collectively contribute to a violation of the lead standard. Of those five monitors, only one monitor has shown violations during the 2006 to 2008 period. This monitor is identified in the boundary map above (E. 56th Street) and has historically been dedicated to monitoring the Ferro Corporation facility, also identified above. Therefore, it is Ohio EPA's belief the violating lead monitor is associated with a localized area around the Ferro Corporation facility.

As can be seen under factors 3 and 4 below, the City of Cleveland is the most densely populated and urbanized area in Cuyahoga County. Within Cleveland, and all of Cuyahoga County, population has been declining and is expected to continue to decline in the future.

As indicated under factor 8 below, in addition to State-wide control requirements of sources that may affect lead emissions, Cuyahoga County has additional, more stringent requirements in place at the county level.

In order to determine an appropriate boundary for the nonattainment area encompassing this violating monitor, Ohio EPA used spatial interpolation of air quality monitoring data. Based upon U.S. EPA guidance ("Procedures for Estimating Probability of Nonattainment of a PM₁₀ NAAQS Using Total Suspended Particulate or PM₁₀ Data," December 1986 [57 Fr 13549]), "spatial interpolation of air monitoring data is the method most appropriate for situations in which monitors are located at relatively close proximity to one another." Appendix H contains the detailed spatial interpolation analysis conducted by Ohio EPA. The analysis was based upon monitoring data from the five monitors using three worst-case 3-month averages during which violations occurred. The results are conservative and consistent with the area's meteorology, and Ohio EPA recommends that the appropriate partial-county nonattainment boundary be established as indicated in the map above. This boundary would not interfere with any jurisdictional boundaries discussed under factor 7.

An additional grouping of smaller sources of emissions is located in the vicinity west of the City of Solon. The facility with the greatest emissions in Cuyahoga County,

American Spring Wire Corporation, is located within this area and will be monitored in the near future as part of the expansion of the ambient monitoring network. After adequate collection of future monitoring data, Ohio EPA will be able to determine if additional nonattainment boundaries in this area appropriate. Until such time, Ohio EPA is recommending the remainder of Cuyahoga County be determined “unclassifiable.”

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

TRI	4.29
NEI	3.48

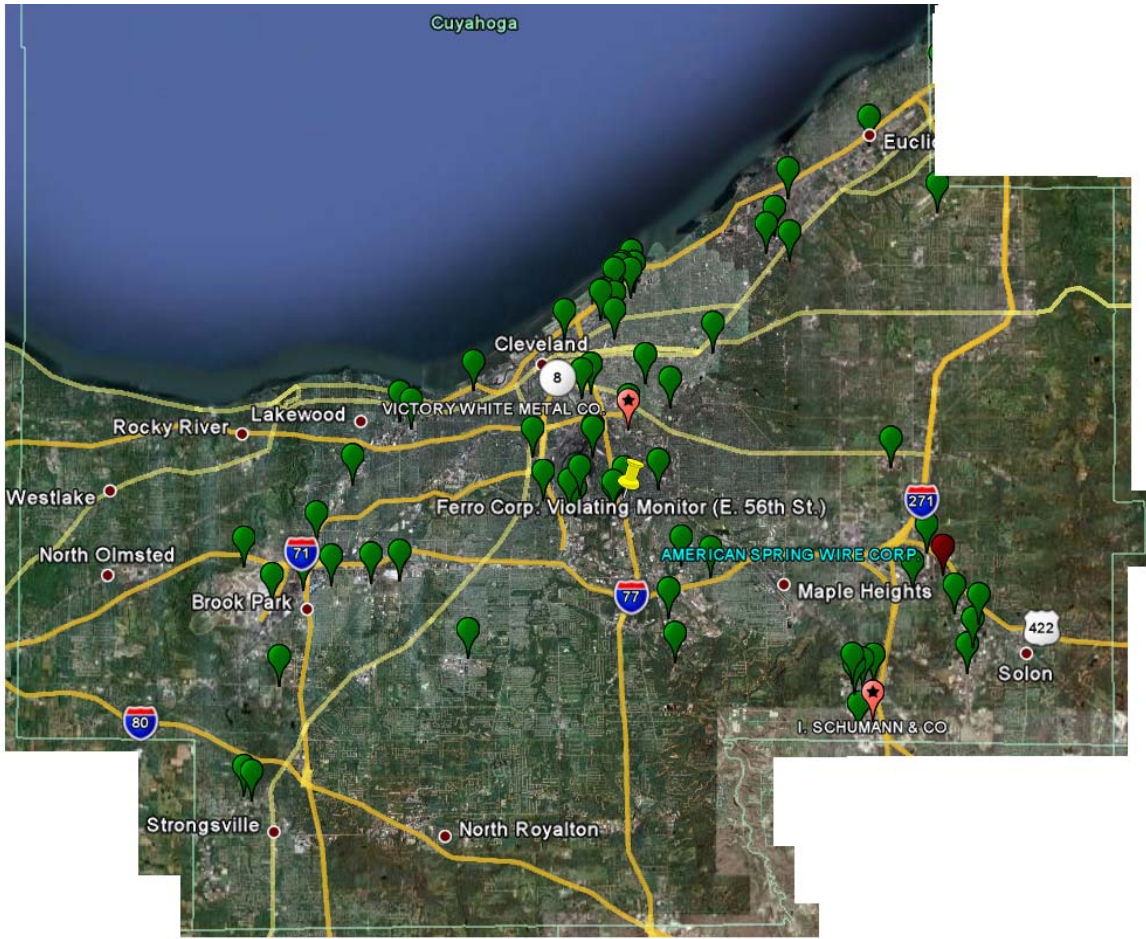
2005 Sources of Lead Emissions (≥ 0.5 TPY)¹²

Source Name	NEISIC Code Description	NEI	TRI	Street Address	City
AMERICAN SPRING WIRE CORP.	Steel Wiredrawing and Steel Nails and Spikes	1.19	1.19	26300 MILES RD.	BEDFORD HEIGHTS
I. SCHUMANN & CO	Secondary Smelting and Refining of Nonferrous Metals	0.55	0.55	22500 ALEXANDER RD	OAKWOOD VILLAGE
VICTORY WHITE METAL CO.	Rolling, Drawing, and Extruding of Nonferrous Metals, Except Copper and Aluminum	0.50	0.50	6100 ROLAND AVE	CLEVELAND


Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Cuyahoga County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. A yellow pin symbol indicates the location of any violating monitor. Appendix A contains a complete list of all sources, with emissions, for Cuyahoga County.

¹² Ford Motor Company is excluded from this list. Ford reported emissions of 0.00033 TPY under the TRI and erroneously reported 1.2 TPY under the NEI. Regardless, Ford has been reducing the level of operations and is permanently shutting down all operations at this facility by the end of 2010.



Factor 2: Air quality data

 = Exceeds standard

AQS: Three-month rolling average for 2006, 2007 and 2008 (ug/m³)

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-035-0042 Fire Station 4 Cleveland	Nov -Jan	0.010	0.009	0.011
	Dec -Feb	0.012	0.008	0.008
	Jan -Mar	0.015	0.009	0.008
	Feb-Apr	0.019	0.011	0.013
	Mar-May	0.018	0.017	0.021
	Apr-Jun	0.019	0.019	0.023
	May-July	0.014	0.024	0.022
	Jun-Aug	0.015	0.021	0.016
	July-Sept	0.011	0.021	0.016
	Aug-Oct	0.013	0.024	0.015
	Sept-Nov	0.011	0.023	0.013
Oct-Dec	0.012	0.021	0.009	

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-035-0038 St. Tikhon Cleveland	Nov -Jan	0.013	0.010	0.013
	Dec -Feb	0.020	0.009	0.012
	Jan -Mar	0.023	0.011	0.013
	Feb-Apr	0.026	0.011	0.024
	Mar-May	0.022	0.016	0.027
	Apr-Jun	0.020	0.018	0.027
	May-July	0.016	0.021	0.021
	Jun-Aug	0.020	0.020	0.021
	July-Sept	0.026	0.018	0.019
	Aug-Oct	0.028	0.018	0.015
	Sept-Nov	0.021	0.015	0.010
Oct-Dec	0.012	0.016	0.007	

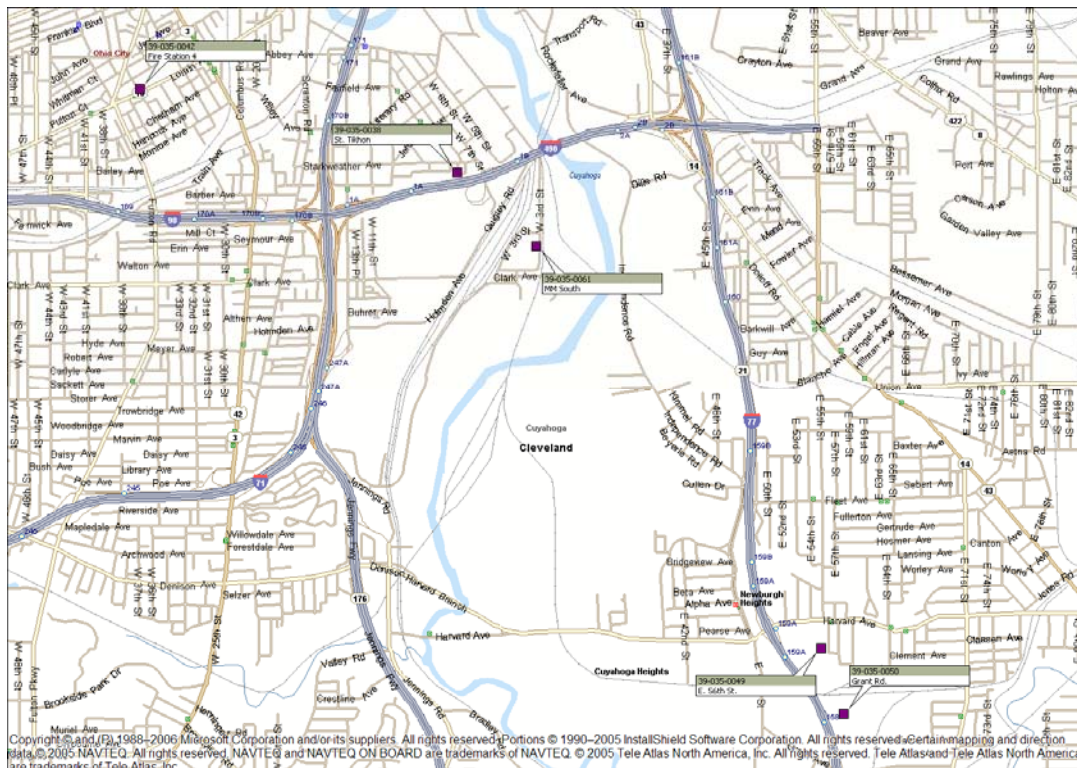
Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-035-0061 Master Metals Facility Cleveland	Nov -Jan	0.008	0.009	0.014
	Dec -Feb	0.006	0.008	0.011
	Jan -Mar	0.013	0.009	0.012
	Feb-Apr	0.017	0.010	0.021
	Mar-May	0.036	0.015	0.026
	Apr-Jun	0.034	0.021	0.026
	May-July	0.031	0.028	0.027
	Jun-Aug	0.016	0.028	0.033
	July-Sept	0.014	0.026	0.035
	Aug-Oct	0.012	0.023	0.027
	Sept-Nov	0.011	0.022	0.016
Oct-Dec	0.009	0.019	0.010	

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-035-0049 E. 56 th St. Ferro Corp Facility Cleveland	Nov -Jan	0.053	0.046	0.118
	Dec -Feb	0.045	0.062	0.053
	Jan -Mar	0.058	0.066	0.078
	Feb-Apr	0.075	0.049	0.087
	Mar-May	0.079	0.062	0.142
	Apr-Jun	0.088	0.061	0.115
	May-July	0.098	0.083	0.136
	Jun-Aug	0.105	0.086	0.143
	July-Sept	0.100	0.114	0.150
	Aug-Oct	0.068	0.133	0.173
	Sept-Nov	0.051	0.163	0.120
Oct-Dec	0.036	0.155	0.102	

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-035-0050 Grant Rd. Ferro Corp Facility Cleveland	Nov -Jan	0.007	0.008	0.016
	Dec -Feb	0.012	0.010	0.012
	Jan -Mar	0.040	0.012	0.012
	Feb-Apr	0.046	0.034	0.016
	Mar-May	0.044	0.040	0.025
	Apr-Jun	0.021	0.048	0.026
	May-July	0.018	0.036	0.033
	Jun-Aug	0.018	0.040	0.026
	July-Sept	0.017	0.036	0.038
	Aug-Oct	0.014	0.028	0.032
	Sept-Nov	0.011	0.020	0.032
Oct-Dec	0.009	0.018	0.014	

Sites with one or months of a composite analysis missing in any three-month period.

Cuyahoga County Lead Monitor Locations and Site ID Numbers



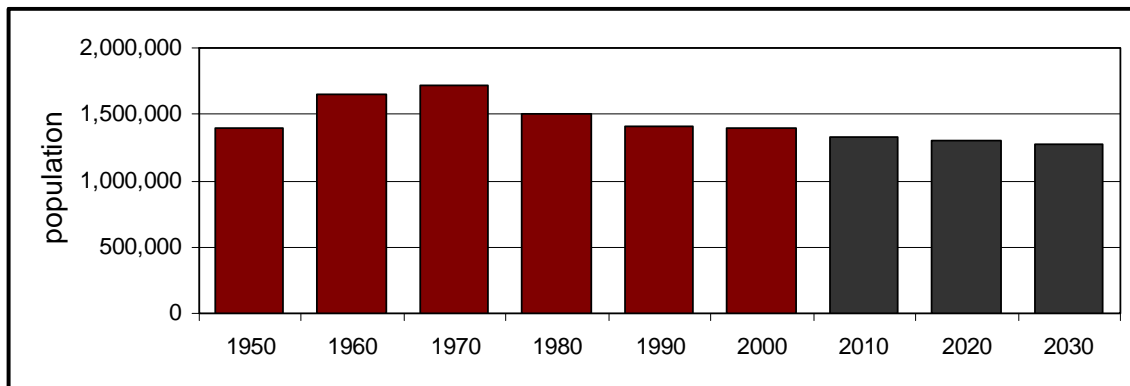
Factor 3 - 4: Urbanization, population and projected growth

Sources: Office of Strategic Research, Ohio Department of Development
U.S. Census Bureau Population Estimates Program 2007

As indicated in the following table and graph, Cuyahoga County population is projected to steadily decrease.

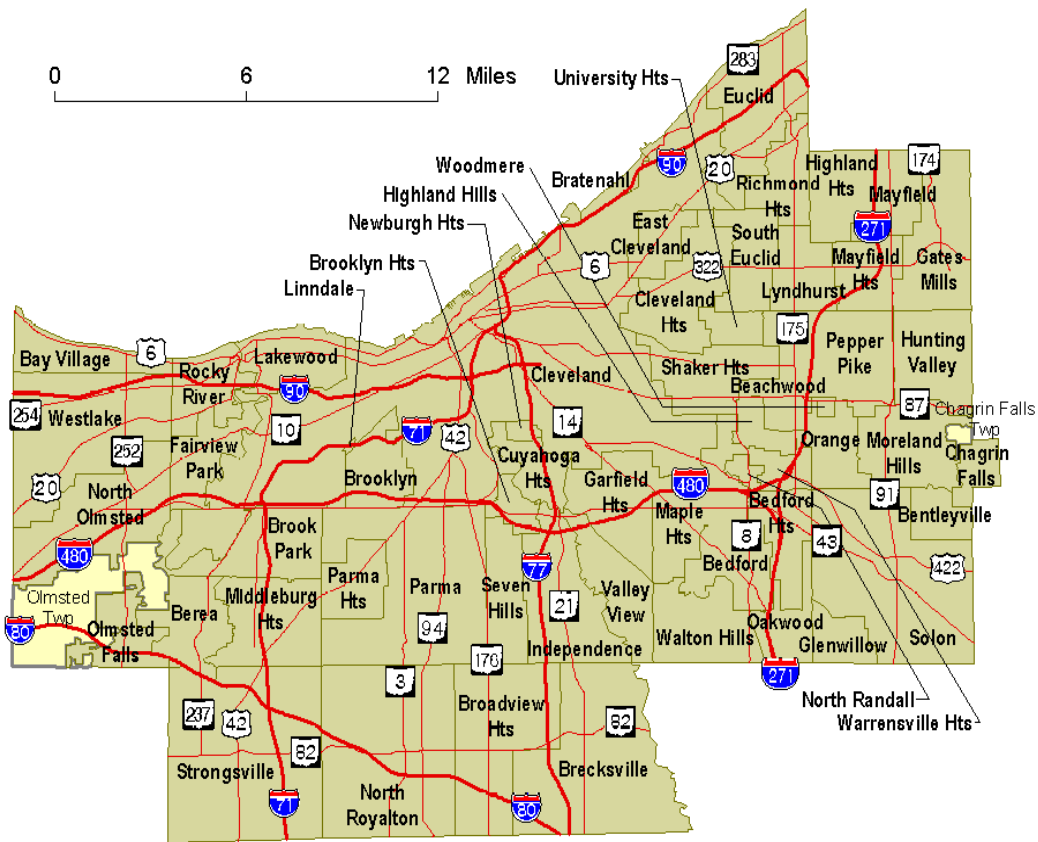
COUNTY	2004	2005	2006	2007	2010	2020	2030
Cuyahoga	1,346,194	1,330,428	1,314,241	1,295,958	1,332,540	1,301,870	1,274,020

Cuyahoga County



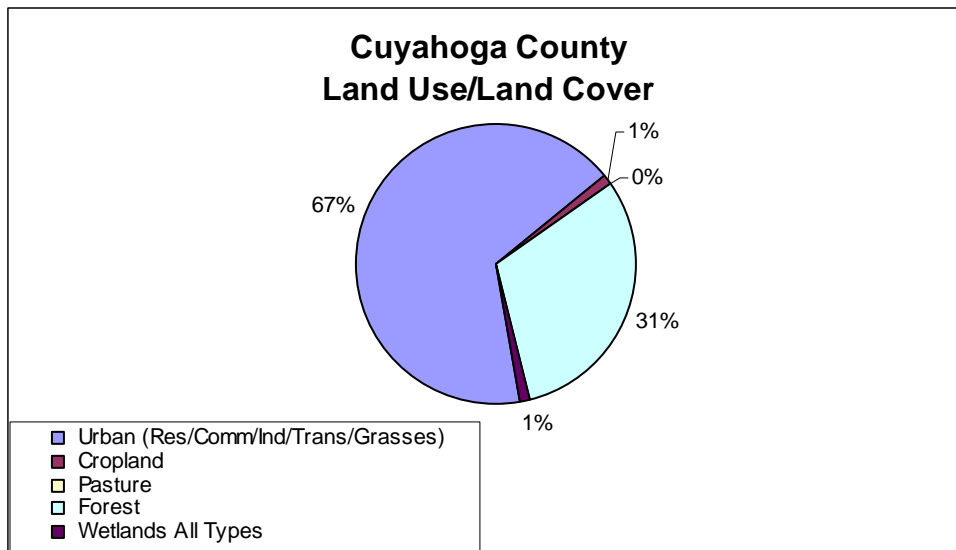
The largest populated cities in Cuyahoga County are:

City	Population		
	2000	2000 Density (persons per sq. mile)	Est. 2007
Cleveland	478,403	6167	438,042
Parma	85,655	4291	78,785
Lakewood	56,646	10208	51,305
Euclid	52,717	4923	47,940
Cleveland Heights	49,958	6160	46,321
Strongsville	43,858	1780	42,874
North Olmsted	34,113	2933	31,641
Westlake	31,719	1995	30,710
North Royalton	28,648	1346	29,373
Garfield Heights	30,734	4253	28,058



Population is expected to decline in these cities with the exception of North Royalton towards the southern border of Cuyahoga County.

Cuyahoga County is one of the most highly urbanized Counties in Ohio:

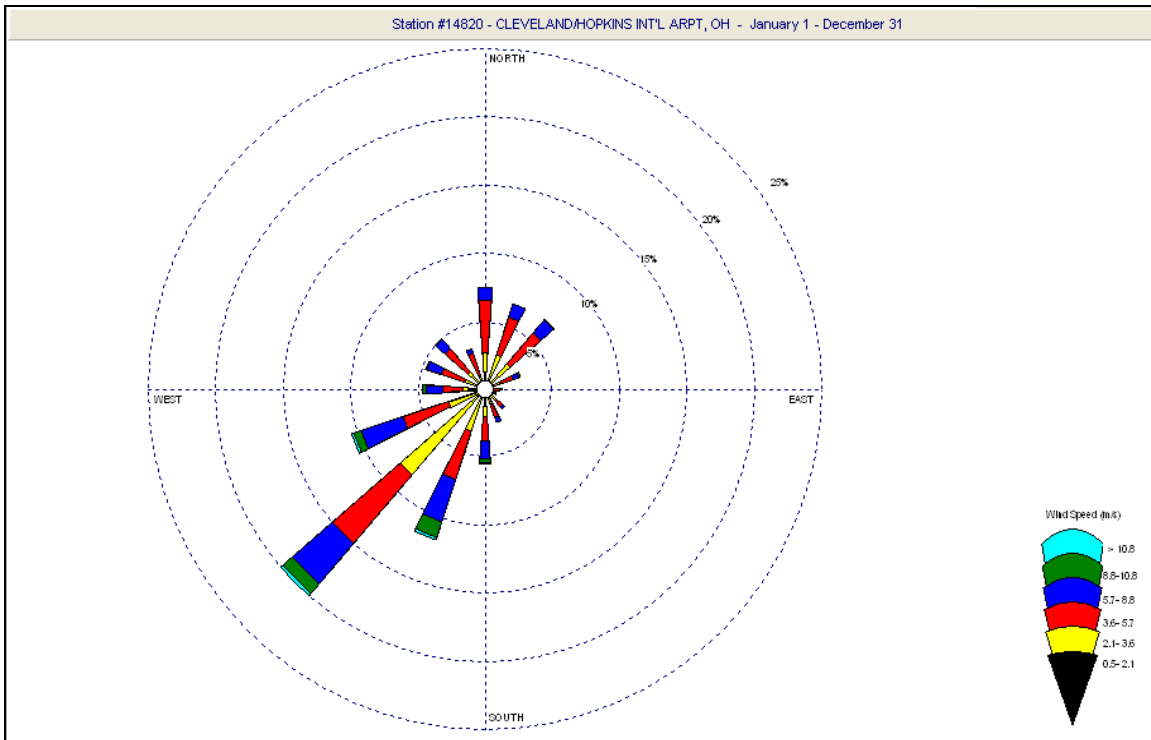


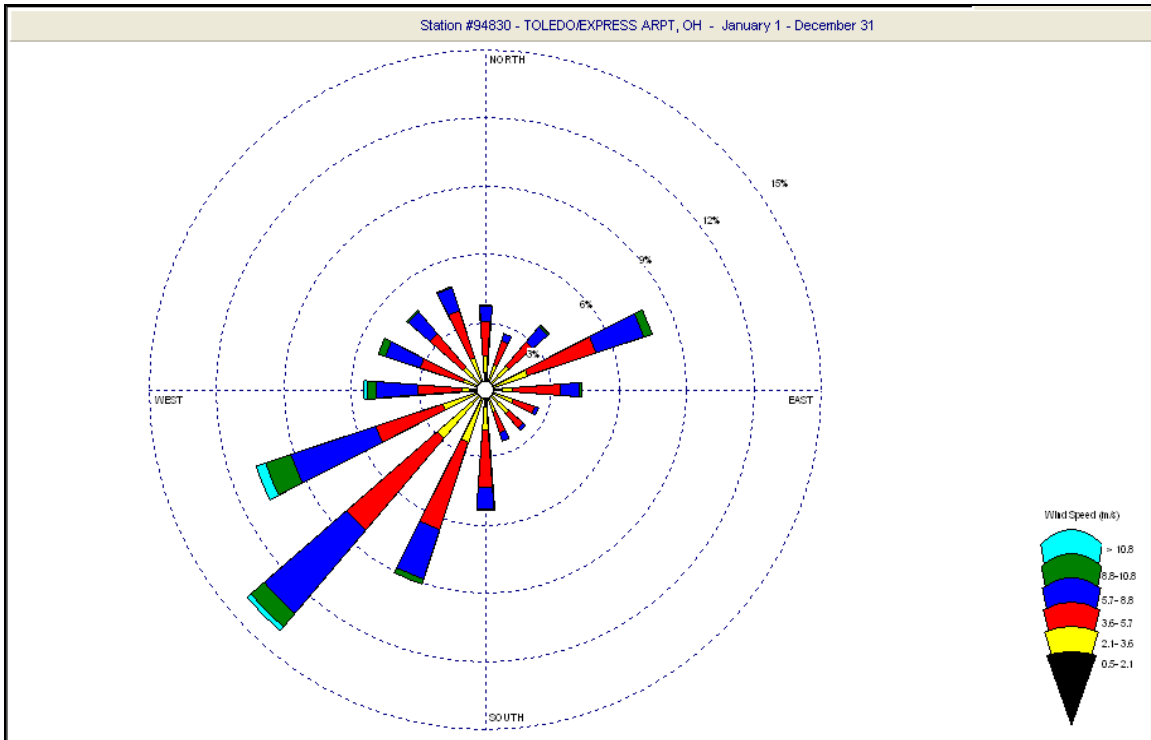
Refer to Appendix E for more detailed maps regarding urbanized areas and population density.

Factor 5: Meteorology

Please refer to the factor 5 general discussion at the beginning of this document for general meteorological information applicable to Cuyahoga County.

Ohio is bounded on the north by Lake Erie which can provide localized modifications to the general flow, primarily by the introduction of land breezes and lake breezes along the Lake during periods of low synoptic wind speeds. These effects would best be represented by the Toledo and Cleveland airport wind roses.





Factor 6: Geography/topography

Cuyahoga County is located within two physiographic Provinces: the glaciated Allegheny Plateau of the Appalachian Plateaus Province on the south and east and the Huron-Erie Lake Plains and Till Plains sections of the Central Lowland Province on the west and north (see Appendix F). The shore of Lake Erie is 569 feet above sea level. The City of Cleveland lies on a series of irregular bluffs lying roughly parallel to the lake. The land rises quickly from the lakeshore with an elevation of 791 feet above sea level at the Hopkins Airport five miles inland from the lake.

The Cuyahoga County area does not have any geographical or topographical barriers significantly affecting transport of lead within its air shed. Therefore, this factor provides no reason to delineate areas potentially included versus excluded from the nonattainment area.

Factor 7: Jurisdictional boundaries

The Ohio EPA Central Office and Cleveland Division of Air Quality are responsible for air quality planning within all areas of Cuyahoga County. The Northeast Ohio Areawide coordinating Agency (NOACA) is the planning agency designated as the Metropolitan Planning Organization for the greater Cleveland area. The NOACA region is composed of five Counties: Cuyahoga, Geauga, Lake, Lorain, and Medina.

The area map identified under factor 3-4 above shows township and city boundaries for Cuyahoga County.

Factor 8: Level of control of emission sources

In addition to those requirements identified in the general discussion section for factor 8 at the beginning of this document, Ohio EPA has also implemented the following requirements in Cuyahoga County that assist in reducing the potential impact on lead concentrations:

- OAC rule 3745-17-12: Additional restrictions on particulate emissions from specific air contaminant sources in Cuyahoga County¹³.

This rule, which provides more stringent requirements than the other OAC Chapter 3745-17 rules discussed in the general section for factor 8, regulates particulate emissions and emissions of fugitive dust from 25 different facilities in Cuyahoga County. Many of these facilities are a source of lead emissions.

- OAC rule 3745-71-06 Source specific emission limits.

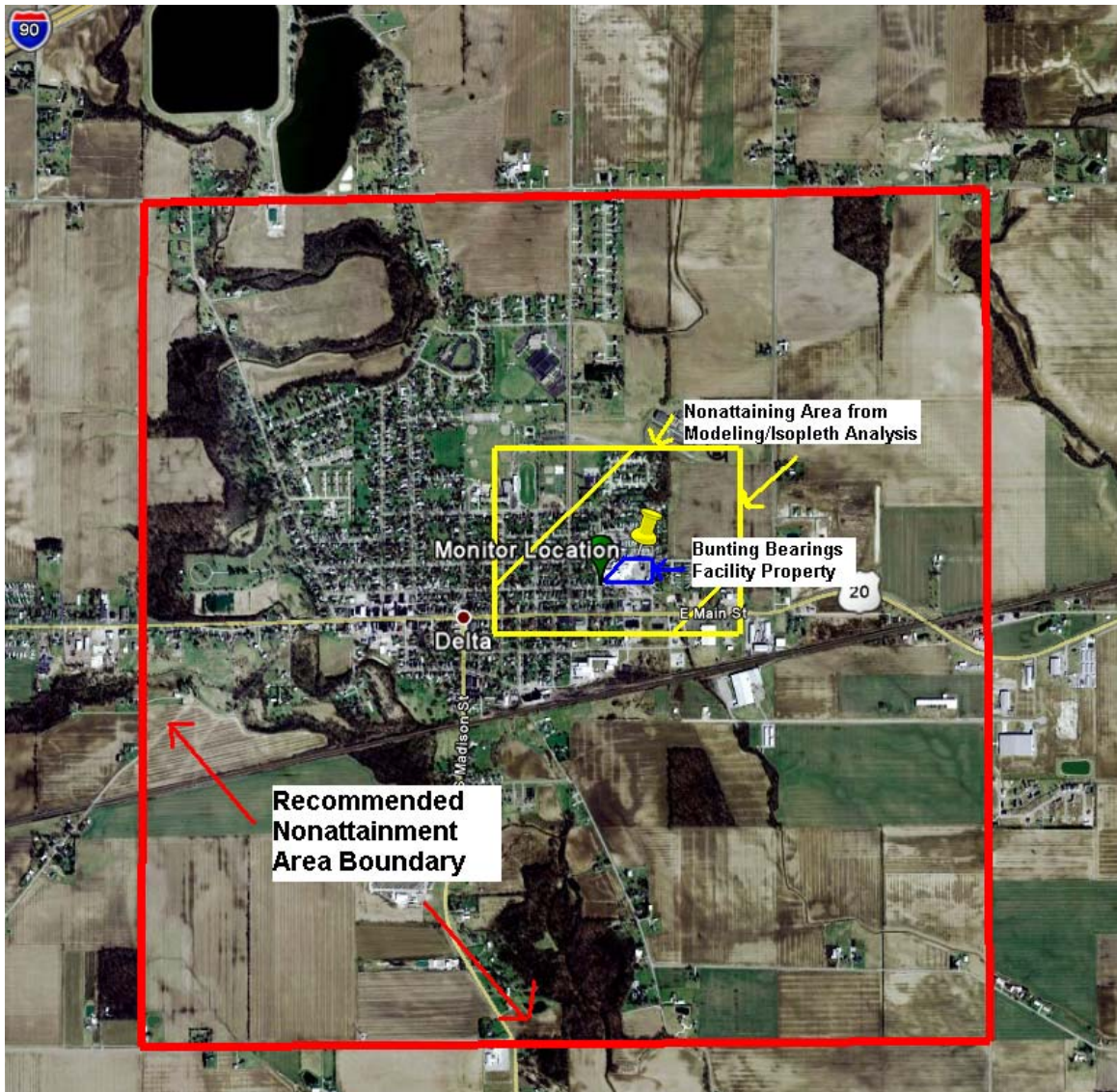
This rule was developed to address lead emissions specifically from Master Metals, Incorporated in Cleveland, Ohio. However, since that time this facility has permanently shut down and is no longer a source of lead emissions.

¹³ <http://www.epa.state.oh.us/dapc/regs/3745-17/17-12.pdf>

Fulton County, OH

Recommended nonattainment boundary:

Partial Fulton: The area enclosed by sections 12 and 13 of York Township and sections 7 and 18 of Swan Creek Township.



Discussion:

Ohio EPA is recommending partial nonattainment of Fulton County, as indicated in the map above, based upon both an analysis of the eight factors and on additional analyses combining dispersion modeling and actual historic monitoring values. This discussion summarizes the results of these analyses.

As seen under factor 1 below there are no facilities located in Fulton County with emissions greater than 0.50 TPY. Appendix A identifies only four smaller sources of with combined lead emissions ranging from 0.29 TPY (NEI) to 0.38 TPY (TRI). The emissions from all sources in Fulton County can be viewed in the map under factor 1. As can be seen, these four smaller sources are fairly widespread throughout the county. Fulton County contains only one monitor which has shown violations fairly consistently during the 2006 to 2008 period. This monitor is identified in the boundary map above and has historically been dedicated to monitoring the Bunting Bearings facility, in the City of Delta, also identified above. Therefore, it is Ohio EPA's belief the violating lead monitor is associated with a localized area around the Bunting Bearings facility.

As can be seen under factors 3 and 4 below, the City of Delta is the fifth largest populated and urbanized area in Fulton County. Although population in Fulton County is expected to increase slightly in the future, the population of the City of Delta is expected to decline.

In order to determine an appropriate boundary for the nonattainment area encompassing this violating monitor, Ohio EPA performed a hybrid approach involving the use of dispersion modeling in conjunction with historic monitoring data. The model is used to generate reasonable concentration gradients through the study area, while the monitor data is used to generate an actual/modeled concentration ratio that can serve as a "correction factor" for adjustment of any apparent systematic tendency of the model to over, or under, predict monitor values. Based upon U.S. EPA guidance ("Procedures for Estimating Probability of Nonattainment of a PM₁₀ NAAQS Using Total Suspended Particulate or PM₁₀ Data," December 1986 [57 Fr 13549]), "dispersion modeling is more appropriate than spatial interpolation of air monitoring data in areas where actual monitoring data are scarce." Appendix I contains the detailed analysis conducted by Ohio EPA. The analysis was based upon emissions from the four lead sources in the county corrected upwards using actual worst-case monitored values to provide a conservative boundary for recommendation. The results are conservative, consistent with the areas meteorology, and Ohio EPA recommends that the appropriate partial-county nonattainment boundary be established as indicated in the map above. This boundary would not interfere with any jurisdictional boundaries discussed under factor 7.

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

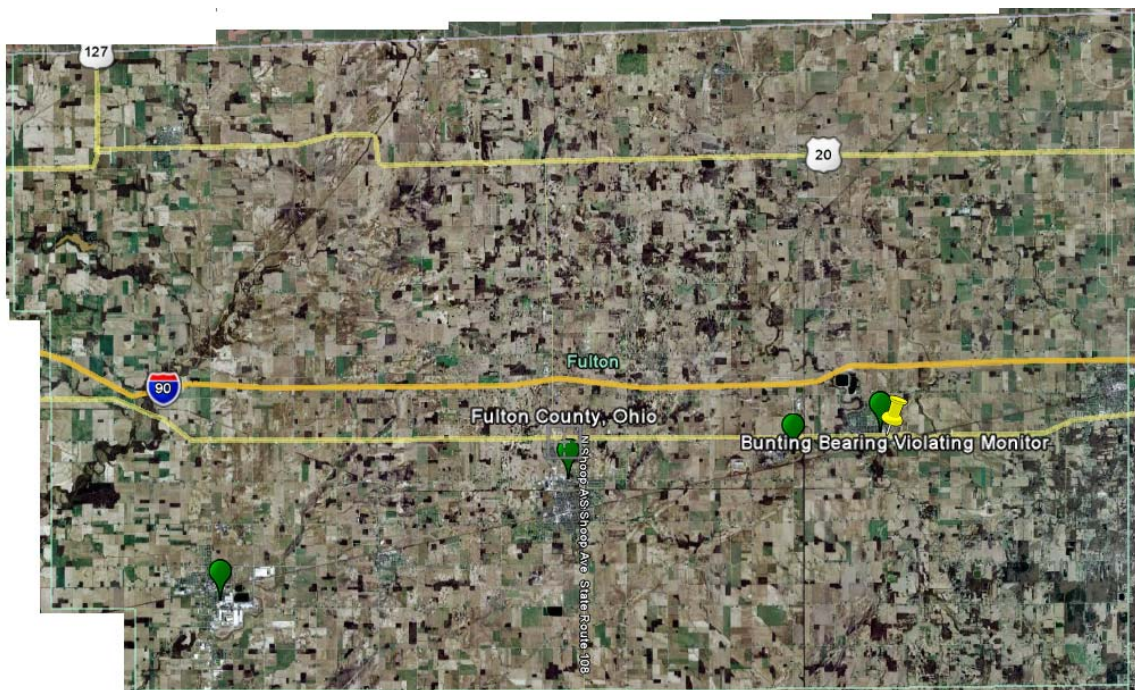
TRI	0.38
NEI	0.29

2005 Sources of Lead Emissions (≥ 0.5 TPY)

Source Name	NEISIC Description	Code	NEI	TRI	Street Address	City
<i>None</i>						

Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Fulton County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. A yellow pin symbol indicates the location of any violating monitor. Appendix A contains a complete list of all sources, with emissions, for Fulton County.



Factor 2: Air quality data

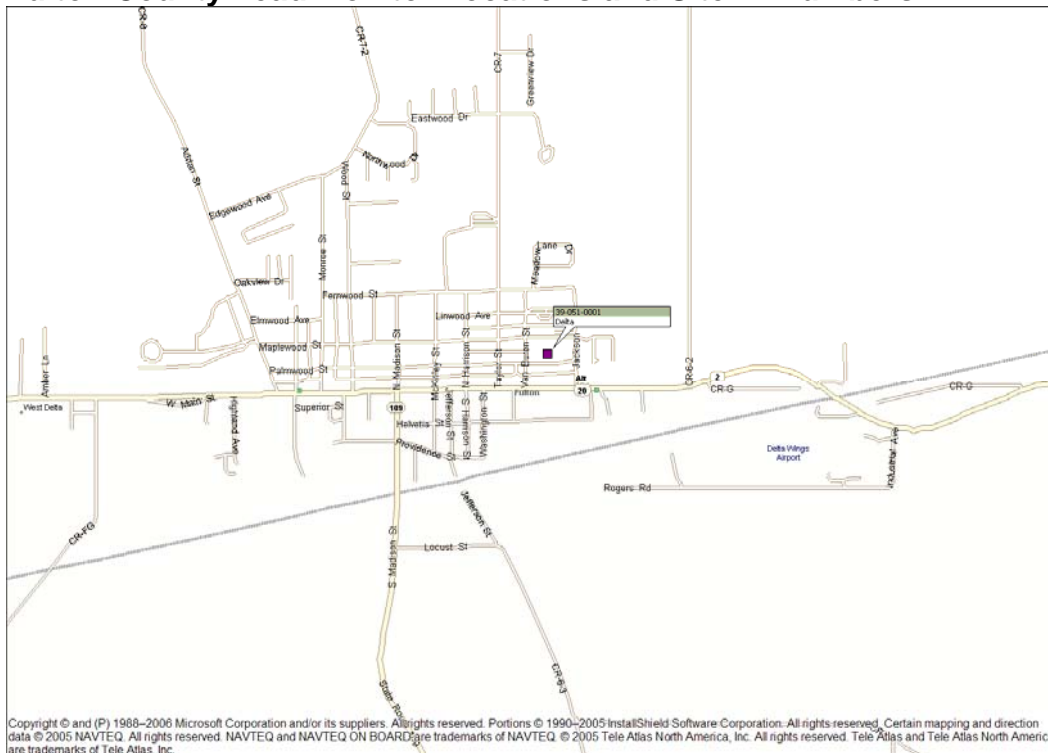
 = Exceeds standard

AQS: Three-month rolling average for 2006, 2007 and 2008 (ug/m³)

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-051-0001 Bunting Bearing Facility Delta	Nov -Jan	0.105	0.423	0.567
	Dec -Feb	0.090	0.450	0.453
	Jan -Mar	0.071	0.357	0.387
	Feb-Apr	0.035	0.233	0.254
	Mar-May	0.100	0.186	0.237
	Apr-Jun	0.116	0.203	0.267
	May-July	0.117	0.180	0.317
	Jun-Aug	0.157	0.247	0.290
	July-Sept	0.215	0.205	0.170
	Aug-Oct	0.283	0.242	0.237
	Sept-Nov	0.210	0.339	0.320
Oct-Dec	0.270	0.523	0.291	

 Sites with one or months of a composite analysis missing in any three-month period.

Fulton County Lead Monitor Locations and Site ID Numbers



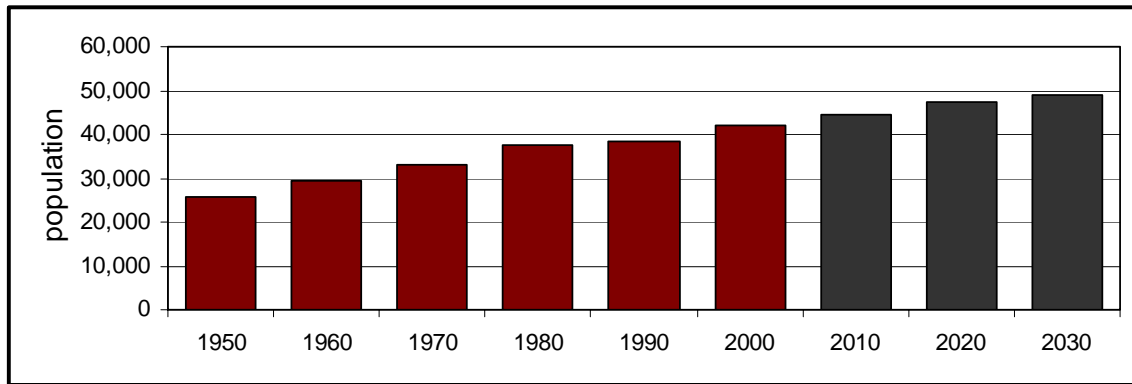
Factor 3 - 4: Urbanization, population and projected growth

Sources: Office of Strategic Research, Ohio Department of Development U.S. Census Bureau Population Estimates Program 2007

As indicated in the following table and graph, Fulton County population is relatively low (57th of the 88 Counties in 2007) although the population is projected to slightly increase.

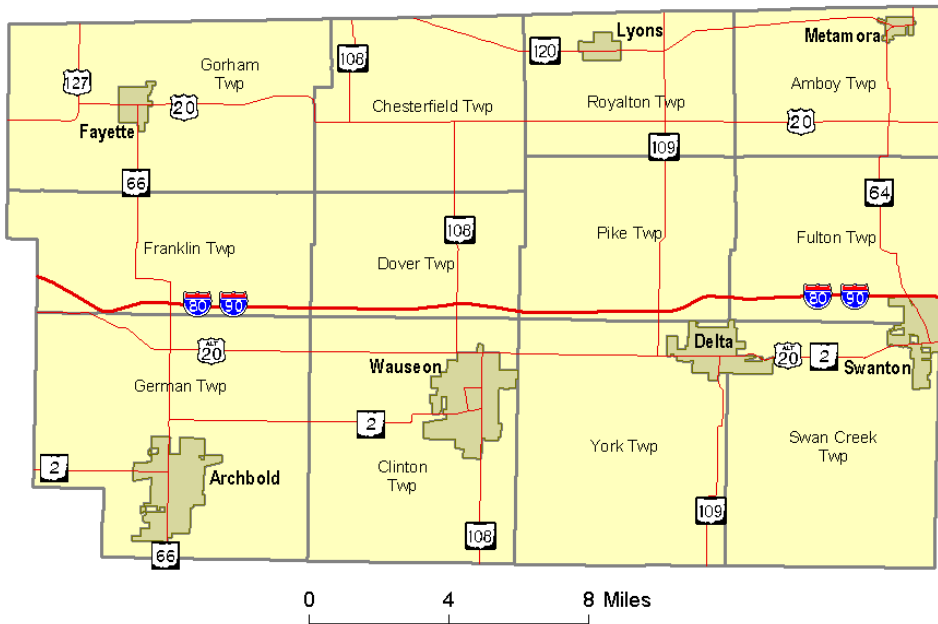
	2004	2005	2006	2007	2010	2020	2030
Fulton	42,785	42,888	42,900	42,562	44,610	47,210	49,110

Fulton County



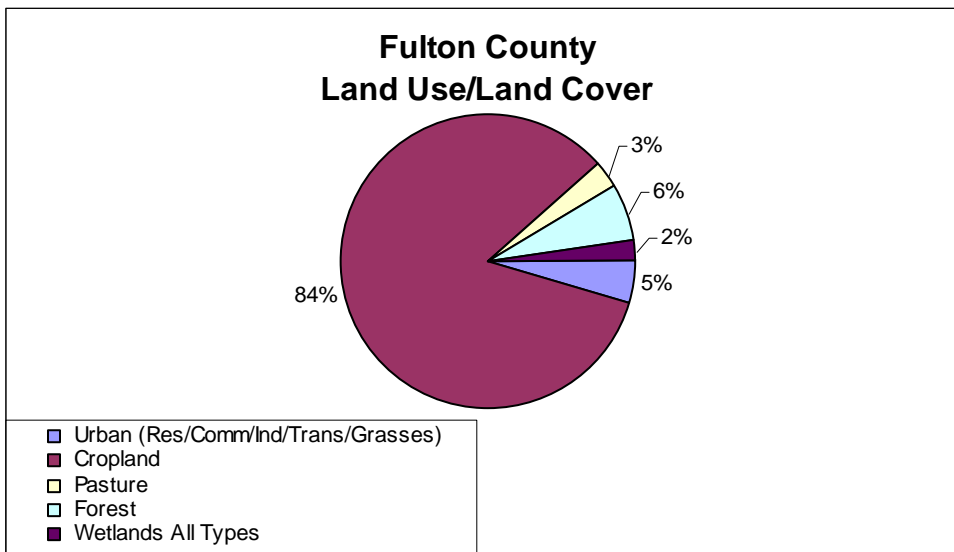
The largest populated cities in Fulton County are:

City/Twp./Village	Population		
	2000	2000 Density (persons per sq. mile)	Est. 2007
Wauseon City	7,091	1438	7,278
Swan Creek Twp UB	6,306	158	6,246
Archbold Village	4,290	1009	4,453
Swanton Village (pt.)	3,283	1388	3,491
Delta Village	2,930	1127	2,907
Clinton Twp UB	2,189	60	2,217
German Twp UB	2,168	47	2,193
York Twp UB	1,788	44	1,805
Pike Twp	1,738	62	1,698
Fulton Twp UB	1,618	58	1,610



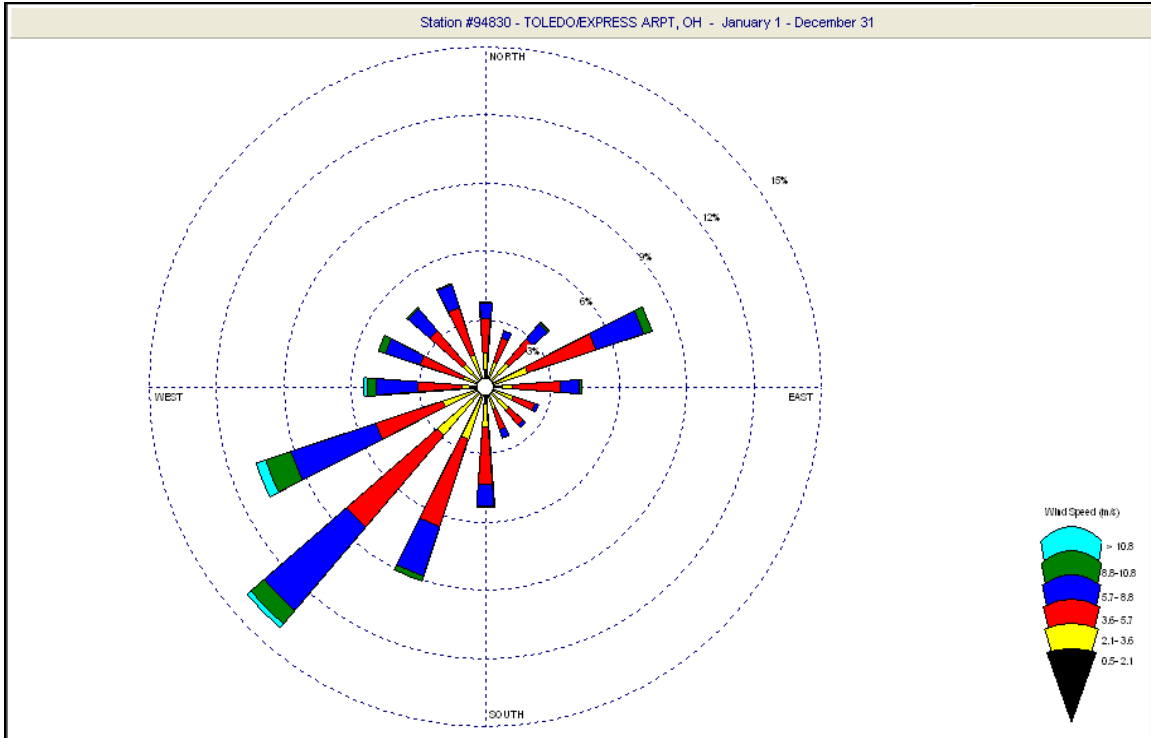
Overall, population is expected to slightly increase in these cities/townships although some areas are showing a slight decline. There are no densely populated areas within Fulton County (all less than 245 persons per square mile with a county-wide average of 103 persons per square mile).

Fulton County is predominantly cropland with only 5% urbanization:



Factor 5: Meteorology

Ohio is bounded on the north by Lake Erie which can provide localized modifications to the general flow, primarily by the introduction of land breezes and lake breezes along the Lake during periods of low synoptic wind speeds. The Toledo wind rose will be most representative for Fulton County.



Factor 6: Topography/Land use/Land cover

Fulton County is located in the Huron-Erie Lake Plains region (Appendix F). The county is made up of gently rolling terrain and nearly level plain. The landscape slopes eastward toward Lake Erie. The elevation ranges from about 680 feet to 806 feet above sea level.

The Fulton County area does not have any geographical or topographical barriers significantly affecting transport of lead within its air shed. Therefore, this factor provides no reason to delineate areas potentially included versus excluded from the nonattainment area.

Factor 7: Jurisdictional boundaries

The Ohio EPA Central Office and Ohio EPA Northwest District Office are responsible for air quality planning within all areas of Fulton County.

The Toledo, OH MSA includes: Fulton, Lucas, Ottawa, and Wood Counties. There is no CSA or MPO for this county.

The area map identified under factor 3 and 4 above shows township and city boundaries for Fulton County.

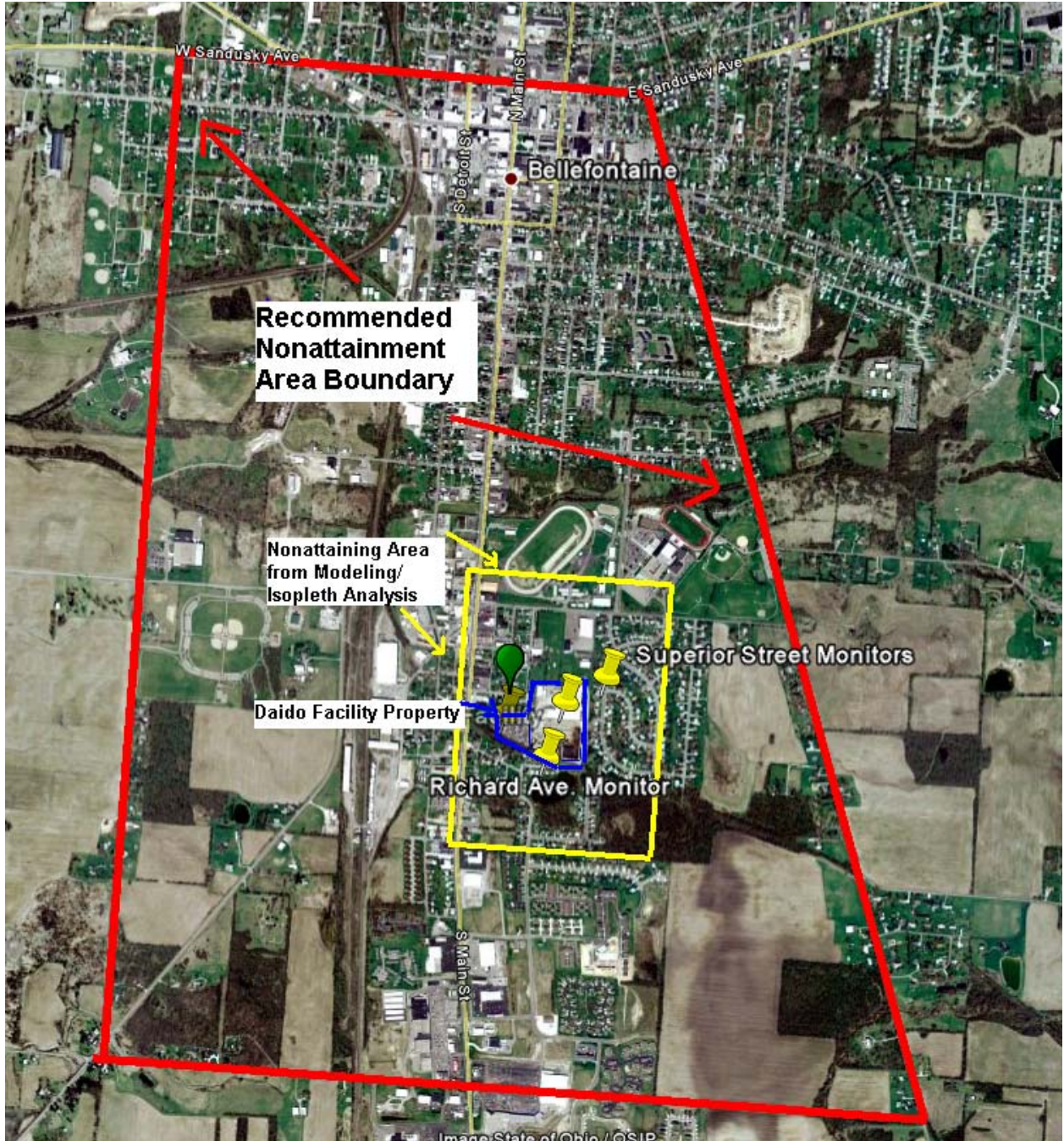
Factor 8: Level of control of emission sources

Please refer to the factor 8 general discussion at the beginning of this document for applicable control information for Fulton County.

Logan County, OH

Recommended nonattainment boundary:

Partial Logan: The area enclosed by sections 27, 28, 33 and 34 of Lake Township



Discussion:

Ohio EPA is recommending partial nonattainment of Logan County, as indicated in the map above, based upon both an analysis of the eight factors and on additional analyses combining dispersion modeling and actual historic monitoring values. This discussion summarizes the results of these analyses.

As seen under factor 1 below there are no facilities located in Logan County with emissions greater than 0.50 TPY. Appendix A identifies only four smaller sources of lead emissions totaling 0.17 TPY (NEI and TRI). The emissions from all sources in Logan County can be viewed in the map under factor 1. As can be seen, these four smaller sources are fairly widespread throughout the county. Logan County contains four monitors which have shown violations in the 2006 and early 2007 periods, but has not show any since mid 2007. The monitors are identified in the boundary map above and have historically been dedicated to monitoring the Daido facility, in the City of Bellefontaine, also identified above. Therefore, it is Ohio EPA's belief the violating lead monitors are associated with a localized area around the Daido facility. Furthermore, Daido has decreased its operations in the recent past (evident by the change in monitored violations) and permanently shut down all lead operations in June of 2009. However, because the historical data has shown violations Ohio EPA believes it remains appropriate to designate this localized area as nonattainment until such time the air quality data meet the requirement for three years without violations.

As can be seen under factors 3 and 4 below, the City of Bellefontaine is a small city with a population of 13,069 (in 2000) although it is the largest populated and urbanized area in Logan County. Although population in Logan County is expected to increase slightly in the future, the population of the City of Bellefontaine is expected to decline.

In order to determine an appropriate boundary for the nonattainment area encompassing these violating monitors, Ohio EPA performed a hybrid approach involving the use of dispersion modeling in conjunction with historic monitoring data. The model is used to generate reasonable concentration gradients through the study area, while the monitor data is used to generate an actual/modeled concentration ratio that can serve as a "correction factor" for adjustment of any apparent systematic tendency of the model to over, or under, predict monitor values. Based upon U.S. EPA guidance ("Procedures for Estimating Probability of Nonattainment of a PM10 NAAQS Using Total Suspended Particulate or PM10 Data," December 1986 [57 Fr 13549]), "dispersion modeling is more appropriate than spatial interpolation of air monitoring data in areas where actual monitoring data are scarce." Appendix J contains the detailed analyses conducted by Ohio EPA. The analysis was based upon emissions from the four lead sources in the county corrected upwards using actual worst-case monitored values to provide a conservative boundary for recommendation. The results are conservative, consistent with the area's meteorology, and Ohio EPA recommends the appropriate partial-county nonattainment boundary be established as indicated in the map above. This boundary would not interfere with any jurisdictional boundaries discussed under factor 7.

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

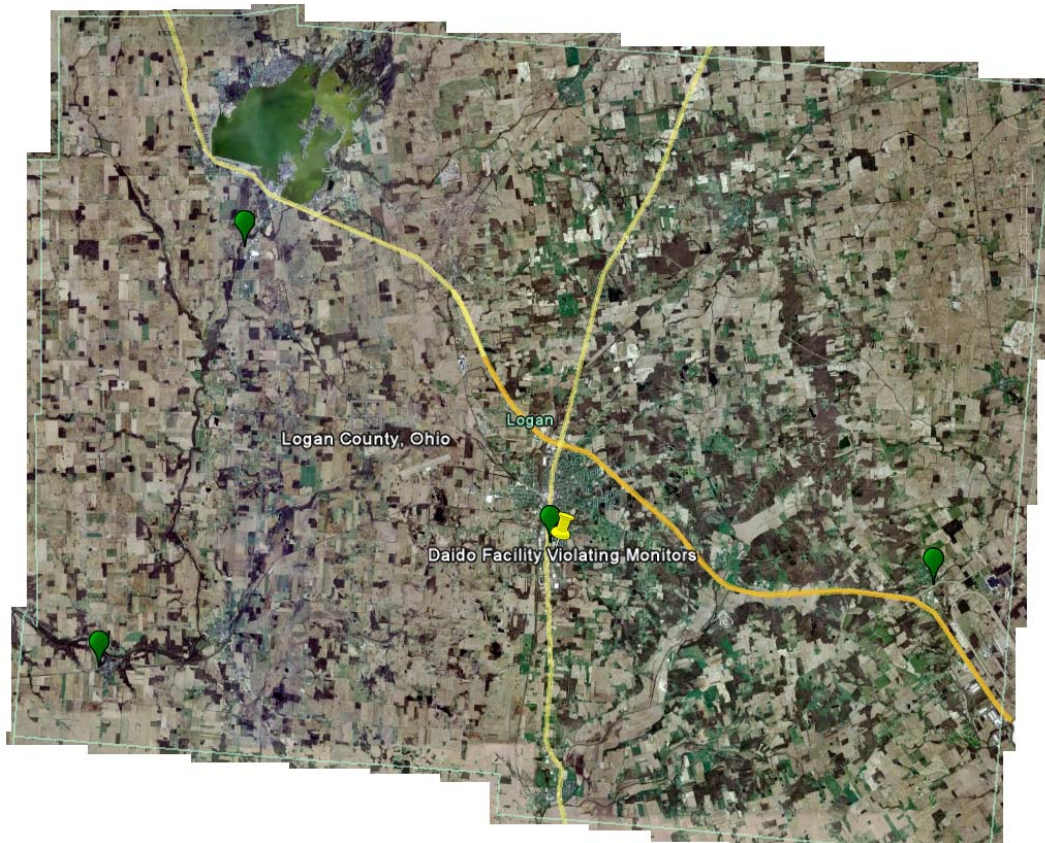
TRI	0.17
NEI	0.17

2005 Sources of Lead Emissions (≥ 0.5 TPY)


Source Name	NEISIC Description	Code	NEI	TRI	Street Address	City
<i>None</i>						

Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Logan County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. A yellow pin symbol indicates the location of any violating monitor. Appendix A contains a complete list of all sources, with emissions, for Logan County.



Factor 2: Air quality data

 = Exceeds standard

AQS: Three-month rolling average for 2006, 2007 and 2008 (ug/m³)

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-091-0008 1215 Greenwood – Daido Facility Bellefontaine <i>*replaced Main St. Nov. 2006</i>	Nov -Jan		0.180	0.070
	Dec -Feb		0.167	0.073
	Jan -Mar		0.113	0.080
	Feb-Apr		0.100	0.063
	Mar-May		0.077	0.057
	Apr-Jun		0.050	0.060
	May-July		0.047	0.070
	Jun-Aug		0.043	0.067
	July-Sept		0.047	0.073
	Aug-Oct		0.040	0.073
	Sept-Nov	0.160	0.053	0.090
	Oct-Dec	0.215	0.050	0.093

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-091-0005 Main St – Daido Facility Bellefontaine <i>*replaced by Greenwood Nov. 2006</i>	Nov -Jan	0.110		
	Dec -Feb	0.097		
	Jan -Mar	0.123		
	Feb-Apr	0.113		
	Mar-May	0.147		
	Apr-Jun	0.133		
	May-July	0.120		
	Jun-Aug	0.100		
	July-Sept	0.105		
	Aug-Oct	0.185		
	Sept-Nov	0.270		
	Oct-Dec	0.270		

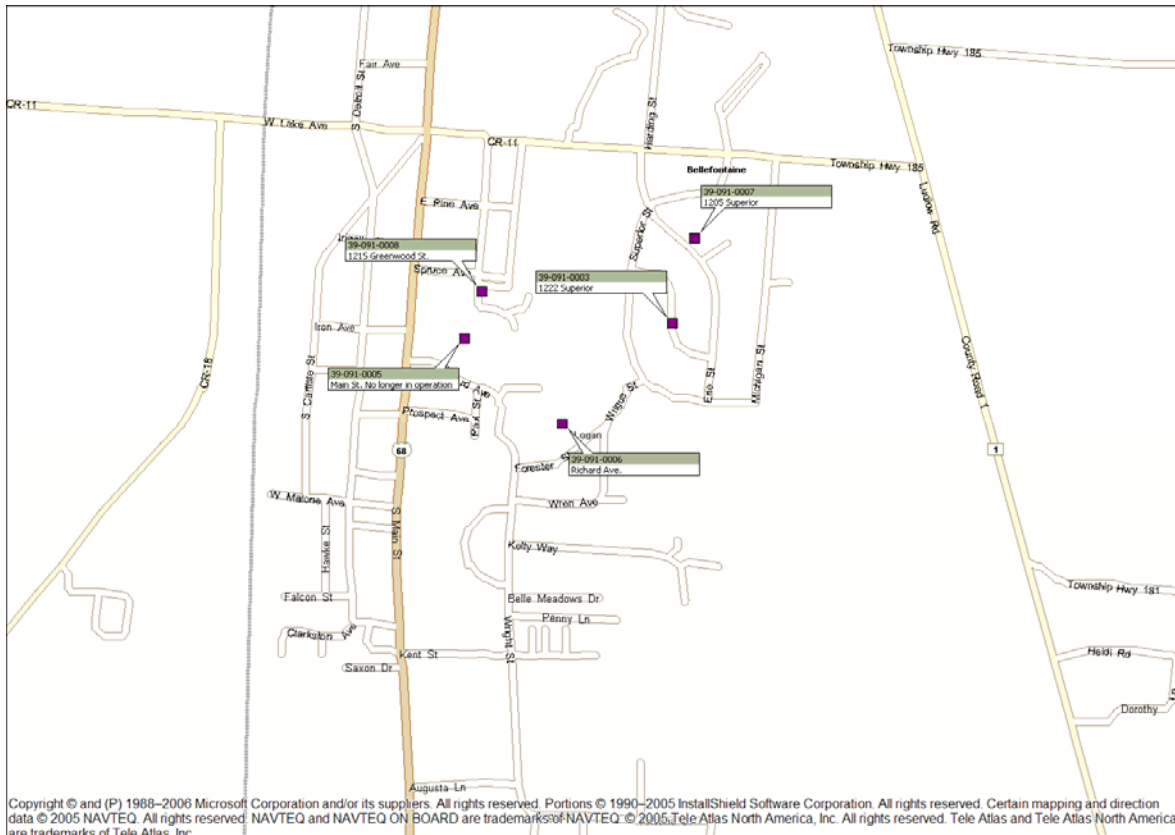
Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-091-0003 1222 Superior – Daido Facility Bellefontaine	Nov -Jan	0.042	0.023	0.089
	Dec -Feb	0.055	0.026	0.045
	Jan -Mar	0.051	0.045	0.045
	Feb-Apr	0.035	0.039	0.043
	Mar-May	0.025	0.050	0.045
	Apr-Jun	0.035	0.056	0.063
	May-July	0.088	0.054	0.058
	Jun-Aug	0.086	0.069	0.041
	July-Sept	0.088	0.064	0.023
	Aug-Oct	0.032	0.083	0.026
	Sept-Nov	0.024	0.116	0.027
	Oct-Dec	0.015	0.097	0.023

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-091-0007 1205 Superior – Daido Facility Bellefontaine	Nov -Jan	0.137	0.087	0.057
	Dec -Feb	0.123	0.113	0.060
	Jan -Mar	0.157	0.140	0.050
	Feb-Apr	0.137	0.160	0.047
	Mar-May	0.193	0.160	0.047
	Apr-Jun	0.220	0.127	0.063
	May-July	0.237	0.107	0.083
	Jun-Aug	0.207	0.070	0.093
	July-Sept	0.175	0.087	0.100
	Aug-Oct	0.130	0.080	0.097
	Sept-Nov	0.095	0.070	0.083
	Oct-Dec	0.083	0.060	0.063

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-091-0006 Richard Ave. – Daido Facility Bellefontaine	Nov -Jan	0.143	0.163	0.083
	Dec -Feb	0.150	0.220	0.090
	Jan -Mar	0.173	0.257	0.097
	Feb-Apr	0.153	0.247	0.080
	Mar-May	0.140	0.190	0.067
	Apr-Jun	0.133	0.133	0.060
	May-July	0.173	0.100	0.067
	Jun-Aug	0.220	0.090	0.077
	July-Sept	0.225	0.083	0.097
	Aug-Oct	0.210	0.080	0.100
	Sept-Nov	0.155	0.077	0.090
	Oct-Dec	0.153	0.070	0.073

Sites with one or months of a composite analysis missing in any three-month period.

Logan County (Bellefontaine, OH) Lead Monitor Locations and Site ID Numbers



Copyright © and (P) 1988–2006 Microsoft Corporation and/or its suppliers. All rights reserved. Portions © 1990–2005 InstallShield Software Corporation. All rights reserved. Certain mapping and direction data © 2005 NAVTEQ. All rights reserved. NAVTEQ and NAVTEQ ON BOARD are trademarks of NAVTEQ. © 2005 Tele Atlas North America, Inc. All rights reserved. Tele Atlas and Tele Atlas North America are trademarks of Tele Atlas, Inc.

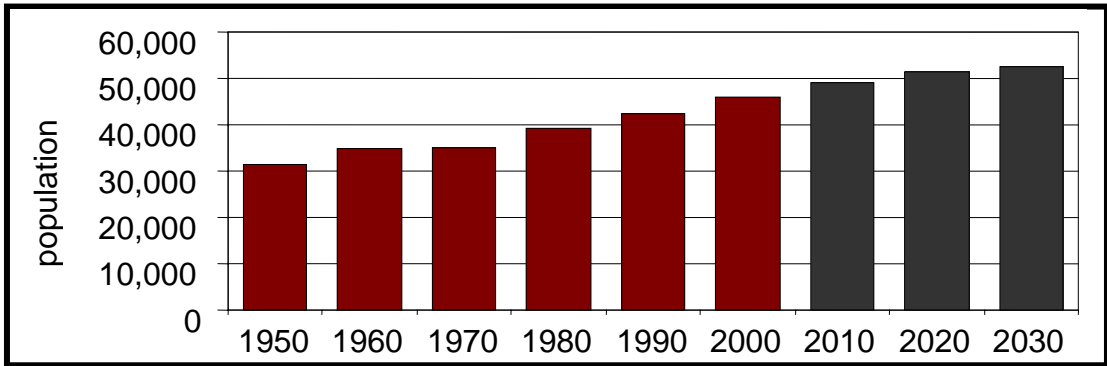
Factor 3 - 4: Urbanization, population and projected growth

Sources: Office of Strategic Research, Ohio Department of Development
 U.S. Census Bureau Population Estimates Program 2007

As indicated in the following table and graph, Logan County population is relatively low (52nd of the 88 Counties in 2007) although the population is projected to slightly increase.

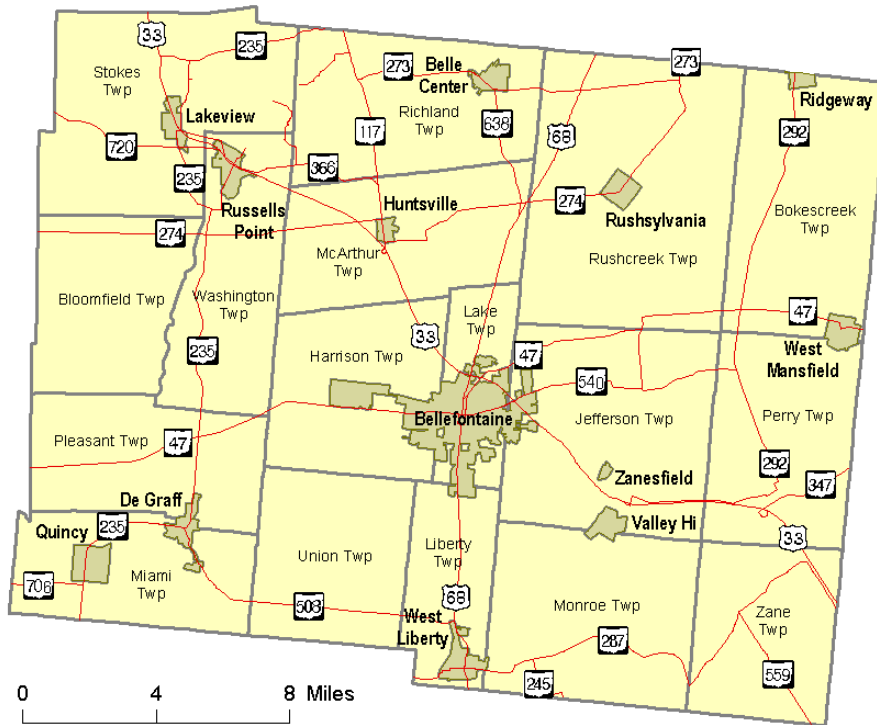
	2004	2005	2006	2007	2010	2020	2030
Logan	46,469	46,327	46,104	46,279	49,040	51,340	52,500

Logan County



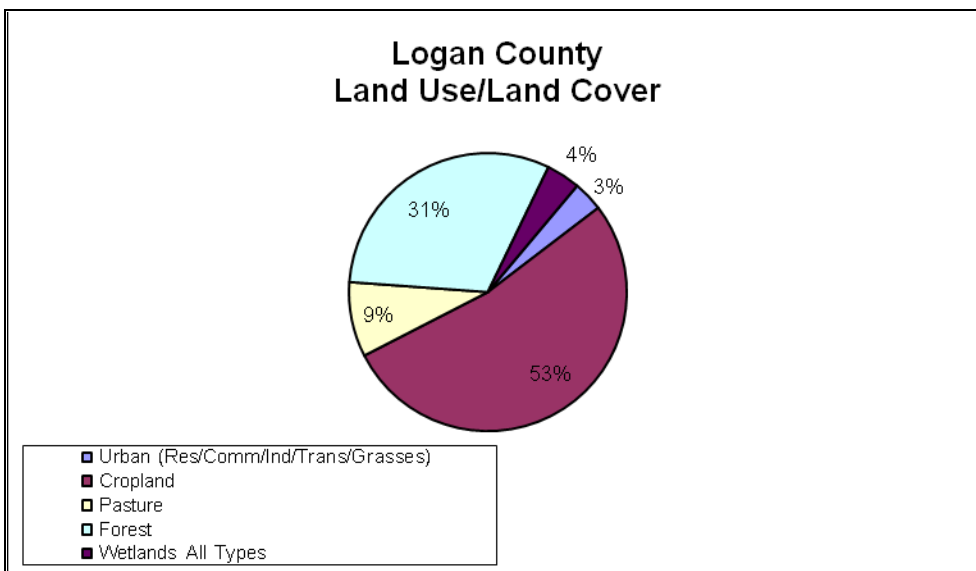
The largest populated cities in Logan County are:

City/Twp./Village	Population		
	2000	2000 Density (persons per sq. mile)	Est. 2007
Bellefontaine City	13,069	1491	12,737
Stokes Twp UB	4,293	135	4,275
Washington Twp UB	2,326	106	2,327
Jefferson Twp UB	2,012	56	2,103
Rushcreek Twp UB	1,648	34	1,790
West Liberty Village	1,813	1638	1,738
Richland Twp UB	1,648	58	1,693
Harrison Twp UB	1,599	69	1,651
McArthur Twp UB	1,495	54	1,584
Russells Point Village	1,619	1733	1,529



Overall, population is expected to slightly increase in these cities/townships although some areas, such as the largest city (Bellefontaine), are showing a slight decline. There are no densely populated areas within Logan County (all less than 245 persons per square mile with a county-wide average of 100 persons per square mile).

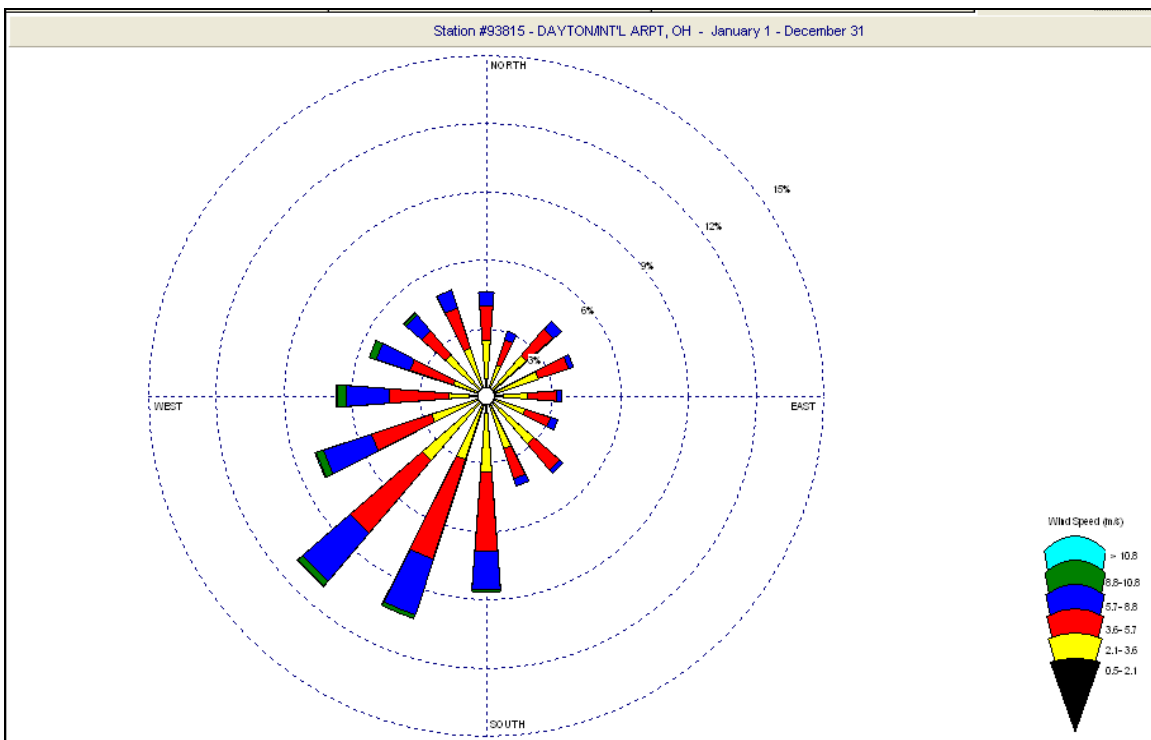
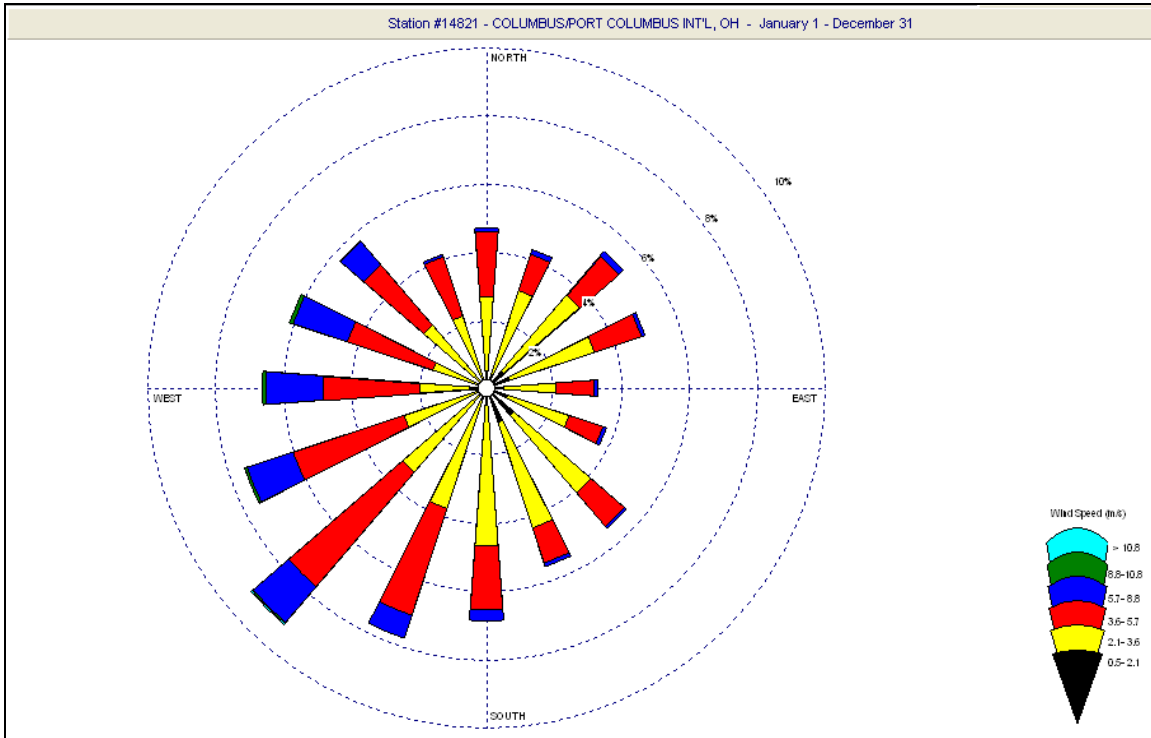
Logan County is predominantly cropland and forest with only 3% urbanization:



Factor 5: Meteorology

Please refer to the factor 5 general discussion at the beginning of this document for general meteorological information applicable to Fulton County.

The regional nature of mid-latitude wind distributions may best be represented by the Columbus and Dayton airport wind roses:



Factor 6: Topography/Land use/Land cover

Logan County is located in the Central Lowland Till Plains region (Appendix F). The relief varies because of glacier movements that created eight end and ground moraines, creating a complex pattern. Along the west and northwest, northeast and southwest corners the ground is nearly level to gently sloping. Inward from these regions the topography varies from nearly level to very steep where the highest point in Ohio is near Bellefontaine. The elevation ranges from about 450 feet to 1,549 feet above sea level.

The Logan County area does not have any geographical or topographical barriers significantly affecting transport of lead within its air shed. Therefore, this factor provides no reason to delineate areas potentially included versus excluded from the nonattainment area.

Factor 7: Jurisdictional boundaries

The Ohio EPA Central Office and Ohio EPA Southwest District Office are responsible for air quality planning within all areas of Logan County.

Logan County belongs to the Bellefontaine micropolitan statistical area. There is no MSA, CSA or MPO for this county.

The area map identified under factors 3 and 4 above shows township and city boundaries for Logan County.

Factor 8: Level of control of emission sources

Please refer to the factor 8 general discussion at the beginning of this document for applicable control information for Logan County.

Counties with All Monitors Meeting the Lead NAAQS

**Butler
Columbiana
Franklin
Washington**

Butler County, OH

Recommended nonattainment boundary: none

Discussion:

Butler County contains one monitor which has shown no violations of the lead standard from the 2006 to 2008 period. No additional monitors are proposed under Ohio's expanded monitoring network. Therefore, no nonattainment designation is necessary for this county nor is an analysis of the eight factors. For informational purposes, factor 2 is identified below.

Factor 2: Air quality data

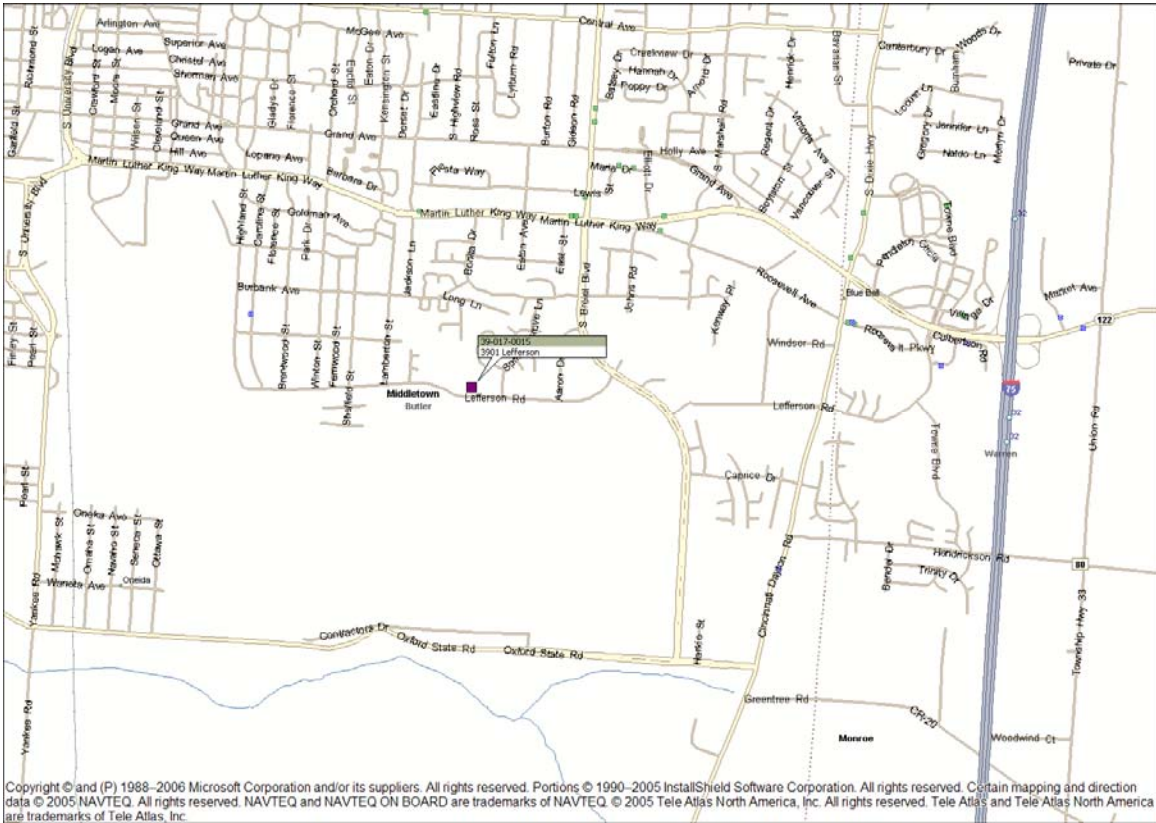
 = Exceeds standard

AQS: Three-month rolling average for 2006, 2007 and 2008 (ug/m³)

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-017-0015 3901 Lefferson – AK Steel Facility Middletown	Nov -Jan	0.010	0.003	0.005
	Dec -Feb	0.010	0.002	0.005
	Jan -Mar	0.010	0.002	0.004
	Feb-Apr	0.005	0.004	0.005
	Mar-May	0.005	0.006	0.005
	Apr-Jun	0.007	0.006	0.007
	May-July	0.010	0.005	0.007
	Jun-Aug	0.009	0.006	0.008
	July-Sept	0.006	0.006	0.006
	Aug-Oct	0.004	0.007	0.008
	Sept-Nov	0.004	0.007	0.009
	Oct-Dec	0.004	0.007	0.009

 Sites with one or months of a composite analysis missing in any three-month period.

Butler County Lead Monitor Locations and Site ID Numbers



Columbiana County, OH

Recommended nonattainment boundary: none

Discussion:

Columbiana County contains three monitors which have shown no violations of the lead standard from the 2006 to 2008 period. No additional monitors are proposed under Ohio's expanded monitoring network. Therefore, no nonattainment designation is necessary for this county nor is an analysis of the eight factors. For informational purposes, factor 2 is identified below.

Factor 2: Air quality data

 = Exceeds standard

AQS: Three-month rolling average for 2006, 2007 and 2008 (ug/m³)

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-029-0019 1250 George – Von Roll Facility East Liverpool	Nov -Jan	0.021	0.020	0.014
	Dec -Feb	0.022	0.005	0.013
	Jan -Mar	0.022	0.013	0.010
	Feb-Apr	0.024	0.014	0.023
	Mar-May	0.023	0.026	0.030
	Apr-Jun	0.026	0.019	0.029
	May-July	0.013	0.021	0.018
	Jun-Aug	0.014	0.020	0.012
	July-Sept	0.011	0.025	0.018
	Aug-Oct	0.009	0.025	0.015
	Sept-Nov	0.020	0.018	0.015
Oct-Dec	0.022	0.015	0.009	

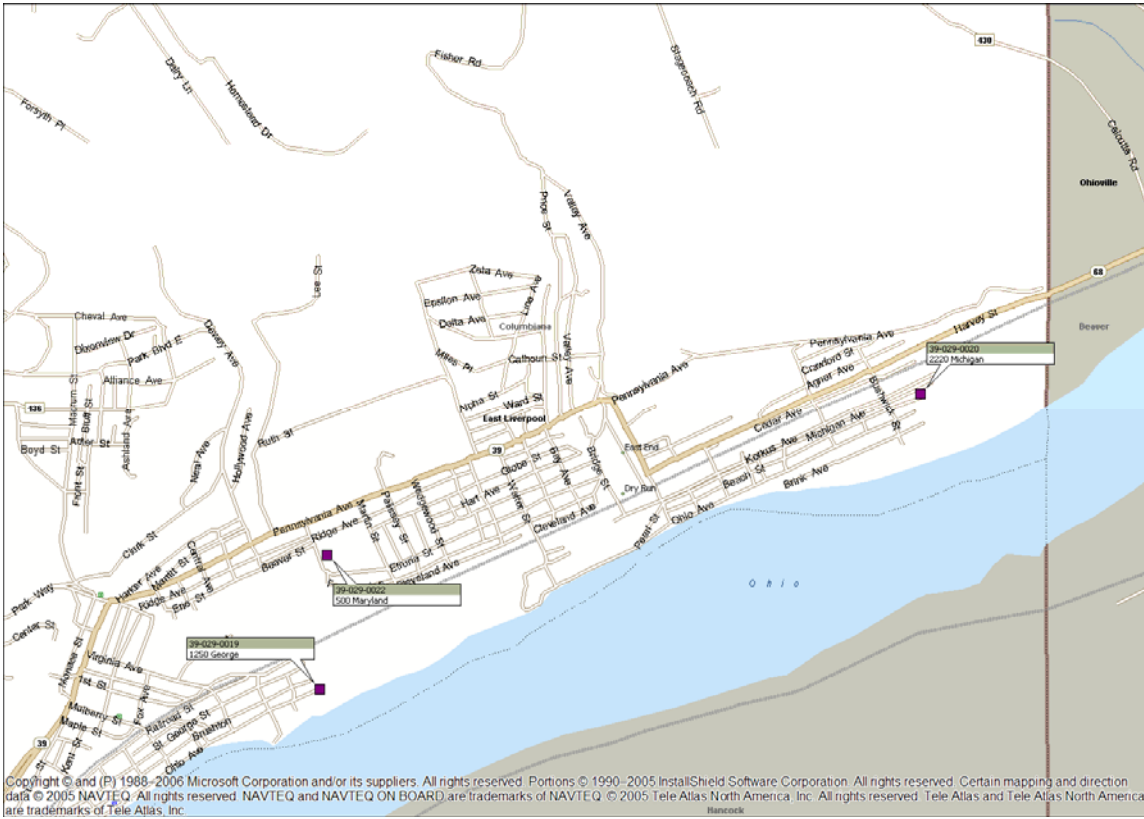
Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-029-0020 2220 Michigan – SH Bell (State Line) Facility East Liverpool	Nov -Jan	0.029	0.024	0.014
	Dec -Feb	0.029	0.007	0.016
	Jan -Mar	0.038	0.013	0.013
	Feb-Apr	0.024	0.016	0.018
	Mar-May	0.024	0.023	0.019
	Apr-Jun	0.015	0.015	0.019
	May-July	0.010	0.017	0.012
	Jun-Aug	0.009	0.015	0.008
	July-Sept	0.009	0.022	0.010
	Aug-Oct	0.010	0.024	0.010
	Sept-Nov	0.024	0.022	0.010
	Oct-Dec	0.027	0.017	0.008

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-029-0022 500 Maryland – Von Roll/ SH Bell (Little England) Facilities East Liverpool	Nov -Jan	0.018	0.010	0.014
	Dec -Feb	0.020	0.009	0.015
	Jan -Mar	0.034	0.020	0.012
	Feb-Apr	0.022	0.019	0.018
	Mar-May	0.021	0.027	0.025
	Apr-Jun	0.010	0.016	0.025
	May-July	0.011	0.022	0.018
	Jun-Aug	0.011	0.019	0.009
	July-Sept	0.008	0.022	0.013
	Aug-Oct	0.007	0.019	0.011
	Sept-Nov	0.006	0.014	0.013
	Oct-Dec	0.010	0.014	0.010



Sites with one or months of a composite analysis missing in any three-month period.

Columbiana County Lead Monitor Locations and Site ID Numbers



Franklin County, OH

Recommended nonattainment boundary: none

Discussion:

Franklin County contains one monitor which has shown no violations of the lead standard from the 2006 to 2008 period. An additional monitor will likely be proposed in the future as part of the monitoring network for urban areas with populations greater than 500,000 persons. The current monitor is already located within the only urban area in Franklin County that meets this criterion, Columbus. County-wide emissions are low in Franklin County with no sources emitting greater than 0.5 TPY.

2005 County-Wide Emissions (TPY):

TRI	0.51
NEI	0.39

Therefore, Ohio EPA believes no nonattainment designation or unclassifiable recommendation is necessary for this county nor is an analysis of the eight factors. For informational purposes, factor 2 is identified below.

Factor 2: Air quality data

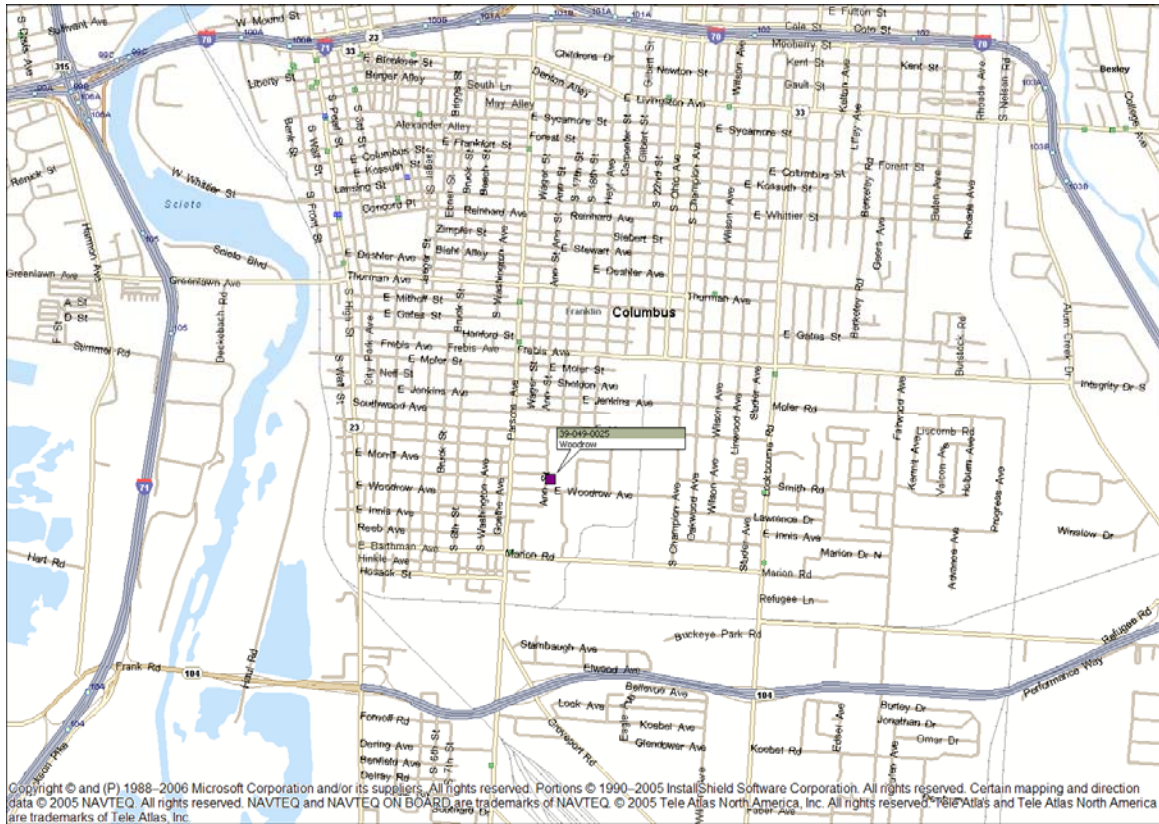
 = Exceeds standard

AQS: Three-month rolling average for 2006, 2007 and 2008 (ug/m³)

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-049-0025 Woodrow Columbus	Nov -Jan	0.004	0.007	0.007
	Dec -Feb	0.005	0.007	0.005
	Jan -Mar	0.005	0.007	0.005
	Feb-Apr	0.009	0.006	0.008
	Mar-May	0.007	0.008	0.009
	Apr-Jun	0.009	0.008	0.011
	May-July	0.009	0.009	0.011
	Jun-Aug	0.010	0.010	0.011
	July-Sept	0.010	0.011	0.012
	Aug-Oct	0.009	0.010	0.011
	Sept-Nov	0.008	0.009	0.010
	Oct-Dec	0.007	0.008	0.008

 Sites with one or months of a composite analysis missing in any three-month period.

Franklin County Lead Monitor Locations and Site ID Numbers



Washington County, OH

Recommended nonattainment boundary: none

Discussion:

Washington County contains one monitor which has shown no violations of the lead standard from the 2006 to 2008 period. No additional monitors are proposed under Ohio's expanded monitoring network. Therefore, no nonattainment designation is necessary for this county nor is an analysis of the eight factors. For informational purposes, factor 2 is identified below.

Factor 2: Air quality data

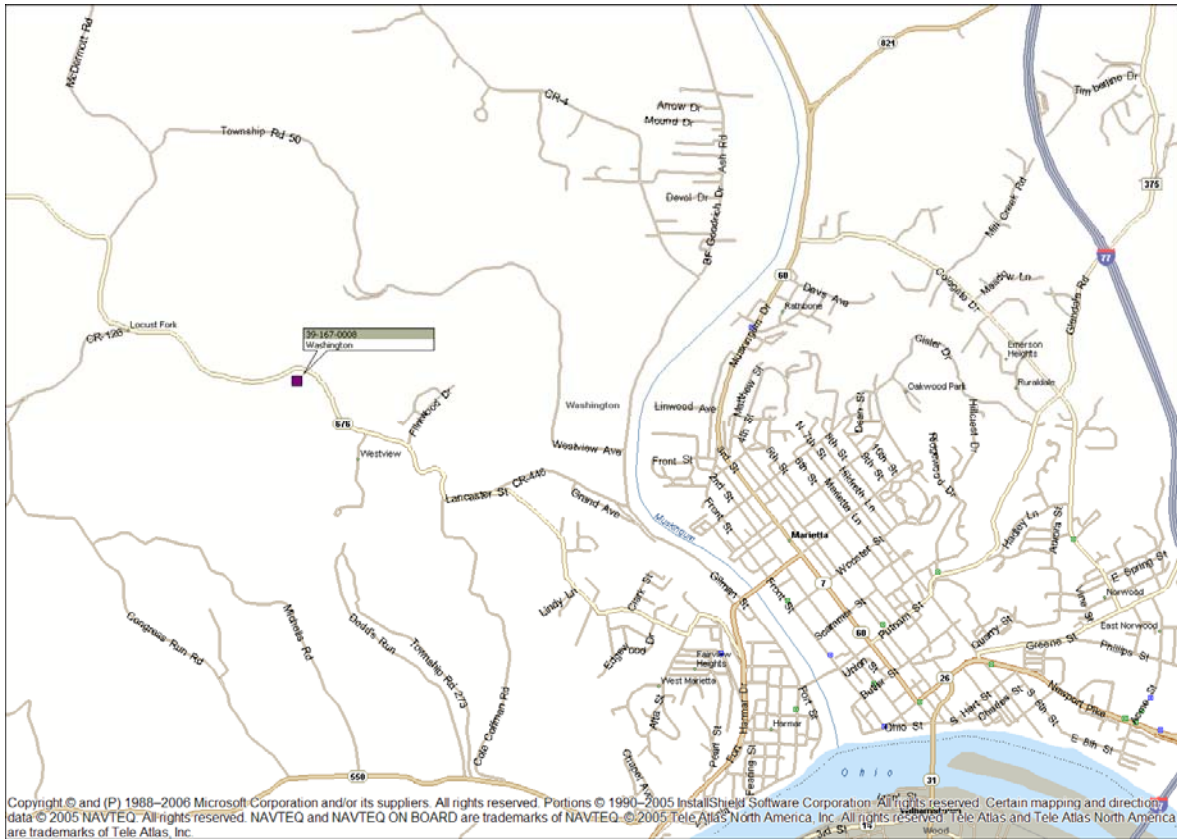
 = Exceeds standard

AQS: Three-month rolling average for 2006, 2007 and 2008 (ug/m³)

Site Location City	3-month period	Three-month rolling average (ug/m ³)		
		2006	2007	2008
39-167-0008 – Eramet Facility Marietta	Nov -Jan	0.005	0.004	0.004
	Dec -Feb	0.007	0.006	0.004
	Jan -Mar	0.007	0.006	0.004
	Feb-Apr	0.008	0.005	0.004
	Mar-May	0.004	0.004	0.004
	Apr-Jun	0.003	0.003	0.004
	May-July	0.005	0.004	0.004
	Jun-Aug	0.004	0.004	0.004
	July-Sept	0.004	0.004	0.004
	Aug-Oct	0.002	0.005	0.004
	Sept-Nov	0.002	0.005	0.004
	Oct-Dec	0.003	0.004	0.004

 Sites with one or months of a composite analysis missing in any three-month period.

Washington County Lead Monitor Locations and Site ID Numbers



***Counties Currently without Monitors, but with Future Monitors to be Installed
for the Lead NAAQS***

The following Counties will have monitors installed in the near future as part of the expanded lead monitoring network. Because monitoring data is currently not sufficient to accurately characterize these areas as either not attaining or attaining, Ohio EPA is recommending such areas be identified as unclassifiable. For informational purposes, factor 1 is identified below for each area.

**Marion
Stark
Trumbull
Hamilton
Lucas
Mahoning
Montgomery
Summit**

Marion County, OH

A facility-based monitor will be installed near the Nucor Marion Steel facility.

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

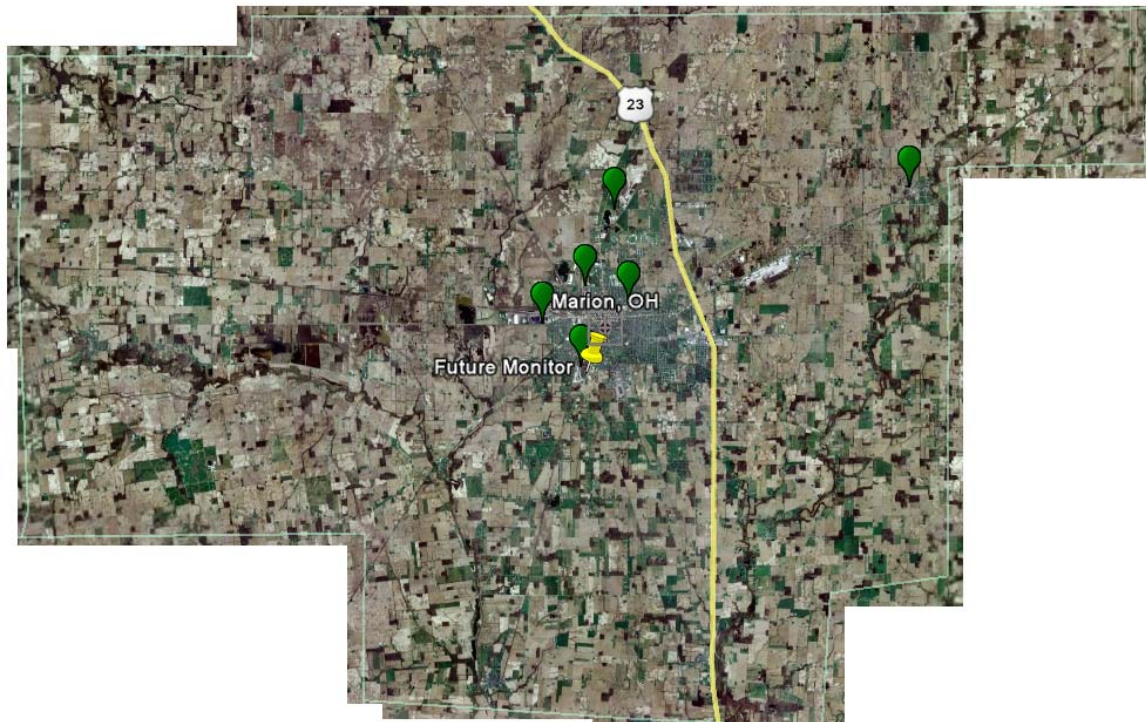
TRI	0.16
NEI	0.16

2005 Sources of Lead Emissions (≥ 0.5 TPY)

Source Name	NEISIC Description	Code	NEI	TRI	Street Address	City
<i>None</i>						

Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Marion County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. A yellow pin symbol indicates the location of future monitors. Appendix A contains a complete list of all sources, with emissions, for Marion County.



Stark County, OH

A facility-based monitor will be installed near the Timken facility.

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

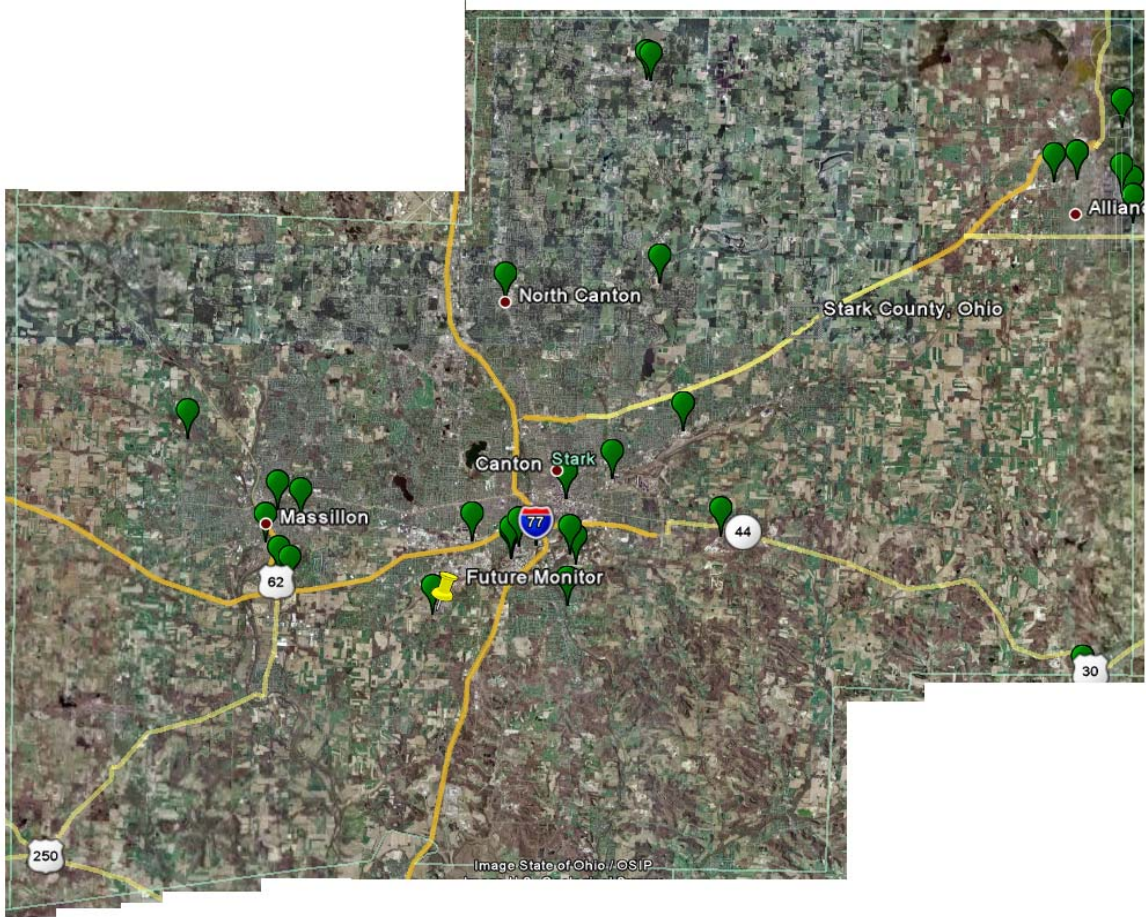
TRI	0.46
NEI	1.24

2005 Sources of Lead Emissions (≥ 0.5 TPY)

Source Name	NEISIC Code Description	NEI	TRI	Street Address	City
THE TIMKEN COMPANY - BEARING PLANTS	Ball and Roller Bearings	0.00	1.05	1835 DUEBER AVENUE, S.W.	CANTON

Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Stark County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. A yellow pin symbol indicates the location of future monitors. Appendix A contains a complete list of all sources, with emissions, for Trumbull County.



Trumbull County, OH

A facility-based monitor will be installed near the Ellwood Engineering Castings facility.

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

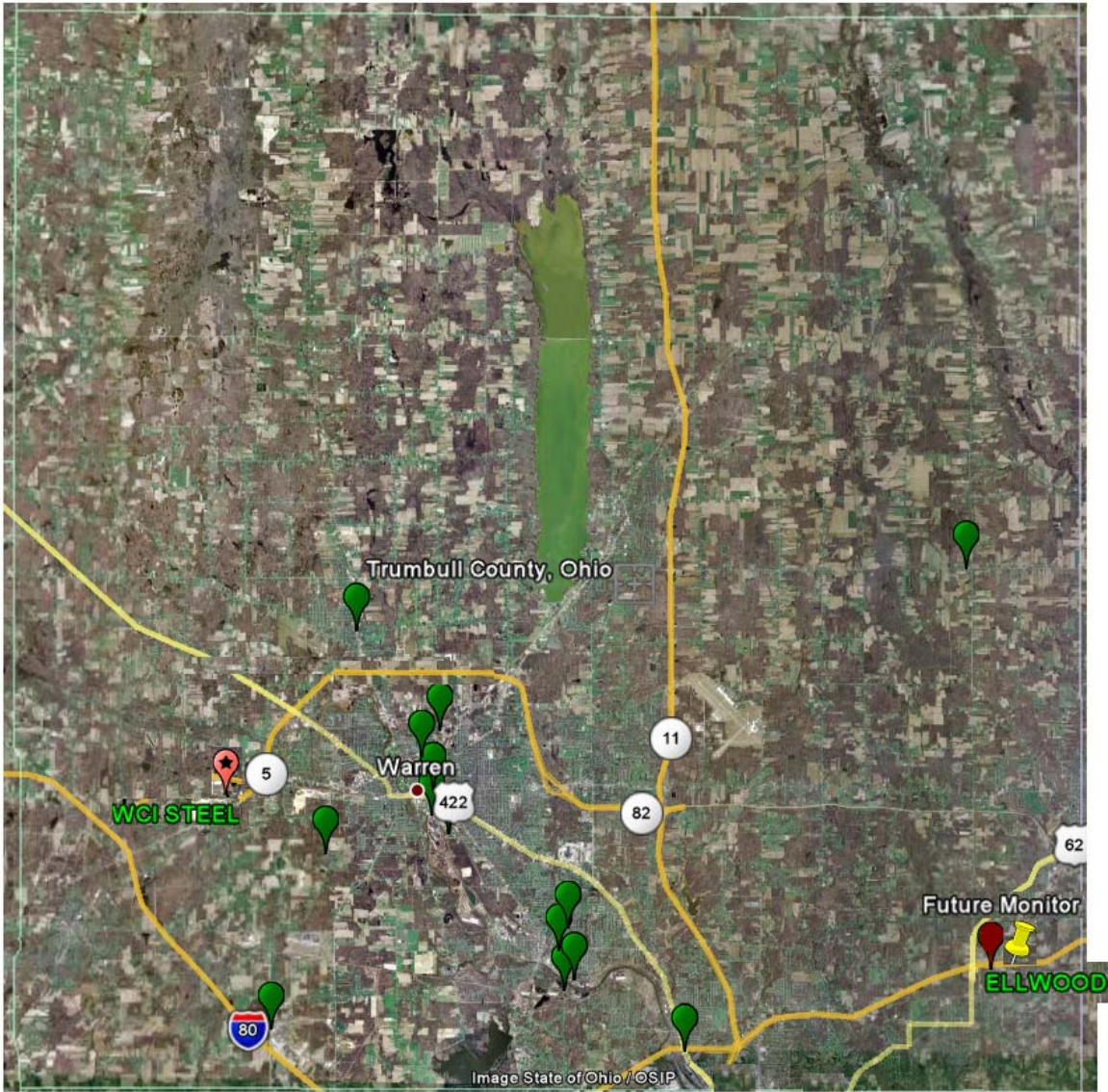
TRI	2.65
NEI	0.27

2005 Sources of Lead Emissions (≥ 0.5 TPY)

Source Name	NEISIC Code Description	NEI	TRI	Street Address	City
ELLWOOD ENGINEERED CASTINGS	Gray and Ductile Iron Foundries	0.00	1.74	7158 HUBBARD MASURY ROAD	HUBBARD
WCI STEEL, INC.	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.00	0.54	1040 PINE AVE SE	WARREN

Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Trumbull County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. A yellow pin symbol indicates the location of future monitors. Appendix A contains a complete list of all sources, with emissions, for Trumbull County.



Hamilton County, OH

A core-based statistical area (CBSA) monitor is planned for installation in January 2011 in the Cincinnati-Middletown area.

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

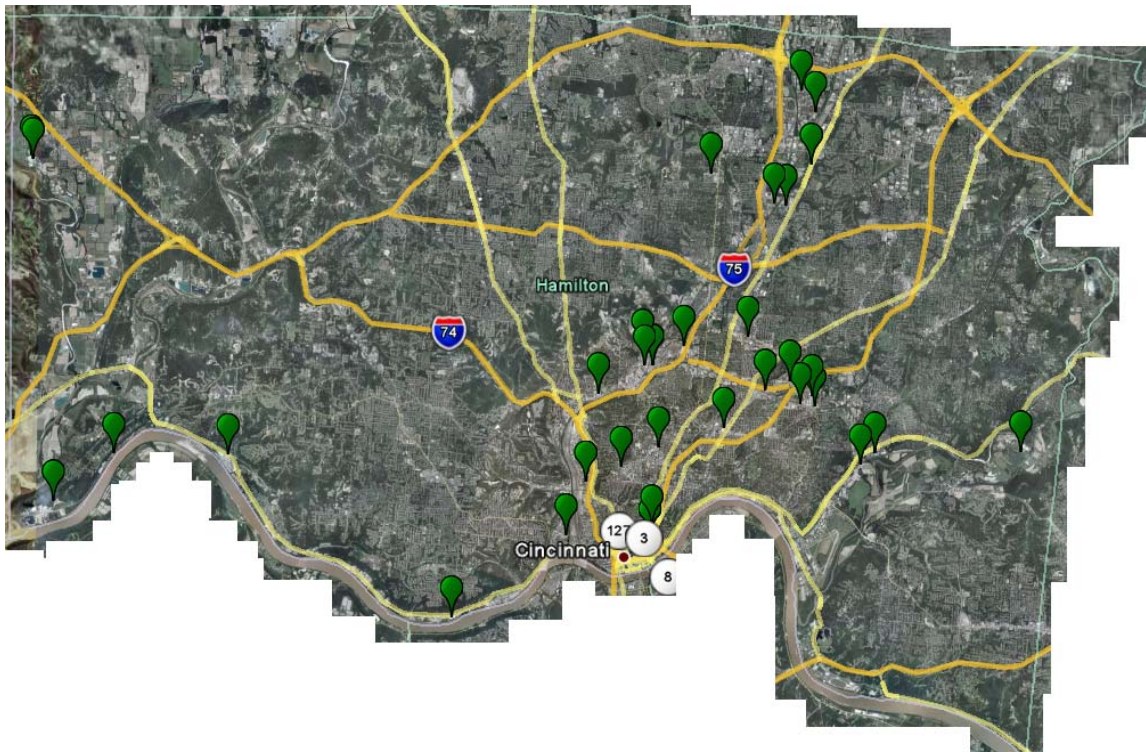
TRI	0.41
NEI	0.37

2005 Sources of Lead Emissions (≥ 0.5 TPY)

Source Name	NEISIC Description	Code	NEI	TRI	Street Address	City
<i>None</i>						

Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Hamilton County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. Appendix A contains a complete list of all sources, with emissions, for Hamilton County.



Lucas County, OH

A CBSA monitor is planned for installation in January 2011 in the Toledo area.

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

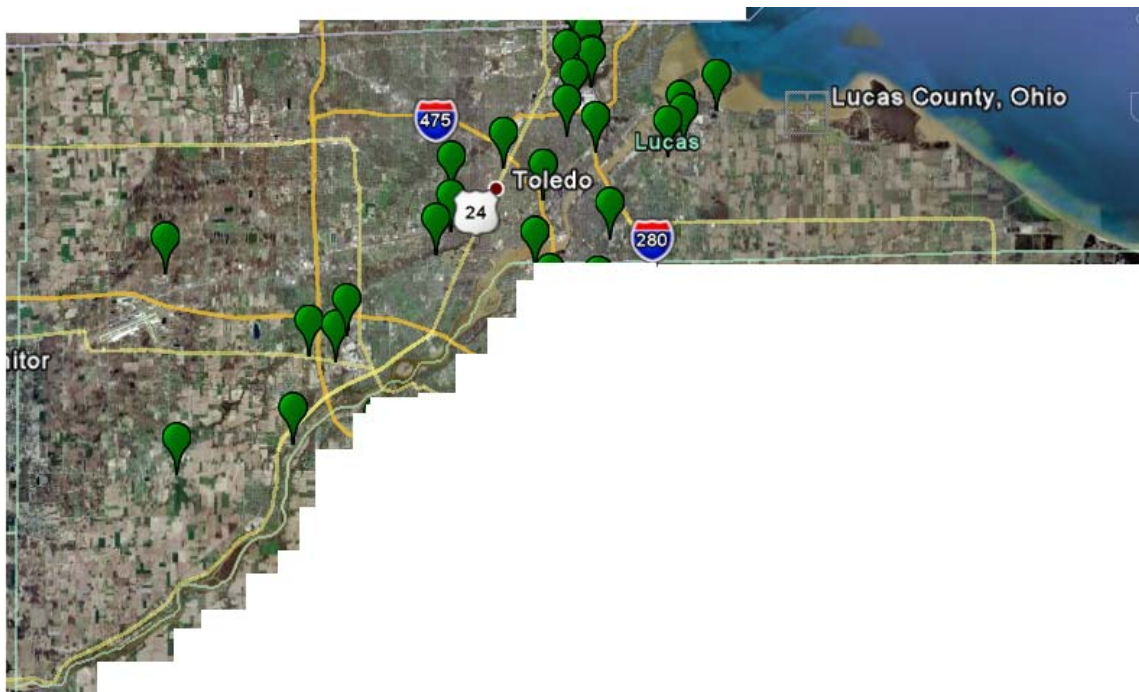
TRI	0.47
NEI	0.59

2005 Sources of Lead Emissions (≥ 0.5 TPY)

Source Name	NEISIC Description	Code	NEI	TRI	Street Address	City
<i>None</i>						

Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Lucas County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. Appendix A contains a complete list of all sources, with emissions, for Lucas County.



Mahoning County, OH

A CBSA monitor is planned for installation in January 2011 in the Youngstown-Warren-Boardman area.

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

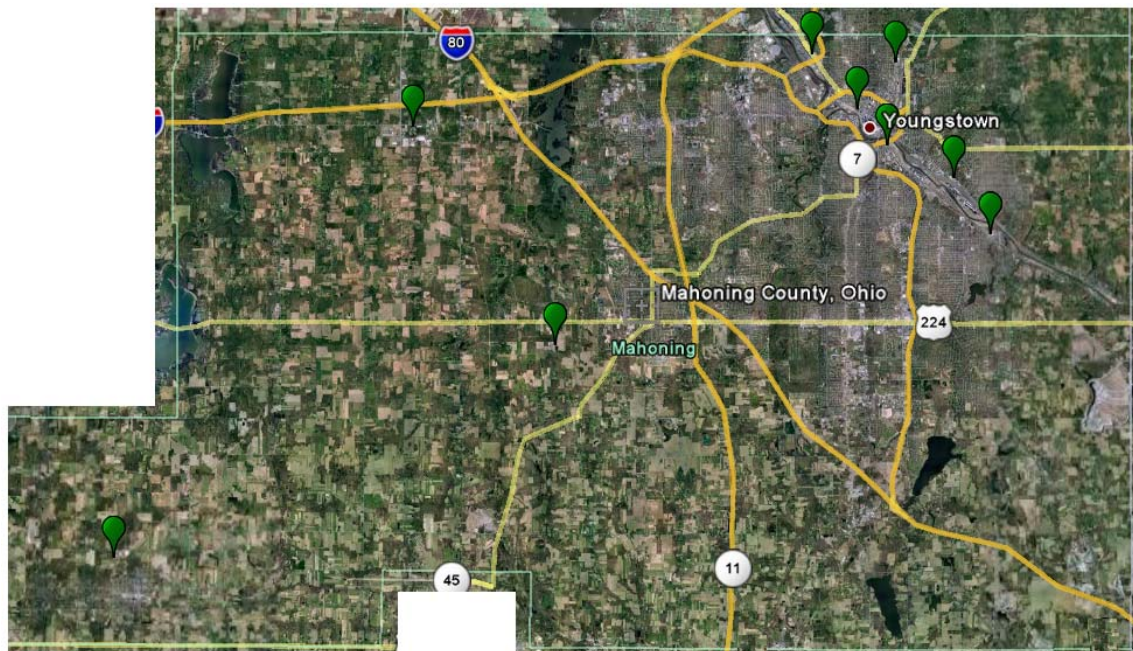
TRI	0.13
NEI	0.07

2005 Sources of Lead Emissions (≥ 0.5 TPY)

Source Name	NEISIC Description	Code	NEI	TRI	Street Address	City
<i>None</i>						

Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Mahoning County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. Appendix A contains a complete list of all sources, with emissions, for Mahoning County.



Montgomery County, OH

A CBSA monitor is planned for installation in January 2011 in the Dayton area.

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

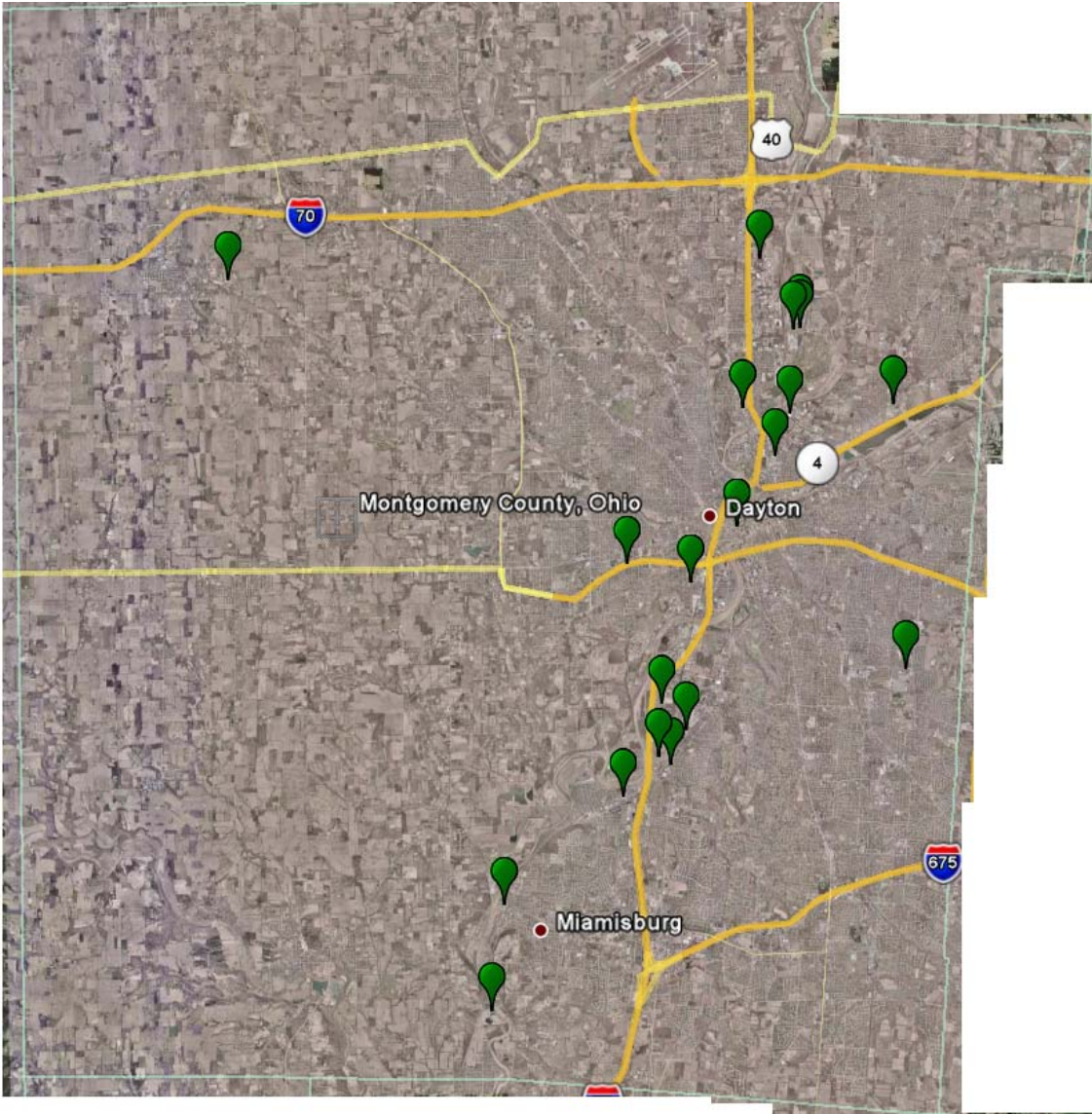
TRI	0.52
NEI	0.15

2005 Sources of Lead Emissions (≥ 0.5 TPY)

Source Name	NEISIC Description	Code	NEI	TRI	Street Address	City
<i>None</i>						

Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Montgomery County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. Appendix A contains a complete list of all sources, with emissions, for Montgomery County.



Summit County, OH

A CBSA monitor is planned for installation in January 2011 in the Akron area.

Factor 1: Emissions

2005 County-Wide Emissions (TPY):

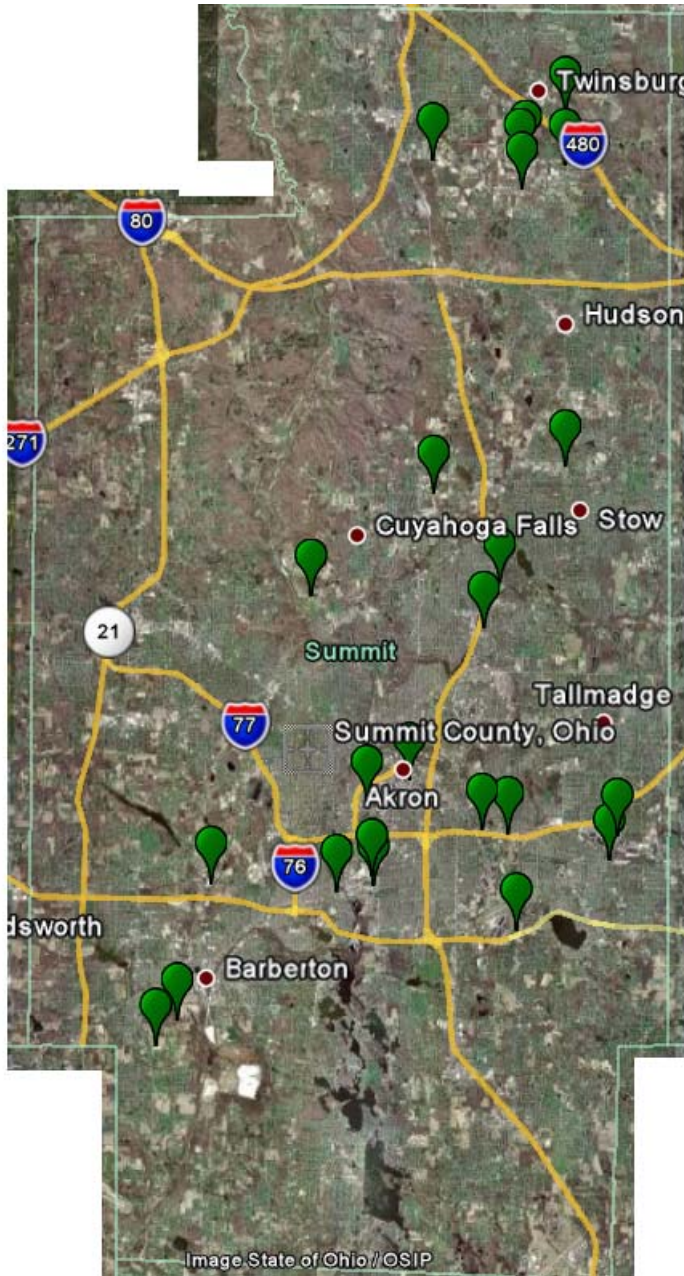
TRI	0.83
NEI	0.53

2005 Sources of Lead Emissions (≥ 0.5 TPY)

Source Name	NEISIC Description	Code	NEI	TRI	Street Address	City
<i>None</i>						

Map of 2005 Sources of Lead Emissions

The following map identifies all sources of lead emissions (TRI or NEI) in Summit County during 2005. Sources with emissions ≥ 0.5 TPY are identified by facility name and the symbol “📍” if ≥ 1.0 TPY or “📍” if ≥ 0.50 TPY and < 1.0 TPY, while all other sources < 0.5 TPY are identified by the symbol “📍”. Appendix A contains a complete list of all sources, with emissions, for Summit County.



APPENDIX A
Detailed lead emissions inventories

APPENDIX B
Stationary source categories that have the largest
emissions in the 2002 NEI

APPENDIX C
Air Quality System (AQS) data sheets

APPENDIX D
SLAMS 2008 lead certification

APPENDIX E
Population and urbanization maps

APPENDIX F
Geography and topography maps

APPENDIX G
Jurisdiction boundary maps

APPENDIX H
Spatial interpolation analysis for Cuyahoga County

APPENDIX I
Dispersion modeling and historic monitoring data
analysis for Fulton County

APPENDIX J
Dispersion modeling and historic monitoring data
analysis for Logan County

APPENDIX K

Public notice, public hearing, and response to
comments documentation

(*note: no response to comments document is
included because no testimony was given, or
comments received)

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
DAYTON POWER & LIGHT CO JM STUART STATION	Electric Services	0.08576238	0.291	745 U.S. 52	ABERDEEN	Adams County
DP&L, KILLEN GENERATING STATION	Electric Services	0.02182673	0.1375	14869 U.S. Route 52	MANCHESTER	Adams County
WHEMCO-OHIO FOUNDRY INC	Gray and Ductile Iron Foundries	0.000405	0.000405	1600 MCCLAIN RD	LIMA	Allen County
INEOS USA LLC	Nitrogenous Fertilizers	0.0002375		1900 FORT AMANDA RD	LIMA	Allen County
SUPERIOR FORGE & STEEL CORPORATION	Steel Foundries, NEC	6.0526E-05		1820 MCCLAIN ROAD	LIMA	Allen County
FORD MOTOR CO.-LIMA	Motor Vehicle Parts and Accessories	3.9474E-06		1155 BIBLE ROAD	LIMA	Allen County
METOKOTE CORPORATION PLANT 25	Coating, Engraving, and Allied Services, NEC	1.9737E-06		1340 NEUBRECHT ROAD	LIMA	Allen County
MANSFIELD PLUMBING PRODUCTS	Vitreous China Plumbing Fixtures and China and Earthenware Fittings and Bathroom Accessories	0.00019309	0.151905	150 EAST FIRST STREET	PERRYSVILLE	Ashland County
CLEVELAND ELECTRIC ILLUMINATING CO., ASHTABULA PLANT	Electric Services	0.021	0.0178	2133 Lake Road	ASHTABULA	Ashtabula County
GENERAL ALUMINUM MANUFACTURING CO	Aluminum Foundries	0.009	0.009	1043 CHAMBERLAIN BLVD	CONNEAUT	Ashtabula County
FOSECO METALLURGICAL INC.	Nonclay Refractories	0.002	0.002	1100 MAPLE AVE	CONNEAUT	Ashtabula County
MILLENNIUM INORGANIC CHEMICALS, INC. - PLANT 2	Inorganic Pigments	0.00174211		2426 MIDDLE ROAD	ASHTABULA	Ashtabula County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
ROCK CREEK ALUMINUM INC	Primary Production of Aluminum	0.001	0.001	2639 E. WATER ST.	ROCK CREEK	Ashtabula County
PLASTICOLORS, INC.	Paints, Varnishes, Lacquers, Enamels, and Allied Products	0.001	0.001	2600 MICHIGAN AVE	ASHTABULA	Ashtabula County
MOLDED FIBER GLASS COMPOSITE SYSTEMS CO	Plastics Products, NEC	0.00026974		2925 MFG PLACE	ASHTABULA	Ashtabula County
SHUT D - PLASTECH ENGINEERED PRODUCTS, INC. - ANDOVER	Plastics Products, NEC	3.2895E-06		MAPLE STREET EXTENSION	ANDOVER	Ashtabula County
General Clay Products Corp	Brick and Structural Clay Tile	0.01722891		39420 US Highway 33	Nelsonville	Athens County
OHIO UNIVERSITY LAUSCHE HEATING PLANT	Colleges, Universities, and Professional Schools	1.3816E-05		FACTORY STREET	ATHENS	Athens County
GOODYEAR TIRE AND RUBBER COMPANY	Fabricated Rubber Products, NEC	0.449785	0.449785	1115 SOUTH WAYNE STREET	ST. MARYS	Auglaize County
THE MINSTER MACHINE COMPANY	Machine Tools, Metal Forming Type	0.152	0.152	240 WEST FIFTH STREET	MINSTER	Auglaize County
ST MARYS MUNICIPAL POWER PLANT	Electric Services	0.00805	0.00805	335 NORTH CHESTNUT STREET	ST. MARYS	Auglaize County
GENERAL ALUMINUM - WAPAKONETA PLANT	Aluminum Die-Castings	0.0025	0.0025	13663 SHORT RD	WAPAKONETA	Auglaize County
CROWN EQUIPMENT CORP. PLANTS 3,4,5, & 7	Industrial Trucks, Tractors, Trailers, and Stackers	0.000195	0.000195	424 WEST MONROE STREET	NEW BREMEN	Auglaize County
R. E. BURGER PLANT	Electric Services	0.051465	0.051465	57246 Ferry Landing Road	SHADYSIDE	Belmont County
WHEELING-PITTSBURGH STEEL CORPORATION - MARTINS FERRY	Coating, Engraving, and Allied Services, NEC	2.8947E-05	0.002	1001 MAIN STREET	MARTINS FERRY	Belmont County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
GLASS COATINGS & CONCEPTS	Nonmetallic Mineral Products, NEC	0.034	0.034	300 LAWTON AVE	MONROE	Butler County
HAMILTON BRASS & ALUMINUM CASTINGS CO	Copper Foundries	0.01865	0.01865	706 S 8TH ST	HAMILTON	Butler County
BAY WEST PAPER CORP.	Paper Mills	0.00875	0.00875	700 COLUMBIA AVE	MIDDLETOWN	Butler County
FUTURE FINISHES INC.	Electroplating, Plating, Polishing, Anodizing, and Coloring	0.008	0.008	40 STANDEN DR	HAMILTON	Butler County
AK STEEL CORPORATION	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.00284056	1.5165	1801 CRAWFORD STREET	MIDDLETOWN	Butler County
SHEPHERD COLOR CO	Inorganic Pigments	0.00025	0.00025	4539 DUES DR	CINCINNATI	Butler County
BLUEGRASS MILLS HOLDING COMPANY	Paperboard Mills	0.00020526		407 CHARLES STREET	MIDDLETOWN	Butler County
MOHAWK PAPER MILLS INC. - HAMILTON MILL	Paper Mills	0.0001625		400 DAYTON ST.	HAMILTON	Butler County
MILLER BREWERIES EAST, INC.	Malt Beverages	9.2105E-06	0.022	2525 WAYNE MADISON ROAD	TRENTON	Butler County
SMART PAPERS LLC	Paper Mills	0.00000725	0.00905	601 NORTH 'B' STREET	HAMILTON	Butler County
MIAMI UNIVERSITY	Colleges, Universities, and Professional Schools	6.5789E-06		COLE SERVICE BUILDING	OXFORD	Butler County
CITY OF HAMILTON MUNICIPAL ELECTRIC PLANT	Electric and Other Services Combined	8.7946E-07	0.01275	960 North Third Street	HAMILTON	Butler County
FUSION CERAMICS INC	Chemicals and Chemical Preparations, NEC	0.0185	0.0185	160 SCIO RD SE	CARROLLTON	Carroll County
GENERAL COLOR & CHEMICAL CO INC	Custom Compounding of Purchased Plastics Resins	0.005	0.005	350 BRIDGE ST	MINERVA	Carroll County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
ALUMINUM ONE	Secondary Smelting and Refining of Nonferrous Metals	0.002815	0.002815	217 ROOSEVELT AVE	MINERVA	Carroll County
GRIMES AEROSPACE CO	Aircraft Parts and Auxiliary Equipment, NEC	0.0073		550 STATE RTE. 55	URBANA	Champaign County
GRIMES AEROSPACE CO	Aircraft Parts and Auxiliary Equipment, NEC	0.0003	0.0003	515 N. RUSSELL ST.	URBANA	Champaign County
FOX RIVER PAPER CO. - HOWARD MILL	Packaging Paper and Plastics Film, Coated and Laminated	5.7237E-05		700 WEST COURT STREET	URBANA	Champaign County
TEIKURO CORP	Electroplating, Plating, Polishing, Anodizing, and Coloring	0.0105	0.0105	4500 GATEWAY BLVD	SPRINGFIELD	Clark County
INTERNATIONAL TRUCK & ENGINE CORP.	Truck and Bus Bodies	4.8684E-05		6125 URBANA ROAD	SPRINGFIELD	Clark County
CINERGY CG&E WC BECKJORD STATION	Electric Services	0.10500078	0.2855	757 US ROUTE 52	NEW RICHMOND	Clermont County
L-3 COMMUNICATIONS KDI PRECISION PRODUCTS	Ordnance and Accessories, NEC	0.00051294	0.00051294	3975 MCMANN RD	CINCINNATI	Clermont County
SPECTRA-TECH MANUFACTURING INC.	Electronic Components, NEC	0.00043088	0.00043088	4013 BORMAN DR	BATAVIA	Clermont County
ZF BATAVIA LLC	Motor Vehicle Parts and Accessories	3.2237E-05		1981 FRONT WHEEL DRIVE	BATAVIA	Clermont County
MILACRON INC	Special Industry Machinery, NEC	7.2368E-06		4165 HALF ACRE RD	BATAVIA	Clermont County
DUKE ENERGY CORP ZIMMER GENERATING STATION	Electric Services	5.3584E-07	0.1884	1781 US Route 52	MOSCOW	Clermont County
BLANCHESTER FOUNDRY	Gray and Ductile Iron Foundries	0.0325	0.0325	214 E CHERRY ST	BLANCHESTER	Clinton County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
AMERICAN SHOWA INC BLANCHESTER PLANT	Motor Vehicle Parts and Accessories	0.0025	0.0025	960 CHERRY ST	BLANCHESTER	Clinton County
AHRESTY WILMINGTON CORP	Aluminum Die-Castings	0.00225	0.008	2627 SOUTH S. ST.	WILMINGTON	Clinton County
NEW SABINA INDUSTRIES INC	Motor Vehicle Parts and Accessories	0.00215	0.00215	12555 E US RT 22	SABINA	Clinton County
STANLEY WORKS	Iron and Steel Forgings	0.0005		197 JEFFERSON ST.	SABINA	Clinton County
ELJER PLUMBINGWARE INC	Enameled Iron and Metal Sanitary Ware	0.231095		921 S. ELLSWORTH AVE.	SALEM	Columbiana County
VON ROLL AMERICA INC	Refuse Systems	0.15664132	0.057	1250 ST. GEORGE STREET	EAST LIVERPOOL	Columbiana County
QUAKER CITY CASTINGS	Gray and Ductile Iron Foundries	0.1146	0.1146	310 EUCLID ST	SALEM	Columbiana County
Summitville Tiles Inc	Ceramic Wall and Floor Tile	0.0119012		State Route 644	Summitville	Columbiana County
BARRETT'S MINERALS INC	Minerals and Earths, Ground or Otherwise Treated	0.0014	0.0014	2400 CLARK AVE	WELLSVILLE	Columbiana County
ALBCO FOUNDRY INC	Nonferrous Foundries, Except Aluminum and Copper	0.001	0.001	230 W MAPLE ST	LISBON	Columbiana County
SHUT D - NATIONAL REFRACTORIES AND MINERALS CORP	Nonclay Refractories	0.0009995		41738 ESTERLY DR. P.O.BOX 47	COLUMBIANA	Columbiana County
STONE CONTAINER CORP.- COSHOCKTON	Paperboard Mills	0.20942118	0.1577	500 NORTH FOURTH STREET	COSHOCKTON	Coshockton County
CONESVILLE POWER PLANT	Electric Services	0.063	0.3915	47201 COUNTY ROAD 273	CONESVILLE	Coshockton County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
AK STEEL-COSHOCTON WORKS	Cold-Rolled Steel Sheet, Strip, and Bars	0.00025	0.00025	17400 STATE RT 16	COSHOCTON	Coshocton County
CLOW WATER SYSTEMS COMPANY	Gray and Ductile Iron Foundries	2.8947E-05	0.1095	P. O. BOX 6001	COSHOCTON (TUSCARAWAS TWP.)	Coshocton County
RYDER-HEIL BRONZE INC.	Nonferrous Foundries, Except Aluminum and Copper	0.00457	0.00457	126 E IRVING ST	BUCYRUS	Crawford County
GE LIGHTING INC - BUCYRUS LAMP PLANT	Electric Lamp Bulbs and Tubes	0.00013092	0.000205	GE COMPANY - BUCYRUS LAMP PLANT	BUCYRUS	Crawford County
NATIONAL LIME & STONE COMPANY	Crushed and Broken Limestone	2.1053E-05		4580 BETHEL ROAD	BUCYRUS	Crawford County
AMERICAN SPRING WIRE CORP.	Steel Wiredrawing and Steel Nails and Spikes	1.187	1.187	26300 MILES RD.	BEDFORD HEIGHTS	Cuyahoga County
I. SCHUMANN & CO	Secondary Smelting and Refining of Nonferrous Metals	0.55	0.55	22500 ALEXANDER RD	OAKWOOD VILLAGE	Cuyahoga County
VICTORY WHITE METAL CO.	Rolling, Drawing, and Extruding of Nonferrous Metals, Except Copper and Aluminum	0.5	0.5	6100 ROLAND AVE	CLEVELAND	Cuyahoga County
FEDERAL METAL CO	Secondary Smelting and Refining of Nonferrous Metals	0.1735	0.1735	7250 DIVISION ST	OAKWOOD VILLAGE	Cuyahoga County
REPUBLIC METALS	Fabricated Metal Products, NEC	0.15	0.15	7930 JONES	CLEVELAND	Cuyahoga County
MORGAN ELECTRO CERAMICS	Electronic Components, NEC	0.14205	0.14205	232 FORBES RD	BEDFORD	Cuyahoga County
ISG CLEVELAND INC.	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.14043812	0.198	3060 EGGERS AVENUE	CLEVELAND	Cuyahoga County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
TDE GROUP INC	Aluminum Die-Castings	0.125		28850 AURORA RD.	OLON	Cuyahoga County
CLEVELAND THERMAL LLC	Steam and Air-Conditioning Supply	0.06075632		1921 HAMILTON AVENUE	CLEVELAND	Cuyahoga County
Nettleton Steel Treating Company	Metal Heat Treating	0.0585		1371 East 45th Street	Cleveland	Cuyahoga County
Hi Tecmetal Incorporated	Metal Heat Treating	0.0585		1177 Marquette Avenue	Cleveland	Cuyahoga County
SHERWOOD	Valves and Pipe Fittings, NEC	0.0505	0.0505	1201 W 65TH ST	CLEVELAND	Cuyahoga County
T & B Foundry Company	Gray and Ductile Iron Foundries	0.05		2469 East 71st Street	Cleveland	Cuyahoga County
CLEVELAND ELECTRIC ILLUMINATING CO., LAKE SHORE PLANT	Electric Services	0.0376	0.0376	6800 South Marginal Road	CLEVELAND	Cuyahoga County
AMERICAN BRONZE CORP	Copper Foundries	0.031	0.031	2941 BROADWAY AVE	CLEVELAND	Cuyahoga County
Hi Tech Metal Incorporated BMT	Fabricated Metal Products, NEC	0.0303		1101 East 55th Street	Cleveland	Cuyahoga County
GENERAL ENVIRONMENTAL MANAGEMENT	Refuse Systems	0.028	0.028	2655 TRANSPORT RD	CLEVELAND	Cuyahoga County
GE EUCLID LAMP PLANT	Electric Lamp Bulbs and Tubes	0.025		1814 E. 45TH ST.	CLEVELAND	Cuyahoga County
METALDYNE INC BEDFORD HEIGHTS PLANT	Aluminum Die-Castings	0.0155		25661 CANNON RD.	BEDFORD HEIGHTS	Cuyahoga County
REPUBLIC ANODE FABRICATORS	Fabricated Metal Products, NEC	0.01		11288 ALAMEDA DR.	STRONGSVILLE	Cuyahoga County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
DIGERONIMO AGGREGATES LLC	Minerals and Earths, Ground or Otherwise Treated	0.01		8900 HEMLOCK ROAD	INDEPENDENCE	Cuyahoga County
SOUTHERLY WASTEWATER TREATMENT CENTER	Sewerage Systems	0.00882303		6000 CANAL ROAD	CUYAHOGA HEIGHTS	Cuyahoga County
SOLON SPECIALTY WIRE	Steel Wiredrawing and Steel Nails and Spikes	0.00625	0.00625	30000 SOLON RD	SOLON	Cuyahoga County
FORD MOTOR COMPANY, CLEVELAND ENGINE PLANTS	Motor Vehicle Parts and Accessories	0.0045	0.0045	18300 FIVE POINTS ROAD	BROOK PARK	Cuyahoga County
FERRO CORPORATION - CLEVELAND FRIT PLANT	Chemicals and Chemical Preparations, NEC	0.0045	0.0045	4150 EAST 56TH STREET, P.O. BOX 6550	CLEVELAND	Cuyahoga County
ART GALVANIZING WORKS INC	Coating, Engraving, and Allied Services, NEC	0.0025	0.0025	3935 VALLEY RD	CLEVELAND	Cuyahoga County
SK WELLMAN CORP	Aircraft Parts and Auxiliary Equipment, NEC	0.0025	0.0025	5372 WEST 130TH STREET	BROOK PARK	Cuyahoga County
Redmond Waltz Electric Company	Motors and Generators	0.001575		4126 St. Clair Avenue	Cleveland	Cuyahoga County
SAINT-GOBAIN CRYSTALS	Measuring and Controlling Devices, NEC	0.0015	0.0015	6801 COCHRAN RD	SOLON	Cuyahoga County
ALUMITECH OF CLEVELAND	Secondary Smelting and Refining of Nonferrous Metals	0.0015	0.0015	4181 BRADLEY RD	CLEVELAND	Cuyahoga County
OATEY CO	Adhesives and Sealants	0.00145		4700 W. 160TH ST.	CLEVELAND	Cuyahoga County
HEXAGRAM INC	Printed Circuit Boards	0.0014	0.0014	23456 MERCANTILE RD	BEACHWOOD	Cuyahoga County
MODINE AFTERMARKET HOLDINGS INC	Motor Vehicle Parts and Accessories	0.001		20137 PROGRESS DR.	STRONGSVILLE	Cuyahoga County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
DU PONT CLEVELAND REFINISH SERVICE CENTER	Paints, Varnishes, Lacquers, Enamels, and Allied Products	0.00085		9200 MIDWEST AVE.	GARFIELD HEIGHTS	Cuyahoga County
Greenfield Crematory (Foresight Family Service)	Funeral Services and Crematories	0.000563		5475 Lake Court	Cleveland	Cuyahoga County
WYMAN-GORDON FORGINGS (CLEVELAND) INC.	Iron and Steel Forgings	0.0005	0.0005	3097 E 61ST ST	CLEVELAND	Cuyahoga County
STANLEY ASSEMBLY TECHS	Hand and Edge Tools, Except Machine Tools and Handsaws	0.0005		5335 AVION PARK DR.	CLEVELAND	Cuyahoga County
COOPER-STANDARD AUTOMOTIVE	Plastics Products, NEC	0.0005		2130 W. 110TH ST.	CLEVELAND	Cuyahoga County
PROLIANCE INTERNATIONAL INC	Motor Vehicle Parts and Accessories	0.00045	0.00045	15600 COMMERCE PARK DR	CLEVELAND	Cuyahoga County
CAST SPECIALTIES INC	Nonferrous Die-Castings, Except Aluminum	0.00042468	0.00042468	26711 MILES RD	WARRENSVILLE HEIGHTS	Cuyahoga County
CHARTER STEEL - CLEVELAND INC	Steel Wiredrawing and Steel Nails and Spikes	0.00039408	0.000025	4300 EAST 49TH STREET	CUYAHOGA HEIGHTS	Cuyahoga County
REMELT SERVICES INC.	Secondary Smelting and Refining of Nonferrous Metals	0.00035	0.00035	6560 JUNIATA AVE	CLEVELAND	Cuyahoga County
FORD MOTOR COMPANY, CLEVELAND CASTING PLANT	Gray and Ductile Iron Foundries	0.00033198	1.2	5600 HENRY FORD BLVD	BROOK PARK	Cuyahoga County
PARMA COMMUNITY GENERAL HOSPITAL	General Medical and Surgical Hospitals	0.00018684		7007 POWERS BOULEVARD	PARMA	Cuyahoga County
SOUTHWEST GENERAL HEALTH CENTER	General Medical and Surgical Hospitals	0.00017632		18697 BAGLEY ROAD	MIDDLEBURG HEIGHTS	Cuyahoga County
American Brass Manufacturing Company	Plumbing Fixture Fittings and Trim	0.00016047		5000 Superior Avenue	Cleveland	Cuyahoga County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
THE LINCOLN ELECTRIC COMPANY	Electric and Gas Welding and Soldering Equipment	0.00015461	0.0175	22801 ST. CLAIR AVENUE	EUCLID	Cuyahoga County
WABASH ALLOYS, LLC	Secondary Smelting and Refining of Nonferrous Metals	0.0001171	0.001	4365 BRADLEY ROAD	CLEVELAND	Cuyahoga County
ELECTROLIZING CORP OF OHIO PLANT 1	Electroplating, Plating, Polishing, Anodizing, and Coloring	0.0001	0.0001	1325 E 152ND ST	CLEVELAND	Cuyahoga County
NASA JOHN H. GLENN RESEARCH CENTER - LEWIS FIELD	Space Research and Technology	9.2763E-05		21000 BROOKPARK ROAD	CLEVELAND	Cuyahoga County
ALCOA-CLEVELAND WORKS	Nonferrous Forgings	8.6842E-05		1600 HARVARD AVENUE	CLEVELAND	Cuyahoga County
METROHEALTH MEDICAL CENTER	General Medical and Surgical Hospitals	7.6974E-05		3395 SCRANTON ROAD	CLEVELAND	Cuyahoga County
FORD MOTOR CO WALTON HILLS STAMPING PLANT	Automotive Stamping	0.000075	0.000075	7845 NORTHFIELD RD	WALTON HILLS	Cuyahoga County
GMC MFD PARMA PLANT-PARMA	Motor Vehicle Parts and Accessories	7.3026E-05	0.0007	5400 CHEVROLET BLVD.	PARMA	Cuyahoga County
THE MEDICAL CENTER COMPANY	Steam and Air-Conditioning Supply	5.4605E-05		2250 CIRCLE DRIVE	CLEVELAND	Cuyahoga County
SIFCO FORGE GROUP, INC.	Iron and Steel Forgings	2.6316E-05		970 EAST 64TH STREET	CLEVELAND	Cuyahoga County
BIRD TECHNOLOGIES GROUP	Instruments for Measuring and Testing of Electricity and Electrical Signals	0.000025	0.000025	30303 AURORA RD	SOLON	Cuyahoga County
HUKILL CHEMICAL CORPORATION	Business Services, NEC	2.2368E-05		7013 KRICK RD	BEDFORD	Cuyahoga County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
ADVANCED ENERGY TECHNOLOGY INC	Carbon and Graphite Products	2.2368E-05		11709 MADISON AVE	LAKEWOOD	Cuyahoga County
GE LIGHTING - NELA PARK	Electric Lamp Bulbs and Tubes	1.7105E-05		1975 NOBLE ROAD	CLEVELAND	Cuyahoga County
COMMONWEALTH ALUMINUM, BEDFORD COIL COATING FACILITY	Coating, Engraving, and Allied Services, NEC	1.6447E-05		7130 KRICK RD.	BEDFORD	Cuyahoga County
PPG INDUSTRIES, INC. - CLEVELAND	Paints, Varnishes, Lacquers, Enamels, and Allied Products	1.3158E-05		3800 WEST 143RD STREET	CLEVELAND	Cuyahoga County
GE LIGHTING - IVANHOE ROAD	Inorganic Pigments	7.2368E-06		1099 IVANHOE ROAD	CLEVELAND	Cuyahoga County
L Gray Barrel & Drum Company	Coating, Engraving, and Allied Services, NEC	0.00000624		2800 East 90th Street	Cleveland	Cuyahoga County
AK-ISG STEEL COATING CO	Electrometallurgical Products, Except Steel	0.00000445	0.00000445	3531 CAMPBELL RD	CLEVELAND	Cuyahoga County
AUTOMATED PACKAGING SYSTEMS	Plastics Products, NEC	3.2895E-06		AUTOMATED PACKAGING SYSTEMS, INC.	GARFIELD HEIGHTS	Cuyahoga County
RESEARCH ORGANICS INC.	Biological Products, Except Diagnostic Substances	1.3158E-06		4353 EAST 49TH STREET	CUYAHOGA HEIGHTS	Cuyahoga County
BASIC ALUMINUM CASTINGS CO	Aluminum Die-Castings	7.4E-09	7.4E-09	1325 E 168TH ST	CLEVELAND	Cuyahoga County
BASF CORPORATION	Paints, Varnishes, Lacquers, Enamels, and Allied Products	3.5526E-05		1175 MARTIN STREET	GREENVILLE	Darke County
GREENVILLE TECHNOLOGY, INC.	Motor Vehicle Parts and Accessories	2.0395E-05		5755 STATE ROUTE 571E	GREENVILLE	Darke County
JOHNS MANVILLE PLANT 2	Mineral Wool	0.05999998	0.0161	408 PERRY ST.	DEFIANCE	Defiance County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
JOHNS MANVILLE INTERNATIONAL, INC.	Mineral Wool	0.03003354	0.006	925 CARPENTER ROAD	DEFIANCE	Defiance County
STANDRIDGE COLOR CORP	Custom Compounding of Purchased Plastics Resins	0.0045	0.0045	1160 INTEGRITY DR	DEFIANCE	Defiance County
COOPER POWER TOOLS INC HICKSVILLE OH OPERATION	Power-Driven Handtools	0.00135	0.00135	600 DEFIANCE AVE	HICKSVILLE	Defiance County
GMC POWERTRAIN DIV.	Gray and Ductile Iron Foundries	0.3408	0.3408	26427 STATE RT. 281 E	DEFIANCE	Defiance County
DEFIANCE ENERGY	Steam and Air-Conditioning Supply	2.3684E-05		P.O. BOX 339	DEFIANCE	Defiance County
PPG INDUSTRIES OHIO INC. - DELAWARE	Paints, Varnishes, Lacquers, Enamels, and Allied Products	0.0045	0.0045	760 PITTSBURGH DRIVE	DELAWARE	Delaware County
ROCKWELL AUTOMATION INC.	Measuring and Controlling Devices, NEC	0.0022	0.0022	8333 GREEN MEADOWS DR N	WESTERVILLE	Delaware County
MICRO INDUSTRIES CORP	Semiconductors and Related Devices	1.8475E-05	1.8475E-05	8399 GREEN MEADOWS DR N	WESTERVILLE	Delaware County
CONCAST METAL PRODUCTS CO	Copper Foundries	0.01089	0.01089	STATE RT 113	BIRMINGHAM	Erie County
AMERICAN COLORS INC DISPERSION PLANT	Paints, Varnishes, Lacquers, Enamels, and Allied Products	0.0027	0.0027	1110 EDGEWATER AVE	SANDUSKY	Erie County
STOWE WOODWARD	Fabricated Rubber Products, NEC	0.00136		916 W. WATER ST.	SANDUSKY	Erie County
GLIDDEN CO	Paints, Varnishes, Lacquers, Enamels, and Allied Products	0.0005	0.0005	300 SPROWL RD	HURON	Erie County
THAKAR ALUMINUM CORP.	Secondary Smelting and Refining of Nonferrous Metals	0.0003685	0.0003685	1364 OLDS ST	SANDUSKY	Erie County
TENNECO AUTOMOTIVE - MONROE CLEVITE ELASTOMERS	Motor Vehicle Parts and Accessories	0.0002	0.0002	33 LOCKWOOD RD	MILAN	Erie County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
CERTAINTEED CORP.	Asphalt Felts and Coatings	3.5526E-05		11519 STATE ROUTE 250N	MILAN	Erie County
SANDUSKY LIMITED	Automotive Trimmings, Apparel Findings, and Related Products	1.6447E-05		3130 WEST MONROE STREET	SANDUSKY	Erie County
LANCASTER GLASS CORPORATION	Pressed and Blown Glass and Glassware, NEC	0.1095	0.1095	240 WEST MAIN STREET	LANCASTER	Fairfield County
OHIO OXIDE	Primary Metal Products, NEC	0.014	0.014	2161 COMMERCE ST	LANCASTER	Fairfield County
FAIRFIELD MEDICAL CENTER	General Medical and Surgical Hospitals	0.00046423		401 NORTH EWING STREET	LANCASTER	Fairfield County
OHIO PAPERBOARD	Paperboard Mills	0.000157	0.000157	310 WATER ST	BALTIMORE	Fairfield County
ANCHOR HOCKING GLASS CO.	Pressed and Blown Glass and Glassware, NEC	9.0789E-05		1115 W. FIFTH AVENUE	LANCASTER	Fairfield County
CROWN CORK AND SEAL	Crowns and Closures	1.8421E-05		940 MILL PARK DRIVE	LANCASTER	Fairfield County
THILMANY, LLC	Converted Paper and Paperboard Products, NEC	1.3158E-05		3165 WILSON ROAD	LANCASTER	Fairfield County
SONOCO PRODUCTS COMPANY	Paperboard Mills	6.5789E-06		831 SOUTH MEMORIAL DRIVE	LANCASTER	Fairfield County
YUSA CORPORATION	Motor Vehicle Parts and Accessories	6.6447E-05		151 JAMISON RD. SW	WASHINGTON COURT HOUSE	Fayette County
DOMINION - WASHINGTON COMPRESSOR STATION	Natural Gas Transmission	1.9737E-06		708 PARROTT ROAD, N.W.	WASHINGTON COURT HOUSE	Fayette County
TECHNEGLAS INC	Pressed and Blown Glass and Glassware, NEC	0.286	0.286	727 E JENKINS AVE CORP	COLUMBUS	Franklin County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
DELPHI THERMAL & INTERIOR COLUMBUS	Motor Vehicle Parts and Accessories	0.0574	0.0574	200 GEORGESVILLE RD	COLUMBUS	Franklin County
COLUMBUS STEEL CASTINGS	Steel Foundries, NEC	0.0175	0.0175	2211 PARSONS AVENUE	COLUMBUS	Franklin County
V&S COLUMBUS GALVANIZING LLC	Coating, Engraving, and Allied Services, NEC	0.0135	0.0135	1000 BUCKEYE PARK RD	COLUMBUS	Franklin County
CLARK GRAVE VAULT/CTL STEEL	Burial Caskets	0.0055	0.0055	375 E FIFTH AVE	COLUMBUS	Franklin County
COLUMBUS SOUTHERLY WASTEWATER TREATMENT PLANT	Water, Sewer, Pipeline, and Communications and Power Line Construction	0.00462658		6977 SOUTH HIGH STREET	LOCKBOURNE	Franklin County
JACKSON PIKE WASTEWATER TREATMENT PLANT	Water, Sewer, Pipeline, and Communications and Power Line Construction	0.00134		2104 JACKSON PIKE	COLUMBUS	Franklin County
LUCENT TECHS	Radio and Television Broadcasting and Communications Equipment	0.001		6200 E. BROAD ST.	COLUMBUS	Franklin County
THE OHIO STATE UNIVERSITY	Colleges, Universities, and Professional Schools	0.00051711		2003 MILLIKIN ROAD	COLUMBUS	Franklin County
TARRIER STEEL CO INC	Fabricated Structural Metal	0.000475	0.000475	1379 S 22ND ST	COLUMBUS	Franklin County
AMETEK SOLIDSTATE CONTROLS	Electrical Machinery, Equipment, and Supplies, NEC	0.00012	0.00012	875 DEARBORN DR	COLUMBUS	Franklin County
HANSON PIPE & PRODUCTS OHIO INC	Concrete Products, Except Block and Brick	0.0001	0.0001	1500 HAUL RD	COLUMBUS	Franklin County
DYNALAB INC.	Printed Circuit Boards	0.0000805	0.0000805	555 LANCASTER AVE	REYNOLDSBURG	Franklin County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
METAL CONTAINER CORPORATION	Metal Cans	6.1184E-05		350 MCCORMICK BOULEVARD	COLUMBUS	Franklin County
ANHEUSER-BUSCH COLUMBUS BREWERY	Malt Beverages	6.0526E-05		700 SCHROCK ROAD	COLUMBUS	Franklin County
AVCOM SMT	Electronic Components, NEC	0.00004	0.00004	213 E BROADWAY	WESTERVILLE	Franklin County
GEORGIA-PACIFIC RESINS INC.	Industrial Organic Chemicals, NEC	2.9605E-05		1975 WATKINS ROAD	COLUMBUS	Franklin County
GRIFFIN WHEEL CO. - COLUMBUS PLANT	Steel Foundries, NEC	1.1842E-05	0.125	3900 BIXBY ROAD	GROVEPORT	Franklin County
CORE MOLDING TECHNOLOGIES INC	Motor Vehicles and Passenger Car Bodies	5.9211E-06		800 MANOR PARK DR.	COLUMBUS	Franklin County
CALGON CARBON CORP.	Industrial Inorganic Chemicals, NEC	5.9211E-06		835 N. CASSADY AVE.	COLUMBUS	Franklin County
INSULFOAM	Plastics Foam Products	2.6316E-06		4849 GROVEPORT ROAD	OBETZ	Franklin County
COLUMBUS STEEL DRUM	Repair Shops and Related Services, NEC	1.3158E-06		1385 BLATT BOULEVARD	BLACKLICK	Franklin County
EVANS COLUMBUS, LLC	Industrial Supplies	1.3158E-06		1410 BLATT BOULEVARD	BLACKLICK	Franklin County
PLASKOLITE, INC.	Plastics Products, NEC	6.5789E-07		1770 JOYCE AVENUE	COLUMBUS	Franklin County
DOMINION - GROVEPORT COMPRESSOR STATION	Natural Gas Transmission	3.3E-07		5509 BERGER ROAD	GROVEPORT	Franklin County
NORTHSTAR BLUESCOPE STEEL, LLC	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.2545	0.2545	6767 COUNTY ROAD 9	DELTA	Fulton County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
MULTI-CAST CORP	Aluminum Foundries	0.03	0.0766	225 E LINFOOT ST.	WAUSEON	Fulton County
BUNTING BEARINGS LLC	Nonferrous Foundries, Except Aluminum and Copper	0.0035	0.0035	200 VAN BUREN ST	DELTA	Fulton County
SAUDER WOODWORKING COGENERATION FACILITY	Electric Services	0.00025924	0.048	502 MIDDLE STREET	ARCHBOLD	Fulton County
GAVIN POWER PLANT	Electric Services	0.021	0.2065	7397 N. ST RT #7	CHESHIRE	Gallia County
HOLZER MEDICAL CENTER	General Medical and Surgical Hospitals	0.0005329		100 JACKSON PIKE	GALLIPOLIS	Gallia County
DTE BUCKEYE LLC	Products of Petroleum and Coal, NEC	0.00048406	0.00048406	7397 STATE RT 7 N	CHESHIRE	Gallia County
L & L SCRAP METALS & RECYCLING	Scrap and Waste Materials	0.0004115		128 TEXAS RD.	GALLIPOLIS	Gallia County
OHIO VALLEY ELECTRIC CORP., KYGER CREEK STATION	Electric Services	0.00027646	0.2065	5758 STATE RTE 7 N	CHESHIRE	Gallia County
STOCK EQUIPMENT CO	Conveyors and Conveying Equipment	0.00135	0.00135	16490 CHILLICOTHE RD	CHAGRIN FALLS	Geauga County
RHEIN CHEMIE CORP PLANT #2	Chemicals and Chemical Preparations, NEC	0.0005	0.0005	160 PARKER CT	CHARDON	Geauga County
RHEIN CHEMIE CORP PLANT 1	Chemicals and Chemical Preparations, NEC	0.0005	0.0005	145 PARKER CT	CHARDON	Geauga County
JOHNSON RUBBER COMPANY	Fabricated Rubber Products, NEC	0.00004	0.00004	16025 JOHNSON STREET	MIDDLEFIELD	Geauga County
EXCEL POLYMERS LLC	Fabricated Rubber Products, NEC	0.0000005	0.0000005	14330 KINSMAN RD	BURTON	Geauga County
CEMEX, INC.	Cement, Hydraulic	0.018579	0.00524	3250 LINEBAUGH ROAD	XENIA	Greene County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
YODER DIE CASTING INC.	Aluminum Die-Castings	0.0123	0.0123	851 BELLBROOK AVE	XENIA	Greene County
TWIST INC	Wire Springs	0.00005	0.00005	1370 LABELLE DR	XENIA	Greene County
WRIGHT-PATTERSON AIR FORCE BASE	National Security	5.2632E-06		88 ABW/CEVY	WRIGHT-PATTERSON AFB	Greene County
SHIELDALLOY METALLURGICAL CORPORATION	Electrometallurgical Products, Except Steel	0.05000328	0.0445	60790 SOUTHGATE ROAD	CAMBRIDGE	Guernsey County
CENTRIA	Coating, Engraving, and Allied Services, NEC	5.1974E-05		530 NORTH SECOND STREET	CAMBRIDGE	Guernsey County
HAMILTON FOUNDRY & MACHINE CO HAM FDY DIV	Gray and Ductile Iron Foundries	0.27		200 INDUSTRIAL DR.	HARRISON	Hamilton County
LANXESS CORP ADDYSTON FACILITY	Plastics Material and Synthetic Resins, and Nonvulcanizable Elastomers	0.0386075	0.006	356 THREE RIVERS PARKWAY	ADDYSTON	Hamilton County
CINERGY CORP MIAMI FORT STATION	Electric Services	0.02100169	0.22545	BROWER ROAD	NORTH BEND	Hamilton County
PROCTER & GAMBLE	Soaps and Other Detergents, Except Speciality Cleaners	0.0109	0.0109	5201 SPRING GROVE AVE	CINCINNATI	Hamilton County
MILL CREEK WWTP	Sewerage Systems	0.00811263		1600 GEST STREET	CINCINNATI	Hamilton County
G. A. AVRIL CO BRASS & BRONZE DIV	Secondary Smelting and Refining of Nonferrous Metals	0.008	0.008	4445 KINGS RUN DR	CINCINNATI	Hamilton County
G. A. AVRIL CO WHITE METAL PRODUCTS DIV	Secondary Smelting and Refining of Nonferrous Metals	0.006	0.006	2108 EAGLE CT	CINCINNATI	Hamilton County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
CINCINNATI MACHINE DIV UNOVA I A S	Steam and Air-Conditioning Supply	0.00566456		4701 Marburg Avenue	CINCINNATI	Hamilton County
XTEK, INC.	Rolling Mill Machinery and Equipment	0.003	0.003	11451 READING RD	CINCINNATI	Hamilton County
D F ELECTRONICS INC.	Industrial Instruments for Measurement, Display, and Control of Process Variables; and Related Products	0.001	0.001	200 NOVNER DR	CINCINNATI	Hamilton County
EMD CHEMICALS INC.	Chemicals and Allied Products, NEC	0.0006	0.0006	2909 HIGHLAND AVE	CINCINNATI	Hamilton County
UNIVERSITY OF CINCINNATI	Colleges, Universities, and Professional Schools	0.00050936		CLIFTON CAMPUS	CINCINNATI	Hamilton County
FORD MOTOR COMPANY	Motor Vehicle Parts and Accessories	0.00016013		3000 SHARON ROAD	CINCINNATI	Hamilton County
COGNIS CORP CINCINNATI PLANT	Chemicals and Chemical Preparations, NEC	0.00012895	0.0272	4900 ESTE AVENUE	CINCINNATI	Hamilton County
FORMICA CORPORATION - EVENDALE OPERATIONS	Steam and Air-Conditioning Supply	0.0001234		10155 READING ROAD	EVENDALE	Hamilton County
CHILDRENS HOSPITAL MEDICAL CENTER	Specialty Hospitals, Except Psychiatric	6.1184E-05		3333 BURNET AVENUE	CINCINNATI	Hamilton County
ROHM AND HAAS CHEMICALS LLC	Industrial Organic Chemicals, NEC	5.3289E-05	0.00005	2000 WEST STREET	READING	Hamilton County
GENERAL ELECTRIC AIRCRAFT ENGINES, EVENDALE PLANT	Aircraft Engines and Engine Parts	4.6711E-05		1 NEUMANN WAY M/D N123	CINCINNATI	Hamilton County
CAST-FAB TECHNOLOGIES, INC.	Gray and Ductile Iron Foundries	4.4079E-05	0.0025	3040 FORRER STREET	CINCINNATI	Hamilton County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
GENERAL MILLS OPERATIONS INC	Cereal Breakfast Foods	3.0921E-05		11301 MOSTELLER ROAD	CINCINNATI	Hamilton County
KEEBLER COMPANY	Cookies and Crackers	0.000025		ONE TRADE STREET	CINCINNATI	Hamilton County
B-WAY CORPORATION	Metal Cans	1.8421E-05		8200 BROADWELL ROAD	CINCINNATI	Hamilton County
CINERGY SOLUTIONS OF ST. BERNARD, LLC	Steam and Air-Conditioning Supply	1.3158E-05		5189 SPRING GROVE AVENUE	CINCINNATI	Hamilton County
AGRIUM NORTH BEND NITROGEN OPERATIONS	Nitrogenous Fertilizers	1.3158E-05		10743 BROWER RD.	NORTH BEND	Hamilton County
TORBECK INDUSTRIES	Fabricated Structural Metal	0.00001	0.00001	355 INDUSTRIAL DR	HARRISON	Hamilton County
ROTEX INC.	General Industrial Machinery and Equipment, NEC	0.00000895	0.00000895	1230 KNOWLTON ST	CINCINNATI	Hamilton County
THE C.W. ZUMBIEL COMPANY - HARRIS AVE	Commercial Printing, Gravure	7.2368E-06		2339 HARRIS AVENUE	CINCINNATI	Hamilton County
THE C.W. ZUMBIEL COMPANY - CLENEAY AVENUE	Commercial Printing, Lithographic	7.2368E-06		1743 CLENEAY AVENUE	CINCINNATI	Hamilton County
CARAUSTAR MILL GROUP, INC.	Paperboard Mills	3.9474E-06		5500 WOOSTER RD	CINCINNATI	Hamilton County
PMC SPECIALTIES GROUP, INC.	Industrial Organic Chemicals, NEC	2.6316E-06	0.0725	501 MURRAY ROAD	ST. BERNARD	Hamilton County
VALVOLINE CO	Lubricating Oils and Greases	0.00000097	0.00000097	3901 RIVER RD	CINCINNATI	Hamilton County
KAO BRANDS COMPANY	Perfumes, Cosmetics, and Other Toilet Preparations	6.5789E-07	0.043215	2535 SPRING GROVE AVENUE	CINCINNATI	Hamilton County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
CINCINNATI DRUM SERVICE	Metal Shipping Barrels, Drums, Kegs, and Pails	6.5789E-07		400 CAVETT AVENUE	READING	Hamilton County
ROCK-TENN COMPANY, MILL DIVISION, INC.	Paperboard Mills	5.7471E-07	0.00325	3347 MADISON ROAD	CINCINNATI	Hamilton County
NISSIN BRAKE OHIO INC	Motor Vehicle Parts and Accessories	0.005	0.005	1901 INDUSTRIAL DR	FINDLAY	Hancock County
BRIDGESTONE APM - FINDLAY AVD	Molded, Extruded, and Lathe-Cut Mechanical Rubber Goods	0.0045		1800 INDUSTRIAL DR.	FINDLAY	Hancock County
MIDWEST DICKEN FOUNDRY	Copper Foundries	0.0025	0.0025	19710 ST RT 12	ARCADIA	Hancock County
SENECA WIRE & MANUFACTURING CO	Steel Wiredrawing and Steel Nails and Spikes	0.002	0.002	319 S VINE ST	FOSTORIA	Hancock County
ADM-FOSTORIA	Soybean Oil Mills	0.00013684		608 FINDLAY ROAD	FOSTORIA	Hancock County
THE COOPER TIRE COMPANY - FINDLAY	Tires and Inner Tubes	0.00013092	0.00045	701 LIMA AVE.	FINDLAY	Hancock County
WHIRLPOOL FINDLAY DIVISION	Household Appliances, NEC	5.6579E-05		4901 NORTH MAIN STREET	FINDLAY	Hancock County
HISAN, INC.	Motor Vehicle Parts and Accessories	8.5526E-06		1849 INDUSTRIAL DRIVE	FINDLAY	Hancock County
ANDOVER INC KENTON OHIO	Electronic Coils, Transformers, and Other Inductors	0.0000027	0.0000027	350 W EPSY ST	KENTON	Hardin County
Clay City Pipe	Brick and Structural Clay Tile	0.00877349		515 E. Main St	Bowerston	Harrison County
HARRISON PROCESSING CORP	Bituminous Coal Underground Mining	0.00065		86395 MINE RD.	HOPEDALE	Harrison County
SILGAN CAN CO	Metal Cans	3.0921E-05		12-773 ST RT 110	NAPOLEON	Henry County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
CAMPBELL SOUP SUPPLY CO LLC	Canned Specialties	1.0526E-05	0.335	12-773 STATE RT 110 PO BOX 311	NAPOLEON	Henry County
TENNECO AUTOMOTIVE - NAPOLEON PLANT	Motor Vehicle Parts and Accessories	4.5977E-06	0.0105	11-800 STATE RT 424 E	NAPOLEON	Henry County
GE LOGAN LIGHTING PLANT	Pressed and Blown Glass and Glassware, NEC	0.06012	0.06012	12680 STATE RT 93 N	LOGAN	Hocking County
General Clay Products Corp	Brick and Structural Clay Tile	0.00844216		550 Zanesville Avenue	Logan	Hocking County
LAUREL STORAGE STATION	Natural Gas Transmission	6.5789E-07		23151 STATE ROUTE 56	SOUTH BLOOMINGVILLE	Hocking County
EPIC TECHNOLOGIES	Electronic Components, NEC	0.001	0.001	200 E BLUEGRASS DR	NORWALK	Huron County
POLYONE CORP NORWALK	Custom Compounding of Purchased Plastics Resins	0.000505	0.000505	80 NW ST	NORWALK	Huron County
A. SCHULMAN INC.	Custom Compounding of Purchased Plastics Resins	0.0005	0.0005	350 N BUCKEYE ST	BELLEVUE	Huron County
FISHER-TITUS MEDICAL CENTER	General Medical and Surgical Hospitals	0.00030264		272 BENEDICT AVENUE	NORWALK	Huron County
SOLAE LLC	Soybean Oil Mills	7.6316E-05		605 GOODRICH RD	BELLEVUE	Huron County
R.R. DONNELLEY & SONS CO	Book Printing	4.6053E-05		1145 CONWELL AVENUE	WILLARD	Huron County
PEPPERIDGE FARM INC.	Cookies and Crackers	3.8158E-05		3320 STATE ROUTE 103 E	WILLARD	Huron County
London Tile Company	Ceramic Wall and Floor Tile	5.3012E-06		65 Walnut Street	New London	Huron County
OSCO INDUSTRIES INC JACKSON DIV	Gray and Ductile Iron Foundries	0.02	0.02	ATHENS & CHILLICOTHE STS	JACKSON	Jackson County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
MERIDIAN AUTOMOTIVE SYSTEMS, JACKSON OPERATIONS	Plastics Products, NEC	3.3553E-05		1020 EAST MAIN STREET	JACKSON	Jackson County
OHIO FRAME PLANT	Wood Kitchen Cabinets	1.3158E-05		960 E. MAIN STREET	JACKSON	Jackson County
WHEELING-PITTSBURGH STEEL CORP . MINGO JUNCTION	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.75	0.75	MCLISTER AVE	MINGO JUNCTION	Jefferson County
W. H. SAMMIS PLANT	Electric Services	0.392	0.31926	STATE RT 7	STRATTON	Jefferson County
CARDINAL POWER PLANT (CARDINAL OPERATING COMPANY)	Electric Services	0.21	0.297	306 COUNTY RD 7 E	BRILLIANT	Jefferson County
WHEELING-PITTSBURGH STEEL CORPORATION - STEUBENVILLE	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.00032171	0.0065	SOUTH 3RD STREET EXTENSION	STEUBENVILLE	Jefferson County
WHEELING-PITTSBURGH STEEL CORPORATION - YORKVILLE PLANT	Cold-Rolled Steel Sheet, Strip, and Bars	4.9735E-05		219 PUBLIC ROAD	YORKVILLE	Jefferson County
TITANIUM METALS CORPORATION	Rolling, Drawing, and Extruding of Nonferrous Metals, Except Copper and Aluminum	4.0789E-05		100 TITANIUM WAY	TORONTO	Jefferson County
KNOX COMMUNITY HOSPITAL	General Medical and Surgical Hospitals	0.0001173		1330 COSHOCTON RD	MOUNT VERNON	Knox County
FIRSTENERGY CORP EASTLAKE PLANT	Electric Services	0.28	0.145455	10 ERIE ROAD	EASTLAKE	Lake County
PAINESVILLE MUNICIPAL ELECTRIC PLANT	Electric Services	0.03335	0.0667	325 RICHMOND STREET	PAINESVILLE	Lake County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
AEXCEL CORP	Paints, Varnishes, Lacquers, Enamels, and Allied Products	0.005	0.005	7373 PRODUCTION DR	MENTOR	Lake County
CONN-SELMER, INC. FKA UNITED MUSICAL INSTRUMENTS USA INC.	Fabricated Metal Products, NEC	0.0014	0.0014	34199 CURTIS BLVD	EASTLAKE	Lake County
FUSION INC ALLOY DIV PLANT TWO	Primary Metal Products, NEC	0.0011	0.0011	4700 TOPPS INDUSTRIAL PKWY	WILLOUGHBY	Lake County
COUSINS ALUMINUM PROCESSING LTD	Secondary Smelting and Refining of Nonferrous Metals	0.001005		1170 FAIRPORT - NURSERY RD.	PAINESVILLE	Lake County
CARMEUSE LIME, INC - GRAND RIVER OPERATIONS	Lime	0.00015	0.00015	15 WILLIAMS STREET	GRAND RIVER	Lake County
THE LUBRIZOL CORPORATION	Industrial Organic Chemicals, NEC	0.00012434		155 FREEDOM ROAD	PAINESVILLE	Lake County
THE LUBRIZOL CORPORATION - WICKLIFFE FACILITY	Industrial Organic Chemicals, NEC	6.6447E-05		29400 LAKELAND BOULEVARD	WICKLIFFE	Lake County
MARKING FILMS DIV. OF AVERY DENNISON BUILDING #11	Coated and Laminated Paper, NEC	3.75E-05		670 HARDY ROAD	PAINESVILLE	Lake County
GE QUARTZ, INC. WILLOUGHBY PLANT	Pressed and Blown Glass and Glassware, NEC	1.9737E-05		4901 CAMPBELL RD	WILLOUGHBY	Lake County
CFF OF AVERY DENNISON	Coated and Laminated Paper, NEC	1.8421E-05		5750 HEISLEY ROAD	MENTOR	Lake County
PFF/MFD/STD OF AVERY DENNISON	Coated and Laminated Paper, NEC	9.8684E-06		AVERY DENNISON	PAINESVILLE	Lake County
EYE LIGHTING INTERNATIONAL OF NORTH AMERICA INC	Electric Lamp Bulbs and Tubes	0.000001	0.000001	9150 HENDRICKS ROAD	MENTOR	Lake County
ALL-CRAFT WELLMAN PRODUCTS INC	Marking Devices	7.155E-07	7.155E-07	4839 E 345TH ST	WILLOUGHBY	Lake County
BESCAST, INC.	Aircraft Engines and Engine	6.5789E-07		4600 EAST 355TH ST.	WILLOUGHBY	Lake County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
	Parts					
SAS RUBBER COMPANY	Fabricated Rubber Products, NEC	6.5789E-07		474 NEWELL STREET	PAINESVILLE	Lake County
COMPONENT REPAIR TECHNOLOGIES INC.	336412		0.0026	8507 TYLER BOULEVARD	MENTOR	Lake County
THE DOW CHEMICAL COMPANY - HANGING ROCK	Plastics Foam Products	0.00051776		925 COUNTY ROAD 1A	IRONTON	Lawrence County
DUKE ENERGY OHIO - HANGING ROCK ENERGY FACILITY	Electric Services	5.2632E-06		1395 COUNTY RD 1A	IRONTON	Lawrence County
OWENS CORNING	Mineral Wool	0.02479934	0.477	400 CASE AVE.	NEWARK	Licking County
KAISER ALUMINUM & CHEMICAL CORP.	Aluminum Extruded Products	0.019475	0.009335	1459 HEBRON RD.	HEATH	Licking County
HOLOPHANE PATASKALA PLANT	Commercial, Industrial, and Institutional Electric Lighting Fixtures	0.01		355 W BROAD ST.	PATASKALA	Licking County
Clay City Pipe	Brick and Structural Clay Tile	0.0079518		1329 Seven Hills Road NE	Newark	Licking County
KAISER ALUMINUM	Aluminum Extruded Products	0.00017105		600 KAISER DRIVE	HEATH	Licking County
SAFETY-KLEEN SYSTEMS INC	Business Services, NEC	1.8421E-05		581 MILLIKEN DRIVE, S.E.	HEBRON	Licking County
DENISON UNIVERSITY	Colleges, Universities, and Professional Schools	3.2895E-06		CENTRAL HEATING PLANT	GRANVILLE	Licking County
DOMINION - NEWARK COMPRESSOR STATION	Natural Gas Transmission	1.3158E-06		19042 NASHPORT ROAD	NASHPORT	Licking County
DAIDO METAL BELLEFONTAINE LLC	Motor Vehicle Parts and Accessories	0.121	0.121	1215 GREENWOOD ST	BELLEFONTAINE	Logan County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
QUINCY CASTINGS INC.	Gray and Ductile Iron Foundries	0.035	0.035	206 LIBERTY ST	QUINCY	Logan County
HONDA OF AMERICA, EAST LIBERTY PLANT	Motor Vehicles and Passenger Car Bodies	0.0075	0.0075	11000 STATE RT 347	EAST LIBERTY	Logan County
HONDA TRANSMISSION MANUFACTURING OF AMERICA INC	Motor Vehicle Parts and Accessories	0.0075	0.0075	6964 ST RT 235 N	RUSSELLS POINT	Logan County
ROSS INCINERATION SERVICES, INC.	Refuse Systems	0.0062	0.00662	36790 GILES ROAD	GRAFTON	Lorain County
NATIONAL BRONZE & METALS (OHIO) INC	Copper Foundries	0.363	0.363	5311 W RIVER RD N	LORAIN	Lorain County
RELIANT ENERGY AVON LAKE POWER PLANT	Electric Services	0.238	0.311335	33570 LAKE ROAD	AVON LAKE	Lorain County
BECTEK MANUFACTURING INC	Copper Foundries	0.05	0.05	1305 OBERLIN AVE	LORAIN	Lorain County
NOVEON INC	Plastics Material and Synthetic Resins, and Nonvulcanizable Elastomers	0.0005	0.0005	550 MOORE ROAD	AVON LAKE	Lorain County
ROCK CREEK ALUMINUM INC	Primary Production of Aluminum	0.000285	0.00051	320 HURON ST.	ELYRIA	Lorain County
INSERVCO INC.	Electrical Machinery, Equipment, and Supplies, NEC	0.00016298	0.00016298	110 COMMERCE DR	LAGRANGE	Lorain County
U.S. STEEL CORP TUBULAR DIV LORAIN TUBULAR	Steel Pipe and Tubes	0.00015	0.00015	2199 E. 28TH STREET	LORAIN	Lorain County
NEW NGC INC. (DBA NATIONAL GYPSUM CO)	Gypsum Products	0.00015	0.00015	1901 HENDERSON DR	LORAIN	Lorain County
Aztec Peroxides Inc	Industrial Organic Chemicals, NEC	0.00014		555 GARDEN ST.	Elyria	Lorain County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
FORD MOTOR COMPANY - OHIO ASSEMBLY PLANT	Motor Vehicles and Passenger Car Bodies	0.00011908	0.001	650 MILLER ROAD	AVON LAKE	Lorain County
REPUBLIC ENGINEERED PRODUCTS, INC	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	8.7901E-05	0.4848	1807 E. 28TH STREET	LORAIN	Lorain County
HARSHAW CHEMICAL CO. AKA ENGELHARD CORPORATION	Industrial Inorganic Chemicals, NEC	4.7368E-05		120 PINE STREET	ELYRIA	Lorain County
NYLONGE CO.	Plastics Products, NEC	1.8421E-05		1301 LOWELL ST.	ELYRIA	Lorain County
FORD MOTOR COMPANY - LORAIN ASSEMBLY PLANT	Motor Vehicles and Passenger Car Bodies	1.3158E-05		5401 BAUMHART ROAD	LORAIN	Lorain County
EDGEWATER PLANT	Electric Services	0.00001134		200 OBERLIN AVENUE	LORAIN	Lorain County
ELYRIA FOUNDRY	Gray and Ductile Iron Foundries	5.2632E-06		120 FILBERT STREET	ELYRIA	Lorain County
OBERLIN COLLEGE	Colleges, Universities, and Professional Schools	6.5789E-07		173 W. LORAIN ST.	OBERLIN	Lorain County
BP OIL COMPANY TOLEDO REFINNERY	Petroleum Refining	0.2415	0.08	4001 CEDAR POINT ROAD	OREGON	Lucas County
TOLEDO EDISON CO., BAY SHORE PLANT	Electric Services	0.224	0.2682	4701 BAYSHORE RD	OREGON	Lucas County
JOHNSON CONTROLS BATTERY GROUP INC.	Storage Batteries	0.0612	0.0612	10300 INDUSTRIAL RD	HOLLAND	Lucas County
ENVIROSAFE SERVICES OF OHIO I NC.	Refuse Systems	0.02631	0.02631	876 OTTER CREEK RD	OREGON	Lucas County
SUNOCO INC. TOLEDO REFINERY	Petroleum Refining	0.0205	0.0225	1819 WOODVILLE ROAD	OREGON	Lucas County
JOHNS MANVILLE INTERNATIONAL, INC. / PLANT #01 - W	Mineral Wool	0.00850395	0.0105	6050 RIVER ROAD	WATERVILLE	Lucas County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
SEM-COM CO INC	Manufacturing Industries, NEC	0.002	0.002	1040 N WESTWOOD AVE	TOLEDO	Lucas County
SUPREME BUMPERS INC	Electroplating, Plating, Polishing, Anodizing, and Coloring	0.001		420 S. 15TH ST.	TOLEDO	Lucas County
POWERLAB INC	Industrial Inorganic Chemicals, NEC	0.0006		370 W. DUSSEL SUITE 5	MAUMEE	Lucas County
DAIMLERCHRYSLER CORP	Motor Vehicles and Passenger Car Bodies	0.00034671		4400 CHRYSLER DRIVE	TOLEDO	Lucas County
TOLEDO ASSEMBLY PLANT I	Motor Vehicles and Passenger Car Bodies	0.00010395		4400 CHRYSLER DRIVE	TOLEDO	Lucas County
GENERAL MOTORS CORP., TOLEDO, OH	Motor Vehicle Parts and Accessories	9.6711E-05	0.0004	ATTN: ENVIRONMENTAL SUPERVISOR	TOLEDO	Lucas County
LIBBEY GLASS INC.	Pressed and Blown Glass and Glassware, NEC	8.75E-05		1201 BUCKEYE STREET	TOLEDO	Lucas County
FORD MOTOR CO MAUMEE STAMPING PLANT	Automotive Stamping	0.000055	0.000055	920 ILLINOIS AVE	MAUMEE	Lucas County
MARSULEX, INC.	Industrial Inorganic Chemicals, NEC	5.3289E-05		1400 OTTER CREEK ROAD	OREGON	Lucas County
REXAM BEVERAGE CAN CO RE: WHITEHOUSE PLANT	Metal Cans	3.3553E-05		10444 WATERVILLE SWANTON RD.	WHITEHOUSE	Lucas County
TEXTILEATHER CORPORATION	Coated Fabrics, Not Rubberized	2.5658E-05		3729 TWINING STREET	TOLEDO	Lucas County
PERSTORP POLYOLS, INC.	Industrial Organic Chemicals, NEC	2.3026E-05		600 MATZINGER ROAD	TOLEDO	Lucas County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
TEMBEC BTLR INC	Plastics Material and Synthetic Resins, and Nonvulcanizable Elastomers	1.9079E-05		2525 JEAN-DESY	LONGUEUIL, QUEBEC J4G 1G6	Lucas County
CROWN CORK & SEAL	Coating, Engraving, and Allied Services, NEC	1.6447E-05		5201 ENTERPRISE BLVD	TOLEDO	Lucas County
TOLEDO SUPPLIER PARK - PAINT SHOP	Motor Vehicles and Passenger Car Bodies	9.7701E-06		DAIMLERCHRYSLER SUPPLIER PARK	TOLEDO	Lucas County
METOKOTE CORPORATION, PLANT21	Coating, Engraving, and Allied Services, NEC	3.9474E-06		6615 MAUMEE-WESTERN ROAD	MAUMEE	Lucas County
MANUFACTURERS ENAMELING CORPORATION	Coating, Engraving, and Allied Services, NEC	2.6316E-06		400 S. WESTWOOD AVENUE	TOLEDO	Lucas County
MEDICAL COLLEGE OF OHIO AT TOLEDO	Colleges, Universities, and Professional Schools	6.5789E-07		3000 ARLINGTON AVE	TOLEDO	Lucas County
STEPHEN'S PIPE & STEEL INC	Architectural and Ornamental Metal Work	0.0095	0.0095	10732 SCHADEL RD SE	MOUNT STERLING	Madison County
STANLEY ELECTRIC US COMPANY	Vehicular Lighting Equipment	9.8684E-06		420 EAST HIGH STREET	LONDON	Madison County
SHOWA ALUMINUM CORPORATION OF AMERICA	Motor Vehicle Parts and Accessories	1.3158E-06	0.00003155	10500 O'DAY-HARRISON RD	MT. STERLING	Madison County
V&M STAR	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.063	0.063	2669 MARTIN LUTHER KING JR. BLVD.	YOUNGSTOWN	Mahoning County
WHITACRE-GREER	Clay Refractories	0.00392344		1400 SOUTH MAHONING AVENUE	ALLIANCE	Mahoning County
PROFAB EXTRUSION LLC	Aluminum Extruded Products	0.0022565	0.0022565	2415 WILSON AVE	CAMPBELL	Mahoning County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
YOUNGSTOWN WASTEWATER TREATMENT FACILITY	Sewerage Systems	0.00181		725 POLAND AVENUE	YOUNGSTOWN	Mahoning County
EAST FAIRFIELD COAL COMPANY	Crushed and Broken Limestone	0.00040599		13699 ST. RT. 170	PETERSBURG	Mahoning County
ECD INC	Printed Circuit Boards	0.0003185		1100 N. 21ST ST.	SEBRING	Mahoning County
SOVEREIGN CIRCUITS INC.	Printed Circuit Boards	0.0002	0.0002	12080 DEBARTOLO DR	NORTH JACKSON	Mahoning County
BAIRD BROTHERS SAWMILL INC	Millwork	0.0001908		7060 CRORY RD	CANFIELD	Mahoning County
ASTRO COATINGS, INCORPORATED	Coating, Engraving, and Allied Services, NEC	2.779E-05		65 MAIN STREET	STRUTHERS	Mahoning County
PARKER GEAR PUMP DIVISION	Gray and Ductile Iron Foundries	1.3158E-06	0.069	1775 LOGAN AVE.	YOUNGSTOWN	Mahoning County
YOUNGSTOWN THERMAL	Steam and Air-Conditioning Supply	6.5789E-07		205 NORTH AVE	YOUNGSTOWN	Mahoning County
NUCOR STEEL MARION, INC.	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.1435	0.1435	912 CHENEY AVENUE	MARION	Marion County
OHIO GALVANIZING CORP	Coating, Engraving, and Allied Services, NEC	0.0145	0.0145	467 W FAIRGROUND ST	MARION	Marion County
GLEN-GERY CORP. IBERIA PLANT	Brick and Structural Clay Tile	0.00364219		GLEN-GERY CORPORATION - IBERIA	IBERIA	Marion County
GLEN-GERY CORP	Brick and Structural Clay Tile	0.00175938		5692 RINKER RD	CALEDONIA	Marion County
WHIRLPOOL CORP. MARION DIV.	Household Laundry Equipment	8.75E-05		1300 MARION-AGOSTA ROAD	MARION	Marion County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
BUNGE NORTH AMERICA (EAST) LLC	Soybean Oil Mills	5.0658E-05		751 EAST FARMING STREET	MARION	Marion County
SCA PACKAGING NORTH AMERICA, INC.	Plastics Foam Products	4.0132E-05		1836 LIKENS ROAD	MARION	Marion County
HYLOAD INC	Fabricated Rubber Products, NEC	0.00535	0.00535	9976 RITTMAN RD	WADSWORTH	Medina County
SEVILLE CENTRIFUGAL BRONZE, INC.	Copper Foundries	0.00422	0.00422	22 MILTON ST	SEVILLE	Medina County
General Clay Products Corp	Brick and Structural Clay Tile	0.00328674		9866 Mount Eaton Road	Wadsworth	Medina County
TEKNOR COLOR CO	Custom Compounding of Purchased Plastics Resins	0.001	0.001	120 W DR	LODI	Medina County
A. SCHULMAN INC SPECIALTY COMPOUNDING DIV	Custom Compounding of Purchased Plastics Resins	0.001	0.001	1475 WOLF CREEK TRAIL	SHARON CENTER	Medina County
ADVANCE BRONZE INC FOUNDRY	Copper Foundries	0.0005	0.0005	151 BILLMAN ST	LODI	Medina County
MEDINA GENERAL HOSPITAL	General Medical and Surgical Hospitals	0.00041409		1000 EAST WASHINGTON STREET	MEDINA	Medina County
FLUID TITE CASTINGS LTD	Aluminum Foundries	0.000225		1030 SEVILLE RD.	WADSWORTH	Medina County
OWENS CORNING ROOFING AND ASPHALT, LLC	Asphalt Felts and Coatings	9.8684E-06		890 W. SMITH ROAD	MEDINA	Medina County
JOSEPH ADAMS CORP.	Flavoring Extracts and Flavoring Syrups NEC	1.3158E-06		5740 GRAFTON RD	VALLEY CITY	Medina County
MEDINA BLANKING INC.	Automotive Stamping	2.15E-07	2.15E-07	5580 WEGMAN DR	VALLEY CITY	Medina County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
FORT RECOVERY INDUSTRIES INC.	Plumbing Fixture Fittings and Trim	0.002235	0.002235	2440 STATE RT 49	FORT RECOVERY	Mercer County
CELINA ALUMINUM PRECISION TECHNOLOGIES	Aluminum Foundries	0.00023	0.00023	7059 STAEGER RD	CELINA	Mercer County
FRENCH OIL MILL MACHINERY CO	Machine Tools, Metal Forming Type	0.0005	0.0005	1035 W GREENE ST PO BOX 920	PIQUA	Miami County
GOODRICH AIRCRAFT WHEELS & BRAKES	Aircraft Parts and Auxiliary Equipment, NEC	0.0005		101 WACO ST.	TROY	Miami County
SHUT D - MT PICTURE DISPLAY OF AMERICA (OHIO)	Electron Tubes	5.7237E-05	0.51	1400 WEST MARKET STREET	TROY	Miami County
PIQUA MUNICIPAL POWER SYSTEM	Electric Services	1.9079E-05		919 SOUTH MAIN ST.	PIQUA	Miami County
A.O. SMITH ELECTRICAL PRODUCTS CO.	Motors and Generators	9.5357E-06		531 N. FOURTH ST.	TIPP CITY	Miami County
SPINNAKER COATING LLC	Packaging Paper and Plastics Film, Coated and Laminated	2.6316E-06		518 EAST WATER STREET	TROY	Miami County
SHUT D - ORMET ALUMINUM MILL PRODUCTS CORPORATION	Aluminum Sheet, Plate, and Foil	4.5395E-05	0.005	42722 STATE RTE. 7	HANNIBAL	Monroe County
ORMET PRIMARY ALUMINUM CORP.	Primary Production of Aluminum	4.6053E-06	0.0015	43840 STATE ROUTE 7	HANNIBAL	Monroe County
DP&L, O.H. HUTCHINGS GENERATING STATION	Electric Services	0.07347361	0.0295	9200 CHAUTAUQUA ROAD	MIAMISBURG	Montgomery County
DELPHI ENERGY & CHASSIS SYSTEMS KETTERING OPERATIONS	Motor Vehicle Parts and Accessories	0.06	0.06	2000 FORRER BLVD	KETTERING	Montgomery County
YODER DIE CASTING INC.	Aluminum Die-Castings	0.0088	0.0088	725 KISER ST	DAYTON	Montgomery County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
DELPHI HARRISON THERMAL SYSTEMS	Motor Vehicle Parts and Accessories	0.003		3600 DRYDEN ROAD	MORAINÉ	Montgomery County
DAYTON ALLOY WHEEL	Electroplating, Plating, Polishing, Anodizing, and Coloring	0.0025		1117 W. STEWART ST.	DAYTON	Montgomery County
MULLINS RUBBER PRODUCTS, INC.	Fabricated Rubber Products, NEC	0.0012	0.0007	2949 VALLEY ST.	RIVERSIDE	Montgomery County
DMAX LTD	Internal Combustion Engines, NEC	0.001	0.001	3100 DRYDEN RD	MORAINÉ	Montgomery County
PROJECTS UNLIMITED INC	Electronic Components, NEC	0.00067		3680 WYSE RD.	DAYTON	Montgomery County
GM WFG MORAINÉ UTILITIES GROUP	Steam and Air-Conditioning Supply	0.00033104		3600 DRYDEN ROAD	MORAINÉ	Montgomery County
MCGREGOR ASSOCIATES INC.	Electronic Components, NEC	0.00026548	0.00026548	365 CARR DR	BROOKVILLE	Montgomery County
DELPHI CHASSIS SYSTEMS WISCONSIN BLVD	Motor Vehicle Parts and Accessories	0.00026208		1435 CINCINNATI STREET P.O. BOX 1245	DAYTON	Montgomery County
TATE & LYLE, DAYTON	Industrial Organic Chemicals, NEC	0.00017829		5600 BRENTLINGER DRIVE	DAYTON	Montgomery County
SELECT INDUSTRIES CORP PLANT 3	Special Dies and Tools, Die Sets, Jigs and Fixtures, and Industrial Molds	0.00015	0.00015	220 JANNEY RD	DAYTON	Montgomery County
GENERAL MOTORS VEHICLE MANUFACTURING MORAINÉ ASSEMBLY	Motor Vehicles and Passenger Car Bodies	0.00010632	0.0018	2601 W STROOP RD.	MORAINÉ	Montgomery County
DELPHI AUTOMOTIVE SYSTEMS NEEDMORE OPERATIONS	Motor Vehicle Parts and Accessories	6.4474E-05		3100 NEEDMORE ROAD	DAYTON	Montgomery County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
DELPHI CHASSIS SYSTEMS, HOME AVENUE	Motor Vehicle Parts and Accessories	6.1842E-05		2701 HOME AVENUE	DAYTON	Montgomery County
MIAMI VALLEY HOSPITAL	General Medical and Surgical Hospitals	5.9211E-05		ONE WYOMING STREET	DAYTON	Montgomery County
APPLETON PAPERS INC.	Coated and Laminated Paper, NEC	1.3158E-05	0.085	1030 WEST ALEX-BELL RD.	WEST CARROLLTON	Montgomery County
DELPHI ENERGY & CHASSIS SYSTEMS - VANDALIA	Motor Vehicle Parts and Accessories	5.9211E-06		480 NORTH DIXIE DR.	DAYTON	Montgomery County
ONYX ENVIRONMENTAL SERVICES LLC	Industrial Organic Chemicals, NEC	2.6316E-06		4301 INFIRMARY ROAD	MIAMISBURG	Montgomery County
CARGILL, INC. - DAYTON	Wet Corn Milling	1.3158E-06	0.3375	3201 NEEDMORE ROAD	DAYTON	Montgomery County
CROWN,CORK & SEAL COMPANY, INC.	Metal Cans	1.1494E-06		5005 SPRINGBORO PIKE	WEST CARROLLTON	Montgomery County
GLACIER VANDERVELL INC - NOW MAHLE Engine COMPONENTS	Secondary Smelting and Refining of Nonferrous Metals	0.418	0.418	5130 N STATE RT 60	MC CONNELSVILLE	Morgan County
MIBA BEARINGS US LLC	Railroad Equipment	0.15	0.15	5037 STATE RT 60 N	MC CONNELSVILLE	Morgan County
GOULD ELECTRONICS INC ELECTRONIC MATERIALS	Electroplating, Plating, Polishing, Anodizing, and Coloring	0.0075		5045 N. STATE RTE. 60 N.W.	MC CONNELSVILLE	Morgan County
AK STEEL CORP - ZANESVILLE WORKS	Cold-Rolled Steel Sheet, Strip, and Bars	0.0623	0.0623	1724 LINDEN AVENUE	ZANESVILLE	Muskingum County
OWENS BROCKWAY GLASS CONTAINERS - PLANT #12	Glass Containers	3.2237E-05	0.1413	1700 STATE STREET	ZANESVILLE	Muskingum County
BURNHAM FOUNDRY LLC	Gray and Ductile Iron Foundries	2.5658E-05	0.0005	2345 LICKING ROAD	ZANESVILLE	Muskingum County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
GLACIER VANDERVELL INC - NOW MAHLE Engine COMPONENTS	Motor Vehicle Parts and Accessories	0.683	0.683	17226 INDUSTRIAL HWY	CALDWELL	Noble County
ALPHA COATINGS INC PORT CLINTON	Manufacturing Industries, NEC	0.058395	0.058395	228 BUCKEYE BLVD	PORT CLINTON	Ottawa County
GRAYMONT DOLIME (OH), INC.	Lime	0.0002	0.0002	21880 WEST STATE ROUTE 163	GENOA	Ottawa County
US GYPSUM COMPANY - GYPSUM/MINERAL WOOL	Gypsum Products	0.00012895	6.5E-08	121 SOUTH LAKE STREET	GYPSUM	Ottawa County
BRUSH WELLMAN INC.	Primary Smelting and Refining of Nonferrous Metals, Except Copper and Aluminum	1.9737E-05	0.0305	14710 W. PORTAGE RIVER SOUTH ROAD	HARRIS	Ottawa County
THOMPSON STEEL CO INC	Metal Heat Treating	0.1335		815 W. GASSER RD.	PAULDING	Paulding County
LAFARGE/SYSTech ENVIRONMENTAL CORP.	Cement, Hydraulic	0.03965667	0.0095	11435 COUNTY ROAD 176 P.O. BOX 160	PAULDING	Paulding County
Certaineed Corporation	Ceramic Wall and Floor Tile	0.01868674		4757 Tile Plant Road	New Lexington	Perry County
PPG INDUSTRIES OHIO INC CIRCLEVILLE	Plastics Material and Synthetic Resins, and Nonvulcanizable Elastomers	0.08779329		559 PITTSBURGH RD	CIRCLEVILLE	Pickaway County
DUPONT-CIRCLEVILLE	Plastics Material and Synthetic Resins, and Nonvulcanizable Elastomers	0.00024539		800 DUPONT ROAD	CIRCLEVILLE	Pickaway County
GE CIRCLEVILLE LAMP PLANT	Electric Lamp Bulbs and Tubes	7.0395E-05	0.0007	G. E. LIGHTING, INC - CIRCLEVILLE LAMP	CIRCLEVILLE	Pickaway County
PICWAY POWER PLANT	Electric Services	2.5185E-05	0.014	9301 U.S. ROUTE 23	LOCKBOURNE	Pickaway County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
ALSCO METALS CORPORATION, ASHVILLE FACILITY (ALERIS INT	Prefabricated Metal Buildings and Components	1.5132E-05	0.001	1 REYNOLDS ROAD	ASHVILLE	Pickaway County
MILLS PRIDE PARTNERSHIP	Wood Kitchen Cabinets	0.0059276	0.014	423 HOPEWELL ROAD	WAVERLY	Pike County
UNITED STATES ENRICHMENT CORPORATION	Refuse Systems	0.00375	0.00375	3930 US RT 23 S	PIKETON	Pike County
GE CONSUMER & INDUSTRIAL RAVENNA LAMP PLANT	Electric Lamp Bulbs and Tubes	0.005	0.005	6800 N CHESTNUT ST	RAVENNA	Portage County
RAVENNA ALUMINUM ROOTSTOWN DIV	Aluminum Foundries	0.004	0.004	5159 S PROSPECT ST	RAVENNA	Portage County
HARBISON-WALKER REFRACTORIES CO.	Nonclay Refractories	0.00130723		EAST CENTER STREET / ROUTE 303	WINDHAM	Portage County
RAVENNA FOUNDRY	Aluminum Foundries	0.00083	0.00083	706 N WALNUT ST	RAVENNA	Portage County
KENT STATE UNIVERSITY HEATING PLANT	Colleges, Universities, and Professional Schools	0.00010329		P.O. BOX 5190	KENT	Portage County
TRELLEBORG WHEEL SYSTEMS AMERICAS, INC.	Fabricated Metal Products, NEC	1.5789E-05	0.0001268	61 STATE RTE 43 N	HARTVILLE	Portage County
SCHNELLER, INC.	Coated Fabrics, Not Rubberized	0.0000125		6019 POWDERMILL RD.	KENT	Portage County
PARKER HANNIFIN CORP LEWISBURG PLANT	Valves and Pipe Fittings, NEC	0.006415	0.006415	700 W CUMBERLAND ST	LEWISBURG	Preble County
PARKER HANNIFIN CORP EATON OHIO PLANT	Valves and Pipe Fittings, NEC	0.0025	0.0025	725 N BEECH ST	EATON	Preble County
ROHM & HAAS CHEMICALS LLC.	Adhesives and Sealants	0.002	0.002	10 S ELECTRIC ST	WEST ALEXANDRIA	Preble County
NEATON AUTO PRODUCTS MANUFACTURING, INC.	Fabricated Rubber Products, NEC	5.9211E-06		975 SOUTH FRANKLIN STREET	EATON	Preble County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
LG PHILIPS DISPLAYS USA INC	Electron Tubes	0.0025		700 N. PRATT ST.	OTTAWA	Putnam County
PRO-TEC COATING CO.	Coating, Engraving, and Allied Services, NEC	0.00027697	0.00032	5000 COUNTY RD. #5	LEIPSIC	Putnam County
UNVERFERTH MANUFACTURING CO INC	Farm Machinery and Equipment	0.0000015	0.0000015	18107 US RT 224 W	KALIDA	Putnam County
SHELBY MUNICIPAL LIGHT PLANT	Electric Services	0.032	0.012	34 MANSFIELD AVE.	SHELBY	Richland County
Richland Moulded Brick Co	Brick and Structural Clay Tile	0.00198795		1000 Richland Shale Rd, P.O. Box 1711	Mansfield	Richland County
DESIGNED METAL PRODS INC	Industrial Valves	0.000325		119 ELM ST.	MANSFIELD	Richland County
MEDCENTRAL HEALTH SYSTEM	General Medical and Surgical Hospitals	0.00014423		335 GLESSNER AVENUE	MANSFIELD	Richland County
DOFASCO SHELBY, INC.	Steel Pipe and Tubes	0.00012334	0.0005	132 W. MAIN STREET	SHELBY	Richland County
AK STEEL CORPORATION	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	2.1711E-05	0.111	913 BOWMAN STREET	MANSFIELD	Richland County
GENERAL MOTORS CORP., MANSFIELD, OH	Automotive Stamping	2.1053E-05		GENERAL MOTORS CORPORATION	MANSFIELD	Richland County
EGS NEER	Noncurrent-Carrying Wiring Devices	0.00001025	0.00001025	265 S MILL ST	LEXINGTON	Richland County
WEAVER COMPRESSOR STATION	Natural Gas Transmission	1.3158E-06		ENVIRONMENTAL HEALTH & SAFETY DEPT.	CHARLESTON	Richland County
BARBER SPRING OHIO	Steel Springs, Except Wire	0.0895	0.0895	387 WETZEL DR.	CHILLICOTHE	Ross County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
PH Glatfelter - Chillicothe Mill	Paper Mills	0.01	0.05	401 S PAINT ST	CHILLICOTHE	Ross County
CHILLICOTHE CORRECTIONAL INSTITUTION	Correctional Institutions	0.00146957		Chillicothe Correctional Institute 15802 State Rou	CHILLICOTHE	Ross County
CROWN BATTERY MANUFACTURING CO	Storage Batteries	0.005	0.005	1445 MAJESTIC DR	FREMONT	Sandusky County
MARTIN MARIETTA MAGNESIA SPECIALTIES LLC	Lime	0.000395	0.000395	755 LIME ROAD	WOODVILLE	Sandusky County
CARMEUSE LIME INC MILLERSVILLE OPERATION	Lime	0.0001	0.0001	3964 COUNTY RD 41	MILLERSVILLE	Sandusky County
WHIRLPOOL CORPORATION - CLYDE DIVISION	Household Laundry Equipment	8.3553E-05		119 BIRDSEYE ST.	CLYDE	Sandusky County
H.J. HEINZ, L.P.	Canned Fruits, Vegetables, Preserves, Jams, and Jellies	2.6974E-05		1200 N. FIFTH STREET	FREMONT	Sandusky County
REXAM BEVERAGE CAN COMPANY	Metal Cans	1.3816E-05		2145 CEDAR STREET	FREMONT	Sandusky County
EATON INOAC CO	Plastics Products, NEC	2.6316E-06		1410 MOTOR DRIVE	FREMONT	Sandusky County
GREAT LAKES SUGAR COMPANY	Beet Sugar	1.3158E-06		1101 NORTH FRONT STREET	FREMONT	Sandusky County
OSCO INDUSTRIES INC PORTSMOUTH DIV	Gray and Ductile Iron Foundries	0.25	0.25	11TH & CHILLICOTHE ST	PORTSMOUTH	Scioto County
SUNOCO INC (R&M)	Cyclic Organic Crudes and Intermediates, and Organic Dyes and Pigments	0.04754776	0.173485	1019 HAVERHILL-OHIO FURNACE ROAD	HAVERHILL	Scioto County
OSCO INDUSTRIES INC NEW BOSTON DIV	Gray and Ductile Iron Foundries	0.005	0.005	202 VINE ST	NEW BOSTON	Scioto County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
CARMEUSE OHIO, INC. - MAPLEGROVE LIME PLANT	Minerals and Earths, Ground or Otherwise Treated	0.02695	0.02695	1967 W COUNTY ROAD 42	BETTSVILLE	Seneca County
NATIONAL MACHINERY L L C	Machine Tools, Metal Forming Type	0.0115		161 GREENFIELD ST.	TIFFIN	Seneca County
Seneca Tiles Inc	Ceramic Wall and Floor Tile	0.00163542		7100 S. County Road. 23	Attica	Seneca County
HONEYWELL-AUTOLITE	Electrical Equipment for Internal Combustion Engines	9.3421E-05		1600 N. UNION STREET	FOSTORIA	Seneca County
CHURCH & DWIGHT CO.	Alkalies and Chlorine	5.8553E-05		2501 EAST COUNTY ROAD 34	OLD FORT	Seneca County
ROSS ALUMINUM FOUNDRIES II	Aluminum Foundries	0.005	0.005	707-815 N OAK AVE	SIDNEY	Shelby County
ROSS ALUMINUM FOUNDRIES AVON DIV	Aluminum Foundries	0.001	0.001	2500 SCHENK RD	SIDNEY	Shelby County
HONDA OF AMERICA MFG., INC. ANNA ENGINE PLANT	Motor Vehicle Parts and Accessories	0.00033583	0.2445	12500 MERANDA ROAD	ANNA	Shelby County
CARGILL, INCORPORATED	Soybean Oil Mills	0.00028816	0.1645	2400 INDUSTRIAL DRIVE	SIDNEY	Shelby County
AMERICAN TRIM L.L.C.	Metal Stamping, NEC	0.00011118		1501 WEST MICHIGAN STREET	SIDNEY	Shelby County
HANSON PIPE & PRECAST INC SIDNEY	Concrete Products, Except Block and Brick	0.00009	0.00009	4625 HARDIN-WAPAK RD	SIDNEY	Shelby County
ALCOA BUILDING PRODUCTS, INC	Sheet Metal Work	0.0000625		2615 CAMPBELL ROAD	SIDNEY	Shelby County
SCHINDLER ELEVATOR CORP	Printed Circuit Boards	0.00001	0.00001	920 S VANDEMARK	SIDNEY	Shelby County
THERMOSEAL INC.	Gaskets, Packing, and Sealing Devices	7.8947E-06		2350 CAMPBELL ROAD	SIDNEY	Shelby County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
AIRSTREAM, INC.	Travel Trailers and Campers	1.9737E-06		419 WEST PIKE STREET	JACKSON CENTER	Shelby County
TIMKEN CO HARRISON STEEL PLANT	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.407		HARRISON AVE. S.W.	CANTON	Stark County
THE LONGABERGER COMPANY	Wood Products, NEC	0.01634824		224 EAST MAPLE STREET	HARTVILLE	Stark County
ENVIRITE OF OHIO INC.	Refuse Systems	0.008	0.008	2050 CENTRAL AVE SE	CANTON	Stark County
ESSROC CEMENT CORP	Cement, Hydraulic	0.00674375		8282 MIDDLEBRANCH AVE., NE	MIDDLEBRANCH	Stark County
STARK CERAMICS, INC.	Brick and Structural Clay Tile	0.00502656	0.012	600 WEST CHURCH STREET	EAST CANTON	Stark County
NORTH AMERICAN GALVANIZING CO OHIO	Coating, Engraving, and Allied Services, NEC	0.005	0.005	1723 CLEVELAND AVE SW	CANTON	Stark County
WATER POLLUTION CONTROL CENTER	Sewerage Systems	0.00229		3530 CENTRAL AVENUE, S.E	CANTON	Stark County
IRONROCK CAPITAL, INC.	Ceramic Wall and Floor Tile	0.001325	0.000255	1201 MILLERTON ROAD S.E.	CANTON	Stark County
OMNI DIE CASTING INC	Aluminum Die-Castings	0.000875	0.001195	1100 NOVA DR. S.E.	MASSILLON	Stark County
OLYMCO INC	Electroplating, Plating, Polishing, Anodizing, and Coloring	0.0005		2125 HARRISON AVE.	CANTON	Stark County
DIXON TICONDEROGA CO., NEW CASTLE REFRACTORIES DIV.	Clay Refractories	0.00040008		11135 CORUNDITE STREET NW	MASSILLON	Stark County
GNW ALUMINUM INC	Secondary Smelting and Refining of Nonferrous Metals	0.000395	0.000395	1356 HARRISBURG RD	ALLIANCE	Stark County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
Timken Co Faircrest Plant	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.00034671		4511 FAIRCREST ST. S.W.	CANTON	Stark County
THAKAR ALUMINUM CORP.	Secondary Smelting and Refining of Nonferrous Metals	0.0002755	0.0002755	4420 LOUISVILLE ST	CANTON	Stark County
REPUBLIC TECHS INTL MASSILLON HRB	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.0002		410 OBERLIN RD. S.W.	MASSILLON	Stark County
REPUBLIC ENGINEERED PRODUCTS, INC.	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.00011447	0.12005	2633 EIGHTH STREET NE	CANTON	Stark County
REPUBLIC SPECIAL METALS	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.0001	0.0001	2201 HARRISON AVE SW	CANTON	Stark County
REPUBLIC ENGINEERED PRODUCTS INC. - MASSILLON CFB	Cold-Rolled Steel Sheet, Strip, and Bars	0.0001	0.0001	401 ROSE AVE SE	MASSILLON	Stark County
CANTON DROP FORGE	Iron and Steel Forgings	3.4868E-05		4575 SOUTHWAY STREET S.W.	CANTON	Stark County
ALLIANCE CASTING CO. LLC	Steel Foundries, NEC	3.2237E-05	0.0055	1001 E BROADWAY ST	ALLIANCE	Stark County
THE TIMKEN COMPANY - BEARING PLANTS	Ball and Roller Bearings	3.2237E-05	1.0445	1835 DUEBER AVENUE, S.W.	CANTON	Stark County
T&W FORGE, INC.	Iron and Steel Forgings	2.5658E-05		562 WEST ELY STREET	ALLIANCE	Stark County
REPUBLIC STORAGE SYSTEMS COMPANY, INC	Office and Store Fixtures, Partitions, Shelving, and Lockers, Except Wood	2.1053E-05		1038 BELDEN AVE NE	CANTON	Stark County
A.R.E., INC.- MASSILLON	Travel Trailers and Campers	1.7763E-05		400 NAVE ROAD	MASSILLON	Stark County
SANCAP LINER TECHNOLOGY,	Abrasive Products	1.6447E-05		16125 ARMOUR	ALLIANCE	Stark County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
INC.				STREET		
THE HOOVER CO. -PLT. 1	Household Vacuum Cleaners	1.1184E-05	0.042485	101 EAST MAPLE STREET	NORTH CANTON	Stark County
HARSCO CO MULTISERV PLANT 22	Minerals and Earths, Ground or Otherwise Treated	0.000005	0.000005	8TH ST C/O REPUBLIC ENGINEERED STEEL	CANTON	Stark County
CROWN FOOD PACKAGING	Metal Cans	1.7241E-06		700 16TH STREET S.E.	MASSILLON	Stark County
STAR BRONZE INC.	Paints, Varnishes, Lacquers, Enamels, and Allied Products	6.5789E-07		803 S MAHONING AVE	ALLIANCE	Stark County
METALDYNE	Aluminum Die-Castings	0.362	0.4685	8001 BAVARIA RD.	TWINSBURG	Summit County
INTEGRATED ROLL SERVICES	Electroplating, Plating, Polishing, Anodizing, and Coloring	0.0251	0.0251	1566 FIRESTONE PKWY	AKRON	Summit County
GOODYEAR TIRE & RUBBER CO. AKRON TECHNICAL CENTER	Tires and Inner Tubes	0.02506535	0.02506535	200 S. MARTHA AVE.	AKRON	Summit County
POLYMERICS INC	Fabricated Rubber Products, NEC	0.025	0.025	2828 SECOND ST	CUYAHOGA FALLS	Summit County
ROCKWELL AUTOMATION INC	Relays and Industrial Controls	0.0229	0.0229	8440 DARROW RD	TWINSBURG	Summit County
AKRON THERMAL ENERGY CORPORATION	Steam and Air-Conditioning Supply	0.0200125		226 OPPORTUNITY PARKWAY	AKRON	Summit County
CHEMIONICS CORP	Fabricated Rubber Products, NEC	0.015	0.015	390 MUNROE FALLS RD	TALLMADGE	Summit County
METALLIC RESOURCES INC	Secondary Smelting and Refining of Nonferrous Metals	0.01	0.01	2116 ENTERPRISE PKWY	TWINSBURG	Summit County
LANCER DISPERSIONS,INC.	Plastics Products, NEC	0.007	0.007	1680 E MARKET ST	AKRON	Summit County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
COMMERCIAL ALLOYS CORP	Secondary Smelting and Refining of Nonferrous Metals	0.004705	0.004705	1831 E HIGHLAND RD	TWINSBURG	Summit County
EMERALD POLYMER ADDITIVES LLC	Industrial Organic Chemicals, NEC	0.004	0.004	240 WEST EMERLING AVENUE	AKRON	Summit County
REVLIS CORP	Chemicals and Chemical Preparations, NEC	0.002	0.002	2845 NEW PARK DR	NORTON	Summit County
OC INDS	Industrial and Commercial Machinery and Equipment, NEC	0.00159936		8333 BOYLE PKY.	TWINSBURG	Summit County
LOCKHEED MARTIN N E & S S	Fabricated Metal Products, NEC	0.00126		1210 MASSILLON RD.	AKRON	Summit County
STRUKTOL CO OF AMERICA	Chemicals and Chemical Preparations, NEC	0.00075	0.00075	201 E STEELS CORNERS RD	STOW	Summit County
AMERICHEM INC	Custom Compounding of Purchased Plastics Resins	0.00075		225 BROADWAY E.	CUYAHOGA FALLS	Summit County
CARGILL, INCORPORATED - SALT DIVISION (AKRON, OH)	Chemicals and Chemical Preparations, NEC	0.00042829	0.2215	2065 MANCHESTER RD.	AKRON	Summit County
HANSON PIPE & PRODUCTS INC MACEDONIA	Concrete Block and Brick	0.000065	0.000065	7925 EMPIRE PKWY	MACEDONIA	Summit County
AKRON BRICK & BLOCK	Concrete Block and Brick	0.00005		325 MOGADORE RD.	AKRON	Summit County
MORGAN ADHESIVES COMPANY (MACTAC)	Coated and Laminated Paper, NEC	2.6316E-05		4560 DARROW ROAD	STOW	Summit County
PPG INDUSTRIES INC. BARBERTON	Plastics Material and Synthetic Resins, and Nonvulcanizable Elastomers	1.5789E-05		4829 FAIRLAND RD	BARBERTON	Summit County
PECHINEY PLASTIC PACKAGING INC	Packaging Paper and Plastics Film, Coated and Laminated	1.1184E-05		1972 AKRON PENINSULA RD.	AKRON	Summit County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
THE UNIVERSITY OF AKRON	Colleges, Universities, and Professional Schools	1.9737E-06		180 EAST MILL ST.	AKRON	Summit County
E. L. STONE COMPANY, INC.	Coating, Engraving, and Allied Services, NEC	1.3158E-06		2998 EASTERN ROAD	BARBERTON	Summit County
PERFORMIX TECHNOLOGIES	Nonmetallic Mineral Products, NEC	0.009	0.009	101 TIDEWATER RD NE	WARREN	Trumbull County
NILES PLANT	Electric Services	0.112	0.100015	1047 BELMONT AVE.	NILES	Trumbull County
DENMAN TIRE CORPORATION	Tires and Inner Tubes	0.086	0.086	400 DIEHL SOUTH ROAD	LEAVITTSBURG	Trumbull County
GE LIGHTING - OHIO LAMP PLANT	Electric Lamp Bulbs and Tubes	0.049	0.049	1210 N PARK AVE	WARREN	Trumbull County
STERICYCLE INC (FORMERLY BFI MEDICAL WASTE INC)	Refuse Systems	0.00545376		1901 PINE AVENUE S.E.	WARREN	Trumbull County
OHIO VALLEY ALUMINUM CO LLC NILES FACILITY	Aluminum Foundries	0.002125	0.002125	925 CARLE ST	NILES	Trumbull County
BFI MEDICAL WASTE INC.	Refuse Systems	0.00069635		1901 PINE AVENUE SE	WARREN	Trumbull County
WCI STEEL, INC.	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	0.00059211	0.54	1040 PINE AVE SE	WARREN	Trumbull County
GENERAL MOTORS LORDSTOWN COMPLEX - LORDSTOWN EAST PLANT	Motor Vehicles and Passenger Car Bodies	0.00046974		GENERAL MOTORS LORDSTOWN COMPLEX EAST	WARREN	Trumbull County
STANWADE METAL PRODUCTS	Fabricated Metal Products, NEC	0.00025	0.00025	6868 STATE RT 305	HARTFORD	Trumbull County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
TRUMBULL MEMORIAL HOSPITAL	General Medical and Surgical Hospitals	0.00013774		TRUMBULL MEMORIAL HOSPITAL	WARREN	Trumbull County
DELPHI PACKARD ELECTRIC SYSTEMS, NORTH RIVER ROAD	Current-Carrying Wiring Devices	5.4605E-05	0.0015	DELPHI PACKARD ELECTRIC SYSTEMS	WARREN	Trumbull County
GE LIGHTING INC - NILES MAHONING GLASS PLANT	Pressed and Blown Glass and Glassware, NEC	4.4079E-05	0.126	GE NILES/MAHONING GLASS PLANT	NILES	Trumbull County
MITTAL STEEL USA	Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills	3.6184E-05		3100 EAST 45TH STREET	WARREN	Trumbull County
GENERAL MOTORS LORDSTOWN COMPLEX - LORDSTOWN WEST PLANT	Automotive Stamping	2.4342E-05		2369 ELLSWORTH-BAILEY ROAD	LORDSTOWN	Trumbull County
TECNOCAP, LLC	Fabricated Metal Products, NEC	2.3026E-05		2100 GRISWOLD NE	WARREN	Trumbull County
INDALEX INC. GIRARD FACILITY	Aluminum Extruded Products	5.9211E-06		706 SOUTH STATE STREET	GIRARD	Trumbull County
ELLWOOD ENGINEERED CASTINGS	Gray and Ductile Iron Foundries	5.2632E-06	1.735	7158 HUBBARD MASURY ROAD	HUBBARD	Trumbull County
CLEVELAND STEEL CONTAINER NILES	Metal Shipping Barrels, Drums, Kegs, and Pails	4.6053E-06		115 ERIE STREET	NILES	Trumbull County
U.S. DEFENSE NATIONAL STOCKPILE CENTER WARREN DEPOT	General Government, NEC	0.0000001	0.0000001	PINE ST EXTENSION	WARREN	Trumbull County
COMMONWEALTH ALUMINUM NEWPORT ROLLING MILL	Aluminum Sheet, Plate, and Foil	0.0255	0.025	7319 NEWPORT RD. S.E.	UHRICHSVILLE	Tuscarawas County
PENN-OHIO COAL CO. D.B.A. CENTRAL FUEL CO.	Bituminous Coal and Lignite Surface Mining	0.021095	0.021095	2458 SHADYVIEW RD	NEW PHILADELPHIA	Tuscarawas County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
DOVER MUNICIPAL LIGHT PLANT	Electric Services	0.014	0.014	303 EAST BROADWAY	DOVER	Tuscarawas County
Stone Creek Brick Co	Brick and Structural Clay Tile	0.00930361		103 North St	Stone Creek	Tuscarawas County
THE BELDEN BRICK COMPANY	Brick and Structural Clay Tile	0.00765469		P.O. BOX 430	SUGARCREEK	Tuscarawas County
Superior Clay Corp	Brick and Structural Clay Tile	0.00581277		6566 Superior Rd SE, P.O. Box 352	Uhrichsville	Tuscarawas County
IMCO RECYCLING OF OHIO INC.	Secondary Smelting and Refining of Nonferrous Metals	0.0039	0.0039	7335 NEWPORT ROAD SOUTHEAST	UHRICHVILLE	Tuscarawas County
MARLITE INC	Millwork	3.9474E-06		202 HARGER STREET	DOVER	Tuscarawas County
MINTEQ INTERNATIONAL INC ZEDMARK DIV	Nonclay Refractories	0.0000035	0.0000035	5864 CROWN RD NW TOWNSHIP RD 164	DOVER	Tuscarawas County
DOMINION TRANSMISSION INC	Natural Gas Transmission	9.2E-07		656 GRAVEL LICK ROAD	PORT WASHINGTON	Tuscarawas County
THE GOODYEAR TIRE & RUBBER COMPANY	Rubber and Plastics Hose and Belting	0.00550197	0.0027	13601 INDUSTRIAL PKY.	MARYSVILLE	Union County
HONDA OF AMERICA MANUFACTURING, INC.	Testing Laboratories	2.3684E-05	0.0005	24000 HONDA PKY.	MARYSVILLE	Union County
HONDA R & D NORTH AMERICA INC.	Testing Laboratories	0.0000125		21001 ST. RT. 739	RAYMOND	Union County
EATON AEROQUIP INC.	Fluid Power Valves and Hose Fittings	0.0035	0.0035	1225 W MAIN ST	VAN WERT	Van Wert County
ROBERT P. MONE PLANT	Electric Services	6.5789E-07		4406 MENTZER ROAD	CONVOY	Van Wert County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
MCARTHUR COMPRESSOR STATION	Natural Gas Transmission	6.5789E-07		COLUMBIA GAS TRANSMISSION CORP.	CHARLESTON	Vinton County
L-3 COMMUNICATIONS CINCINNATI ELECTRONICS	Radio and Television Broadcasting and Communications Equipment	0.0125	0.0125	7500 INNOVATION WAY	MASON	Warren County
MITSUBISHI ELECTRIC AUTOMOTIVE AMERICA INC	Electrical Equipment for Internal Combustion Engines	0.00285	0.00285	4773 BETHANY RD	MASON	Warren County
PIONEER AUTOMOTIVE TECHNOLOGIES	Household Audio and Video Equipment	0.0001895	0.0001895	100 S PIONEER BLVD	SPRINGBORO	Warren County
RELIANCE MEDICAL PRODUCTS INC	Dental Equipment and Supplies	0.0001	0.0001	3535 KINGS MILL RD	MASON	Warren County
PROCTER & GAMBLE COMPANY HEALTH CARE RESEARCH CENTER	Commercial Economic, Sociological, and Educational Research	8.0921E-05		8700 MASON MONTGOMERY ROAD	MASON	Warren County
DOMINION RESOURCES SERVICES INC	Natural Gas Transmission	3.6184E-05		P.O. BOX 560	LEBANON	Warren County
ATLAS ROOFING CORPORATION, FRANKLIN ROOFING FACILITY	Asphalt Felts and Coatings	8.5526E-06	0.00005025	675 OXFORD ROAD	FRANKLIN	Warren County
RHGORSUCH STATION	Electric and Other Services Combined	0.18	0.18	STATE RT 7 S PO BOX 728	MARIETTA	Washington County
MUSKINGUM RIVER POWER PLANT	Electric Services	0.105	0.4065	1501 SPARLING ROAD	WATERFORD	Washington County
GLOBE METALLURGICAL INC.	Electrometallurgical Products, Except Steel	0.09451328	0.1295	COUNTY ROUTE 32	WATERFORD	Washington County
ERAMET MARIETTA, INC.	Electrometallurgical Products, Except Steel	0.07659317		STATE RT 7 S	MARIETTA	Washington County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
GLOBE METALLURGICAL INC.	Electrometallurgical Products, Except Steel	0.02329821			BEVERLY	Washington County
RJF INTERNATIONAL CORP.	Plastics Products, NEC	0.0025	0.0025	700 BF GOODRICH RD	MARIETTA	Washington County
ENERGIZER BATTERY MANUFACTURING INC	Industrial Inorganic Chemicals, NEC	0.0005	0.0005	2036 BLUE KNOB RD COUNTY RD 10	MARIETTA	Washington County
KRATON POLYMERS U.S. LLC	Synthetic Rubber	0.00023553	0.0253	2982 WASHINGTON BLVD. P.O. BOX 235	BELPRE	Washington County
SOLVAY ADVANCED POLYMERS LLC	Plastics Material and Synthetic Resins, and Nonvulcanizable Elastomers	2.1053E-05		17005 STATE ROUTE 7	MARIETTA	Washington County
DUKE ENERGY OHIO, INC.	Electric Services	3.9474E-06		THE CINCINNATI GAS & ELECTRIC CO.	BEVERLY	Washington County
COLUMBUS SOUTHERN POWER COMPANY - WATERFORD PLANT	Electric Services	1.3158E-06	0.17825	201 RIGHTEOUS RIDGE ROAD	WATERFORD	Washington County
BEKAERT-CONTOURS	Cold-Rolled Steel Sheet, Strip, and Bars	0.3695	0.3695	510 COLLINS BLVD	ORRVILLE	Wayne County
COLLEGE OF WOOSTER	Colleges, Universities, and Professional Schools	0.032		580 EAST WAYNE AVE.	WOOSTER	Wayne County
AKRON BRASS CO	Hardware, NEC	0.026	0.026	1415 E BOWMAN ST	WOOSTER	Wayne County
DEPARTMENT OF PUBLIC UTILITIES, CITY OF ORRVILLE, OHIO	Electric Services	0.0155	0.0155	1100 Perry Street P.O. Box 107	ORRVILLE	Wayne County
MORTON SALT DIVISION OF MORTON INTERNATIONAL, INC.	Chemicals and Chemical Preparations, NEC	7.8947E-06		151 S. INDUSTRIAL ST.	RITTMAN	Wayne County
SEAMAN CORPORATION	Coated Fabrics, Not Rubberized	5.2632E-06		1000 VENTURE BLVD.	WOOSTER	Wayne County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
THE QUALITY CASTINGS COMPANY	Gray and Ductile Iron Foundries	2.6316E-06	0.15313	1200 NORTH MAIN STREET	ORRVILLE	Wayne County
A.R.E. INC.	Travel Trailers and Campers	2.6316E-06		17494 DOVER ROAD	MOUNT EATON	Wayne County
FERRO CORP	Industrial Inorganic Chemicals, NEC	0.000002	0.000002	1560 N MAIN ST	ORRVILLE	Wayne County
CARAUSTAR INDUSTRIES, INC.	322130		0.15	100 INDUSTRIAL AVE.	RITTMAN	Wayne County
CHASE BRASS & COPPER CO. INC	Rolling, Drawing, and Extruding of Copper	0.044	0.044	14212 CR M-50	MONTPELIER	Williams County
FERRO CORP	Custom Compounding of Purchased Plastics Resins	0.0019855	0.0019855	103 RAILROAD AVE	STRYKER	Williams County
MINTEQ INTERNATIONAL INC	Nonclay Refractories	0.000025	0.000025	719 E HIGH ST	BRYAN	Williams County
TITAN TIRE CORPORATION OF BRYAN	Tires and Inner Tubes	7.2368E-06		927 S. UNION STREET	BRYAN	Williams County
MODINE MANUFACTURING CO	Motor Vehicle Parts and Accessories	0.0355	0.0355	615 BIERLEY RD	PEMBERVILLE	Wood County
TECHNEGLAS, INC.	Pressed and Blown Glass and Glassware, NEC	0.0005	0.0005	2100 N WILKINSON WAY	PERRYSBURG	Wood County
MSC WALBRIDGE COATINGS INC	Coating, Engraving, and Allied Services, NEC	0.0000625		30610 EAST BROADWAY	WALBRIDGE	Wood County
CHARTER STEEL RISINGSUN	Metal Heat Treating	4.9342E-05		6255 US RT 23 S	RISINGSUN	Wood County
PILKINGTON NORTH AMERICA INC	Flat Glass	2.5658E-05	0.069	140 DIXIE HWY	ROSSFORD	Wood County
COOPER TIRE & RUBBER COMPANY	Rubber and Plastics Hose and Belting	7.8947E-06		400 VAN CAMP ROAD	BOWLING GREEN	Wood County

Facility Name	NEISIC Code Description	2005 NEI Emissions (TPY)	2005 TRI Emissions (TPY)	Address	City	County
NORPLAS INDUSTRIES INC.	Motor Vehicle Parts and Accessories	3.9474E-06		7825 CAPLE BLVD.	NORTHWOOD	Wood County
TROY ENERGY, LLC	Electric Services	1.3158E-06		22379 PEMBERVILLE ROAD	LUCKEY	Wood County
COUPLED PRODUCTS INC.	Motor Vehicle Parts and Accessories	0.0095	0.0095	500 RAYBESTOS DR	UPPER SANDUSKY	Wyandot County
PPC INSULATORS	Porcelain Electrical Supplies	0.005	0.005	225 N PATTERSON ST	CAREY	Wyandot County
ENDRES PROCESSING OHIO, LLC	Motor Vehicle Parts and Accessories	0.00142965		7148 STATE ROUTE 199 NORTH	UPPER SANDUSKY	Wyandot County
NATIONAL LIME & STONE CO. - CAREY	Crushed and Broken Limestone	4.8026E-05		NORTH PATTERSON STREET	CAREY	Wyandot County

APPENDIX 2A:

**LARGEST STATIONARY SOURCE CATEGORIES FOR Pb IN
THE 2002 NEI**

Appendix 2A. Largest Stationary Source Categories for Pb in the 2002 NEI.

Boilers and Process Heaters

Materials including coal, oil, natural gas (or, at times, other substances such as wood and petroleum coke) are burned in boilers and process heaters to produce steam. With regard to boilers, the steam is used to produce electricity or provide heat, while process heaters are used in industrial processes. Lead is present naturally in the fuel and is emitted to air following combustion. The extent of emissions depends on the concentration of Pb in the fuel, the quantity of fuel burned, and PM control devices applied.

Industrial, commercial and institutional boilers and process heaters are used at a wide variety of facilities (e.g., refineries, chemical and manufacturing plants, etc), as well as in a "stand alone" mode to provide heat for large building complexes. Consequently, there are thousands of these sources throughout the country, generally located in urban areas, and they range widely in size. Most coal-fired industrial boilers emit about 0.06 tpy, with the larger ones emitting about 0.07 tpy due to the use of high efficiency particulate matter (PM) control devices (ERG, 2002a). [

Among utility boilers, coal-fired boilers have the highest Pb emissions, oil-fired utility plants emit somewhat lower amounts, and gas-fired plants emit very low levels of Pb (USEPA, 1998). There are approximately 1,300 coal-fired electric utility boilers in the U.S. ranging in size from 25 to approximately 1,400 MWe. Based on emission factor calculations, a 325 MWe coal-fired boiler would be expected to emit approximately 0.021 tpy Pb, based on the use of an electrostatic precipitator for PM control (USEPA, 1998). Although there are exceptions, coal-fired utility boilers tend to be located in non-urban areas.

Iron and Steel Foundries

Iron and steel foundries melt scrap, ingot, and other forms of iron and steel and pour the molten metal into molds for particular products. While located in 44 of the lower 48 states (in both cities and rural areas), the 650 existing foundries in the U.S., are most heavily concentrated in the Midwest (IN, IL, OH, MI, WI, and MN) - roughly 40% of foundries with almost 60% of U.S. production (USEPA, 2002a). Most are iron foundries operated by manufacturers of automobiles and large industrial equipment and their suppliers. The largest Pb emission sources at iron foundries are large furnaces, emissions from which generally range from about 0.3 to 3 tpy (generally released at heights of 25-30 feet), depending on the throughput of the furnace, the type and operating characteristics of the emission control system, and the Pb content in the metal charged to the furnace. Regulations promulgated in 2004 are projected to yield emissions reductions of approximately 25 tpy for this category (USEPA, 2004b).

Hazardous Waste Incineration/ Combustion Facilities

Hazardous waste combustors include hazardous waste incinerators, as well as boilers and industrial furnaces that burn hazardous waste for energy or material recovery (e.g., production of halogen acid from the combustion of chlorine-bearing materials). Industrial furnaces burning hazardous waste include cement kilns, lightweight aggregate kilns, and hydrochloric acid production furnaces. Lead is a trace contaminant in the hazardous waste, fossil fuels, and raw materials used in the combustors. In 2005, there were nearly 270 hazardous waste combustor sources in operation in the United States (70 FR at 59530), with approximately 40 percent of them in the states of Texas and Louisiana. As a result of emissions standards promulgated in 2005, EPA estimates that cumulative Pb emissions from hazardous waste combustors will be reduced to approximately 4.0 tons per year by the compliance date in 2008 (USEPA, 2005), a 95% reduction from 1990 levels.

Primary Lead Smelting

At primary Pb smelters, Pb-bearing ore concentrates are smelted to produce Pb metal. Lead is emitted from primary Pb smelters as process emissions, process fugitive emissions, and fugitive dust emissions (CD, p. 2-21). U.S. EPA promulgated a national emissions standard in 1999 for this category which includes an emissions limit for Pb (U.S. EPA 1999a). In the 1990s, there were three operating primary Pb smelters in the U.S.: one in Montana and two in Missouri, emitting an estimated total of about 260 tpy Pb. In 2002, there were two in operation (estimated emissions shown in Table A-1); one of the two had less than 1 tpy Pb emissions. As of 2004, there was only one operating primary Pb smelter in the U.S.,

located in Missouri with estimated total emissions of about 28 tpy in year 2005 (CD, p. 2-20). Thus, total Pb emissions from this category have decreased about 90% since 1990.

Secondary Lead Smelting

Secondary Pb smelters are recycling facilities that use blast, rotary, reverberatory, and/or electric furnaces to recover Pb metal from Pb-bearing scrap materials, primarily Pb-acid batteries. This category does not include remelters and refiners or primary Pb smelters. At secondary Pb smelters, Pb may be emitted from process emissions, process fugitive emissions and fugitive dust emissions from wind or mechanically induced entrainment of dust from stockpile and plant yards and roadways. In 1995, U.S. EPA promulgated a national emissions standard for this category which includes an emissions limit for Pb (USEPA, 1995). In 2002, there were 15 secondary smelters operating in 11 states, most of which are in the eastern half of the U.S. Estimates of total emissions (process and fugitive) for individual facilities as of 2002 range between 1 and 4 tpy, with one facility having total lead emissions of about 12 tpy (USEPA, 2007a; EC/R, 2006). Total Pb emissions (tpy) for this category decreased about 60% from 1990 to 2002.

Military Installations

This source category includes sources that are military facilities. The types of sources contributing to Pb emissions from this category include, among others, rocket and engine test facilities, ammunition manufacturing, weapons testing, waste combustion and boilers. While there are over 300 military facilities in the NEI, only 10% emit over 0.1 tpy of Pb and only 3% emit over 1 tpy. The two largest facilities (listed in Table A-4) are a missile ammunition production plant and a weapons testing facility and these two facilities account for over 75% of the category emissions.

Mining

This category includes various mining facilities that extract ore from the earth containing Pb, zinc, copper and/or other non-ferrous metals (such as gold and silver), and/or non-metallic minerals such as talc and coal. This category does not include the smelting or refining of the metals and minerals. These facilities produce ore concentrates (such as Pb, zinc, and copper concentrates) that are transported to other facilities where further processes, such as smelting and refining take place. The 2002 NEI indicates that there are 3 mining facilities in the U.S. emitting greater than 0.5 tpy Pb, one of which emits more than 5 tpy. This facility is in Missouri and produces Pb, zinc, and copper concentrates that are shipped to customers for further processing.

Integrated Iron & Steel Manufacturing

Integrated iron and steel manufacturing includes facilities engaged in the production of steel from iron ore. The processes include sinter plants, blast furnaces that produce iron, and basic oxygen process furnaces that produce steel, as well as several ancillary processes including hot metal transfer, desulfurization, slag skimming, and ladle metallurgy. There are currently 17 facilities in this source category each of whom emit from 2 to 8 tpy of Pb. Stack heights range from 30 - 50 feet. The facilities are located in 9 states, mostly in the Midwest (USEPA, 2003a). EPA promulgated a national emissions standard in 2003 for this category which includes an emissions limit for PM (as a surrogate for metal HAP, including Pb) (USEPA, 2003b).

Municipal Waste Combustors: Small & Large

Municipal waste combustors (MWCs) incinerate municipal or municipal-type solid waste. The amount of municipal waste incinerated (about 14% of U.S. municipal waste) has remained stable over the past decade. The amount of Pb emitted from municipal waste combustors depends on the amount of Pb in the refuse, with typical sources including paper, inks, cans and other metal scrap and plastics (CD, pp. 2-35 to 2-36). As of 2005, MACT standards were completed for all existing and new municipal waste incineration units, resulting in nationwide Pb emissions of less than 10 tons per year, roughly a 97% reduction since 1990. There are currently 66 large MWC plants and 26 small MWC plants operating nationally, with individual large MWC plants projected to emit less than 0.1 tpy Pb, and small MWC plants less than 0.02 tpy Pb (ERG, 2002b,c; Stevenson, 2002). However, there are a few MWC facilities that emit about 2 tons per year.

Pressed and Blown Glass and Glassware Manufacturing

This category includes manufacturers of flat glass, glass containers, and other pressed and blown glass and glassware, with Pb emitted primarily from the pressed and blown glass industry sector. Some container plants also make a leaded-glass product, but this is not typical of container glass plants. Lead

may also be added to flat glass for use in microwaves and flat-screen TVs. Emissions from individual facilities may range from a few pounds per year up to several tons per year depending on Pb content of their glass and the level of control. Furnace stacks for these facilities are typically of the order of 35-60 feet high. As of 2005, about 22 tons of Pb is emitted from glass manufacturing annually in the U.S. Glass plants are located in 35 States (RTI, 2006). U.S. EPA is currently developing an emissions regulation for this category, scheduled for promulgation in December 2007.

Electric Arc Furnace Steelmaking

In the steelmaking process that uses an electric arc furnace (EAF), the primary raw material is scrap metal, which is melted and refined using electric energy. Since scrap metal is used instead of molten iron, there are no cokemaking or ironmaking operations associated with steel production that use an EAF. There are currently 141 EAFs at 93 facilities, with estimated total nationwide Pb and Pb compound emissions of approximately 80 tons, and the average per facility is approximately 0.75 tpy. Stack heights range from heights of 30 - 50 feet. The facilities are located in 32 states; mostly in the northeast and Midwest, with ninety percent of the facilities located in urban areas. This information is drawn from multiple sources (Lehigh, 1982; Calspan, 1977; RTI, 2005). U.S. EPA is developing a hazardous air pollutant (HAP) emissions regulation for this category, scheduled for promulgation in December 2007.

Lead Acid Battery Manufacturing

The Pb acid battery manufacturing category includes establishments primarily engaged in manufacturing storage batteries from Pb alloy ingots and Pb oxide. The Pb oxide may be prepared by the battery manufacturer or may be purchased from a supplier. There has been a general decline in number of facilities, with 58 facilities currently in operation (data obtained from the Battery Council International (BCI)). The estimated range of facility-specific Pb and Pb compound emissions is from 1×10^{-5} to just below 10 tpy, with an average of about 0.5 tpy. The facilities are located in urban and rural areas of 23 states and Puerto Rico (2002 NEI).

Primary Copper Smelting

This source category includes all industries which refine copper concentrate from mined ore to anode grade copper, using pyrometallic processes. Seven primary copper smelters are currently operating in the U.S. Six of these seven smelters use conventional smelter technology which includes batch converter furnaces for the conversion of matte grade copper to blister copper, while the seventh uses a continuous flash furnace. Two of the three largest smelters are located in AZ, and the third is in Utah. The largest facility emitted an estimated 12.8 tons Pb in 2002, while emissions for the other two large facilities are estimated to be between 0.1 to 5 tpy. No other source in this category emits more than 0.1 tpy. In 2002, U.S. EPA promulgated a national emissions standard, including limits for PM (as a surrogate for metal HAP, including Pb), for this category (USEPA, 2002c).

Portland Cement Manufacturing

Portland cement manufacturing is an energy intensive process in which cement is made by grinding and heating a mixture of raw materials such as limestone, clay, sand, and iron ore in a rotary kiln (a large furnace fueled by coal, oil, gas, coke and/or various waste materials such as tires). Lead, a trace contaminant both of the raw materials and some fuel materials (e.g., coal, tires), is emitted with particulate material from the kiln stacks, which range in height from approximately 10 meters to more than 100 meters. Relatively smaller Pb emissions occur from grinding, cooling, and materials handling steps in the manufacturing process. These facilities are generally located in areas with limestone deposits and in rural areas or near small towns. The largest numbers of facilities are in Pennsylvania and California, although a significant percentage of facilities are in the Midwest. As of 2004, there were 107 Portland cement plants in the U.S. (O'Hare, 2006), with all but three reporting less than 1 tpy of Pb emissions. The highest estimated Pb emissions for a facility in the 2002 NEI is 5.4 tpy. In 1999, U.S. EPA promulgated a national emissions standard, including a limit for PM (as a surrogate for metal HAP, including Pb), for this category (USEPA, 1999b).

REFERENCES

- Calspan Corporation. (1977) Assessment of Industrial Hazardous Waste Practices in the Metal Smelting and Refining Industry. Volume III: Ferrous Smelting and Refining. Prepared for EPA's Office of Solid Waste. No. SW-145c.3
- Eastern Research Group. (2002a) Development of Average Emission Factors and Baseline Emission Estimates for the Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP. Memorandum to Jim Eddinger, Office of Air Quality Planning and Standards, U.S. EPA. October, 2002. Docket number - 0AR-2002-0058-0022.
- Eastern Research Group. (2002b) National Emission Trends for Large Municipal Waste Combustion Units, (years 1090 to 2005). Memorandum to Walt Stevenson. June 17, 2002, EPA Docket A-90-45 / Item VIII-B-7;
- Eastern Research Group. (2002c) National Emission Trends for Small Municipal Waste Combustion Units. Memo to Walt Stevenson. June 12, 2002, EPA Docket A-98-18 / Item VI-B-2
- EC/R Incorporated. (2006) Secondary Lead Smelter Industry – Source Characterization for Residual Risk Assessment. Prepared for USEPA Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, NC. November.
- Lehigh University. 1982. Characterization, Recovery, and Recycling of Electric Arc Furnace Dust. Final report prepared for the U.S. Department of Commerce. February 1982.
- O'Hare, A. 2006. Email to Michele Price from Andy O'Hare, Portland Cement Association. February 28.
- RTI International. (2005) Summary of EPA's 2004 Survey of Minimills. June.
- RTI International. (2006) Characterization of the Glass Manufacturing Industry, Glass Manufacturing Area Source NESHAP. Memorandum to Susan Fairchild, Office of Air Quality Planning and Standards. May 5
- Stevenson, W. (2002) Emissions from Large MWCs at MACT Compliance. Memo to Docket from Walt Stevenson. EPA Docket a-90-45 / Item VIII-B-11.
- U.S. Environmental Protection Agency. (1995) National Emission Standards for Hazardous Air Pollutants for Secondary Lead Smelting. Federal Register, (60FR32587), June 23, 1995. Available at: <http://www.epa.gov/ttn/atw/mactfnlalph.html>
- U.S. Environmental Protection Agency. (1998) Study of Hazardous Air Pollutant Emissions from Electric Utility Steam Generating Units – Final Report to Congress. Office of Air Quality Planning and Standards. EPA 453/R-98-004a. February.
- U.S. Environmental Protection Agency. (1999a) National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelters: Final Rule. 4 June 1999. Federal Register, Volume 64, No. 107, page 30194. Available at: <http://www.epa.gov/ttn/atw/mactfnlalph.html>
- U.S. Environmental Protection Agency. (1999b) National Emission Standards for Hazardous Air Pollutants for Portland Cement Manufacturing: Final Rule. 14 June 1999. Federal Register, Volume 64, No. 113. Available at: <http://www.epa.gov/ttn/atw/pcem/pccmpg.html>
- U.S. Environmental Protection Agency. (2002a) PBT national action plan for alkyl-Pb. Washington, DC: Persistent, Bioaccumulative, and Toxic Pollutants (Pbt) Program. [13 October, 2005] Available: <http://www.epa.gov/opptintr/pbt/cheminfo.htm>

- U.S. Environmental Protection Agency. (2002b) National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries--Background Information for Proposed Standards. EPA-453/R-02-013. Office of Air Quality Planning and Standards, Research Triangle Park, NC. December.
- U.S. Environmental Protection Agency. (2002c) National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelters: Final Rule. 12 June 2002. Federal Register, Volume 67, No. 113, page 40478. Available at: <http://www.epa.gov/ttn/atw/mactfnlalph.html>
- U.S. Environmental Protection Agency. (2003a) Emission estimates for integrated iron and steel plants. Memorandum to Docket, February 3, 2003. Document no. IV-B-4 in Docket No. OAR-2002-0083
- U.S. Environmental Protection Agency. (2003b) National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing: Final Rule. 20 May 2003. Federal Register, Volume 68, No. 97. Available at: <http://www.epa.gov/ttn/atw/iisteel/iisteelpg.html>
- U.S. Environmental Protection Agency. (2004a) National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters: Final Rule. 13 September 2004. Federal Register, Volume 69, No. 176. Available at: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>
- U.S. Environmental Protection Agency. (2004b) National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries; Final Rule. Federal Register 69(78): 21906-21940. April 22.
- U.S. Environmental Protection Agency. (2004c) Air Quality Criteria for Particulate Matter. Volume I. EPA 600/P-99/002aF-bF, Washington, DC. Pages 1-4.
- U.S. Environmental Protection Agency. (2005) "Technical Support Document for HWC MACT Replacement Standards, Volume V: Emission Estimates and Engineering Costs," September 2005, Appendix C.
- U.S. Environmental Protection Agency. (2007a) National Emissions Inventory for 2002, version 3. Office of Air Quality Planning and Standards, Research Triangle Park, NC. September, 2007.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.4899
 LONGITUDE: -84.364067
 UTM ZONE: 16
 UTM NORTHING: 4374276
 UTM EASTING: 726689
 ELEVATION-MSL: 204
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AOCR: (079) METROPOLITAN CINCINNATI
 URBANIZED AREA: (3199) HAMILTON, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

(12128) Lead (TSP) STP
 FOC: 2
 SITE ID: 39-017-0015
 COUNTY: (017) Butler
 CITY: (49840) Middletown
 SITE ADDRESS: 3901 LEFFERSON
 SITE COMMENTS: OHIO BELL FACILITY
 MONITOR COMMENTS:

SUPPORT AGENCY: (1259) Hamilton County Department Of Environmental Services
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM
 PQAO: (1259) Hamilton County Department Of Environmental Services

REPORT FOR: 2005

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0061		5
2	.0650		2
3	.0032		4
4	.0120		4
5	.0130		5
6	.0120		4
7	.0060		5
8	.0096		4
9	.0090		4
10	.0097		5
11	.0061		5
12	.0025		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.4899
 LONGITUDE: -84.364067
 UTM ZONE: 16
 UTM NORTHING: 4374276
 UTM EASTING: 726689
 ELEVATION-MSL: 204
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AQCR: (079) METROPOLITAN CINCINNATI
 URBANIZED AREA: (3199) HAMILTON, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 POC: 2
 SITE ID: 39-017-0015
 COUNTY: (017) Butler
 CITY: (49840) Middletown
 SITE ADDRESS: 3901 LEFFERSON
 SITE COMMENTS: OHIO BELL FACILITY
 MONITOR COMMENTS:

SUPPORT AGENCY: (1259) Hamilton County Department Of Environmental Services
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (1259) Hamilton County Department Of Environmental Services

REPORT FOR: 2006

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0210		4
2	.0077		5
3	.0027		5
4	.0032		4
5	.0076		5
6	.0110		3
7	.0120		5
8	.0028		5
9	.0026		5
10	.0059		5
11	.0028		5
12	.0047		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.4899
 LONGITUDE: -84.364067
 UTM ZONE: 16
 UTM NORTHING: 4374276
 UTM EASTING: 726689
 ELEVATION-MSL: 204
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AQCR: (079) METROPOLITAN CINCINNATI
 URBANIZED AREA: (3199) HAMILTON, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (ISP) STP
 POC: 2
 SITE ID: 39-017-0015
 COUNTY: (017) Butler
 CITY: (49840) Middletown
 SITE ADDRESS: 3901 LEFFERSON
 SITE COMMENTS: OHIO BELL FACILITY
 MONITOR COMMENTS:

SUPPORT AGENCY: (1259) Hamilton County Department Of Environmental Services
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (1259) Hamilton County Department Of Environmental Services

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0000	ND	5
2	.0000	ND	4
3	.0052	MD	6
4	.0068	MD	5
5	.0046	MD	5
6	.0052	MD	5
7	.0064	MD	5
8	.0062	MD	5
9	.0065	MD	5
10	.0074	MD	5
11	.0075	MD	5
12	.0048	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (*) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.4899
 LONGITUDE: -84.364067
 UTM ZONE: 16
 UTM NORTHING: 4374276
 UTM EASTING: 726689
 ELEVATION-MSL: 204
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AOCR: (079) METROPOLITAN CINCINNATI
 URBANIZED AREA: (3199) HAMILTON, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 FOC: 2
 SITE ID: 39-017-0015
 COUNTY: (017) Butler
 CITY: (49840) Middletown
 SITE ADDRESS: 3901 LEPPERSON
 SITE COMMENTS: OHIO BELL FACILITY
 MONITOR COMMENTS:

SUPPORT AGENCY: (1259) Hamilton County Department Of Environmental Services
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(1259) Hamilton County Department Of Environmental Services

REPORT FOR: 2008

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0040		6
2	.0049		2
3	.0038		6
4	.0067		5
5	.0042		5
6	.0091	MD	5
7	.0090	MD	5
8	.0045	MD	5
9	.0054	MD	4
10	.0150	MD	2
11	.0066	MD	5
12	.0042	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.631111
 LONGITUDE: -80.546944
 UTM ZONE: 17
 UTM NORTHING: 4497694
 UTM EASTING: 538314
 ELEVATION-MSL: 209
 PROBE HEIGHT: 2

STATE: (39) Ohio
 AOCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

(12128) Lead (TSP) STP
 SITE ID: 39-029-0019 POC: 1
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 1250 GEORGE, COLUMBIANA FORT AUTHORITY
 SITE COMMENTS:
 MONITOR COMMENTS: NEAR WTI

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM
 PQAO: (0807) Ohio EPA, Northeast District Office

REPORT FOR: 2005

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0110		5
2	.0220		5
3	.0120		5
4	.0190		4
5	.0140		5
6	.0120		5
7	.0190		5
8	.0110		5
9	.0150		5
10	.0130		6
11	.0092		4
12	.0046		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AIR QUALITY SYSTEM

RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.631111
 LONGITUDE: -80.546944
 UTM ZONE: 17
 UTM NORTHING: 4497694
 UTM EASTING: 538314
 ELEVATION-MSL: 209
 PROBE HEIGHT: 2

STATE: (39) Ohio
 AOCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 SITE ID: 39-029-0019 POC:1
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 1250 GEORGE, COLUMBIANA PORT AUTHORITY
 SITE COMMENTS:
 MONITOR COMMENTS: NEAR WTI

REPORT FOR: 2006

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0807) Ohio EPA, Northeast District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0500		5
2	.0120		5
3	.0040		5
4	.0550		5
5	.0096		5
6	.0140		4
7	.0160		3
8	.0110		5
9	.0061		5
10	.0110		5
11	.0440		5
12	.0110		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP
 SITE ID: 39-029-0019 POC: 1
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 1250 GEORGE, COLUMBIANA PORT AUTHORITY
 SITE COMMENTS:
 MONITOR COMMENTS: NEAR WII

STATE: (39) Ohio
 AQCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

CAS NUMBER: 7439-92-1
 LATITUDE: 40.631111
 LONGITUDE: -80.546944
 UTM ZONE: 17
 UTM NORTHING: 4497694
 UTM EASTING: 538314
 ELEVATION-MSL: 209
 PROBE HEIGHT: 2

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2007

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0807) Ohio EPA, Northeast District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0039		5
2	.0000	ND	3
3	.0350		6
4	.0066		5
5	.0360		5
6	.0130		5
7	.0130		5
8	.0340		5
9	.0270		5
10	.0150		5
11	.0110		5
12	.0200		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AIR QUALITY SYSTEM

RAW DATA REPORT

JUL. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.631111
 LONGITUDE: -80.546944
 UTM ZONE: 17
 UTM NORTHING: 4497694
 UTM EASTING: 538314
 ELEVATION-MSL: 209
 PROBE HEIGHT: 2

STATE: (39) Ohio
 AQCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)

MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 SITE ID: 39-029-0019 POC: 1
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 1250 GEORGE, COLUMBIANA PORT AUTHORITY
 SITE COMMENTS:
 MONITOR COMMENTS: NEAR WTI

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office

MONITOR TYPE: OTHER

COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECIFA ICAP (ICP-

PQAO: (0807) Ohio EPA, Northeast District Office

REPORT FOR: 2008

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0120		6
2	.0071		3
3	.0110		6
4	.0500		3
5	.0290		5
6	.0079	MD	5
7	.0180		5
8	.0100		5
9	.0250		5
10	.0092	MD	5
11	.0110	MD	5
12	.0078	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AIR QUALITY SYSTEM

RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.639722
 LONGITUDE: -80.523889
 UTM ZONE: 17
 UTM NORTHING: 4498646
 UTM EASTING: 540268
 ELEVATION-MSL: 212
 PROBE HEIGHT: 2

STATE: (39) Ohio
 ACCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)

MIN DETECTABLE: .01

REPORT FOR: 2005

(12128) Lead (TSP) STP
 SITE ID: 39-029-0020 POC: 1
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 2220 MICHIGAN
 SITE COMMENTS:
 MONITOR COMMENTS: NEAR WTI

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office

MONITOR TYPE: OTHER

COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FPM

FQAO: (0807) Ohio EPA, Northeast District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0094		5
2	.0310		5
3	.0170		5
4	.0170		5
5	.0100		5
6	.0180		4
7	.0140		5
8	.0058		4
9	.0190		5
10	.0180		6
11	.0130		5
12	.0056		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (**) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.639722
 LONGITUDE: -80.523889
 UTM ZONE: 17
 UTM NORTHING: 4498646
 UTM EASTING: 540268
 ELEVATION-MSL: 212
 PROBE HEIGHT: 2

STATE: (39) Ohio
 AOCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 SITE ID: 39-029-0020 POC: 1
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 2220 MICHIGAN
 SITE COMMENTS:
 MONITOR COMMENTS: NEAR WII

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0807) Ohio EPA, Northeast District Office

REPORT FOR: 2006

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0670		5
2	.0140		5
3	.0340		5
4	.0250		5
5	.0120		4
6	.0093		5
7	.0100		5
8	.0082		5
9	.0075		5
10	.0140		5
11	.0510		5
12	.0150		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AIR QUALITY SYSTEM

RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.639722
 LONGITUDE: -80.523889
 UTM ZONE: 17
 UTM NORTHING: 4498646
 UTM EASTING: 540268
 ELEVATION-MSL: 212
 PROBE HEIGHT: 2

STATE: (39) Ohio
 AOCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)

MIN DETECTABLE: .0075

REPORT FOR: 2007

(12128) Lead (TSP) STP
 SITE ID: 39-029-0020 FOC: 1
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 2220 MICHIGAN
 SITE COMMENTS:
 MONITOR COMMENTS: NEAR WTI

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECIFRA ICAP (ICP-
 PQAO:(0807) Ohio EPA, Northeast District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0058		5
2	.0000	ND	4
3	.0340		4
4	.0140		3
5	.0220		5
6	.0100		5
7	.0190		5
8	.0160		4
9	.0320		5
10	.0230		5
11	.0110		5
12	.0180		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP
 SITE ID: 39-029-0020 POC:1
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 2220 MICHIGAN
 SITE COMMENTS:
 MONITOR COMMENTS: NEAR WTI

STATE: (39) Ohio
 AQCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

CAS NUMBER: 7439-92-1
 LATITUDE: 40.639722
 LONGITUDE: -80.1523889
 UTM ZONE: 17
 UTM NORTHING: 4498646
 UTM EASTING: 540268
 ELEVATION-MSL: 212
 PROBE HEIGHT: 2

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2008

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0807) Ohio EPA, Northeast District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0140		5
2	.0150	MD	4
3	.0096		6
4	.0280		3
5	.0200		5
6	.0079	MD	4
7	.0078	MD	4
8	.0088	MD	5
9	.0140	MD	5
10	.0080	MD	5
11	.0083	MD	5
12	.0074	MD	4

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.635
 LONGITUDE: -80.546667
 UTM ZONE: 17
 UTM NORTHING: 4498125
 UTM EASTING: 538325
 ELEVATION-MSL: 229
 PROBE HEIGHT: 6

STATE: (39) Ohio
 AQCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (9320) YOUNGSTOWN-WARREN, OH
 LAND USE: COMMERCIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

(12128) Lead (TSP) STP
 SITE ID: 39-029-0022 FOC: 1
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 500 MARYLAND
 SITE COMMENTS:
 MONITOR COMMENTS: WTI METALS MONITORING, EAST END SCHOOL

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM
 PQAO: (0807) Ohio EPA, Northeast District Office

REPORT FOR: 2005

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0160		4
2	.0180		4
3	.0085		5
4	.0170		5
5	.0098		4
6	.0100		5
7	.0150		4
8	.0075		5
9	.0140		5
10	.0140		6
11	.0052		5
12	.0052		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.635
 LONGITUDE: -80.546667
 UTM ZONE: 17
 UTM NORTHING: 4498125
 UTM EASTING: 538325
 ELEVATION-MSL: 229
 PROBE HEIGHT: 6

STATE: (39) Ohio
 AQCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (9320) YOUNGSTOWN-WARREN, OH
 LAND USE: COMMERCIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 FOC: 1
 SITE ID: 39-029-0022
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 500 MARYLAND
 SITE COMMENTS:
 MONITOR COMMENTS: WTI METALS MONITORING, EAST END SCHOOL

REPORT FOR: 2006

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0807) Ohio EPA, Northeast District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0430		5
2	.0110		5
3	.0470		4
4	.0091		4
5	.0061		5
6	.0140		5
7	.0120		5
8	.0083		4
9	.0026		5
10	.0089		5
12	.0120		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (*) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.635
 LONGITUDE: -80.546667
 UTM ZONE: 17
 UTM NORTHING: 4498125
 UTM EASTING: 538325
 ELEVATION-MSL: 229
 PROBE HEIGHT: 6

STATE: (39) Ohio
 AOCR: (181) STEUBENVILLE-WEIRTON-WHEELING
 URBANIZED AREA: (9320) YOUNGSTOWN-WARREN, OH
 LAND USE: COMMERCIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 FOC: 1
 SITE ID: 39-029-0022
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 500 MARYLAND
 SITE COMMENTS:
 MONITOR COMMENTS: WTI METALS MONITORING, EAST END SCHOOL

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0807) Ohio EPA, Northeast District Office

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0078		4
2	.0058		4
3	.0450		5
4	.0054		5
5	.0310		5
6	.0110		5
7	.0230		5
8	.0240		5
9	.0190		4
10	.0130		4
11	.0096		5
12	.0190		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.635
 LONGITUDE: -80.546667
 UTM ZONE: 17
 UTM NORTHING: 4498125
 UTM EASTING: 538325
 ELEVATION-MSL: 229
 PROBE HEIGHT: 6

STATE: (39) Ohio
 AQCR: (181) STEUBENVILLE-WEIFTON-WHEELING
 URBANIZED AREA: (9320) YOUNGSTOWN-WARREN, OH
 LAND USE: COMMERCIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0021

(12128) Lead (TSP) STP
 SITE ID: 39-029-0022 POC: 1
 COUNTY: (029) Columbiana
 CITY: (23730) East Liverpool
 SITE ADDRESS: 500 MARYLAND
 SITE COMMENTS:
 MONITOR COMMENTS: WTI METALS MONITORING, EAST END SCHOOL

REPORT FOR: 2008

SUPPORT AGENCY: (0807) Ohio EPA, Northeast District Office
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO.(0807) Ohio EPA, Northeast District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0140	MD	6
2	.0130		4
3	.0078		6
4	.0330		3
5	.0350		5
6	.0062	MD	5
7	.0140		5
8	.0077	MD	5
9	.0160	MD	4
10	.0088	MD	5
11	.0130	MD	4
12	.0069	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.476944
 LONGITUDE: -81.681944
 UTM ZONE: 17
 UTM NORTHING: 4591700
 UTM EASTING: 443050
 ELEVATION-MSL: 202
 PROBE HEIGHT: 4

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

REPORT FOR: 2005

(12128) Lead (TSP) STP
 POC: 1
 SITE ID: 39-035-0038
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 2547 ST TIKHON
 SITE COMMENTS: SITE IN PARKING LOT NEAR ST THEODSIUS CHURCH
 MONITOR COMMENTS: SPECIAL STUDY METALS MONITOR

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM
 PQA0:(0229) Cleveland Air Pollution Control Agency

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0300		5
2	.0100		5
3	.0140		5
4	.0310		4
5	.0160		5
6	.0200		5
7	.0190		5
8	.0150		5
9	.0300		5
10	.0260		3
11	.0140		5
12	.0096		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.476944
 LONGITUDE: -81.681944
 UTM ZONE: 17
 UTM NORTHING: 4591700
 UTM EASTING: 443050
 ELEVATION-MSL: 202
 PROBE HEIGHT: 4

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 POC:1
 SITE ID: 39-035-0038
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 2547 ST IIRKON
 SITE COMMENTS: SITE IN PARKING LOT NEAR ST THEODSIUS CHURCH
 MONITOR COMMENTS: SPECIAL STUDY METALS MONITOR

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2006

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0150		5
2	.0350		5
3	.0200		5
4	.0240		5
5	.0220		5
6	.0150		5
7	.0100		5
8	.0340		5
9	.0340		5
10	.0170		5
11	.0110		5
12	.0084		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.476944
 LONGITUDE: -81.681944
 UTM ZONE: 17
 UTM NORTHING: 4591700
 UTM EASTING: 443050
 ELEVATION-MSL: 202
 PROBE HEIGHT: 4

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 SITE ID: 39-035-0038 POC: 1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 2547 ST TIKHON
 SITE COMMENTS: SITE IN PARKING LOT NEAR ST THEODOSIUS CHURCH
 MONITOR COMMENTS: SPECIAL STUDY METALS MONITOR

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0092		5
2	.0091		4
3	.0140		6
4	.0090		5
5	.0240		5
6	.0200		5
7	.0190		5
8	.0210		5
9	.0140		5
11	.0150		3
12	.0160		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.476944
 LONGITUDE: -81.661944
 UTM ZONE: 17
 UTM NORTHING: 4591700
 UTM EASTING: 443050
 ELEVATION-MSL: 202
 PROBE HEIGHT: 4

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2008

(12128) Lead (TSP) STP
 POC: 1
 SITE ID: 39-035-0038
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 2547 ST TIKHON
 SITE COMMENTS: SITE IN PARKING LOT NEAR ST THEODSIUS CHURCH
 MONITOR COMMENTS: SPECIAL STUDY METALS MONITOR

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0229) Cleveland Air Pollution Control Agency

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0089		5
2	.0097		4
3	.0200		4
4	.0410		5
5	.0200		5
6	.0200		5
7	.0220		5
8	.0200		5
9	.0150		5
10	.0095	MD	5
11	.0055	MD	5
12	.0049	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (*) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AIR QUALITY SYSTEM

RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.482222
 LONGITUDE: -81.708889
 UTM ZONE: 17
 UTM NORTHING: 4592320
 UTM EASTING: 440815
 ELEVATION-MSL: 208
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AOCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: COMMERCIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

REPORT FOR: 2005

(12128) Lead (TSP) STP
 POC: 1
 SITE ID: 39-035-0042
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 3136 LORAIN AVE., F.S. 4
 SITE COMMENTS:
 MONITOR COMMENTS:

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: Multiple Monitor Types
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM
 PQAO: (0229) Cleveland Air Pollution Control Agency

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0130		5
2	.0082		5
3	.0082		5
4	.0390		4
5	.0160		5
6	.0240		4
7	.0290		4
8	.0280		4
9	.0270		4
10	.0160		6
11	.0090		5
12	.0059		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (**) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009
 CAS NUMBER: 7439-92-1
 LATITUDE: 41.482222
 LONGITUDE: -81.708889
 UTM ZONE: 17
 UTM NORTHING: 4592320
 UTM EASTING: 440815
 ELEVATION-MSL: 208
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: COMMERCIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 FOC: 1
 SITE ID: 39-035-0042
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 3136 LORAIN AVE., F.S. 4
 SITE COMMENTS:
 MONITOR COMMENTS:

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: Multiple Monitor Types
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2006

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0150		5
2	.0150		5
3	.0150		5
4	.0280		5
5	.0100		3
6	.0190		5
7	.0120		5
8	.0140		5
9	.0076		5
10	.0160		5
11	.0100		5
12	.0099		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (*) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009
 CAS NUMBER: 7439-92-1
 LATITUDE: 41.482222
 LONGITUDE: -81.708889
 UTM ZONE: 17
 UTM NORTHING: 452320
 UTM EASTING: 440815
 ELEVATION-MSL: 208
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: COMMERCIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 POC: 1
 SITE ID: 39-035-0042
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 3136 LORAIN AVE., F.S. 4
 SITE COMMENTS:
 MONITOR COMMENTS:

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0085		4
2	.0068		4
3	.0130		6
4	.0130		5
5	.0260		5
6	.0170		4
7	.0280		5
8	.0190		5
9	.0160		4
10	.0360		5
11	.0160		5
12	.0100		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

JUL. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.482222
 LONGITUDE: -81.708889
 UTM ZONE: 17
 UTM NORTHING: 4592320
 UTM EASTING: 440815
 ELEVATION-MSL: 208
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: COMMERCIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 SITE ID: 39-035-0042 POC: 1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 3136 LORAIN AVE., F.S. 4
 SITE COMMENTS:
 MONITOR COMMENTS:

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2008

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0067		5
2	.0073		2
3	.0099		5
4	.0210		5
5	.0330		5
6	.0160		5
7	.0160		5
8	.0150		5
9	.0160	MD	5
10	.0150	MD	5
11	.0073	MD	5
12	.0058	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

JUL. 30, 2009

(12128) Lead (TSP) STP
 SITE ID: 39-035-0049 POC: 1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: E. 56TH ST.
 SITE COMMENTS:
 MONITOR COMMENTS:

CAS NUMBER: 7439-92-1
 LATITUDE: 41.446667
 LONGITUDE: -81.651111
 UTM ZONE: 17
 UTM NORTHING: 4588330
 UTM EASTING: 445600
 ELEVATION-MSL: 213
 PROBE HEIGHT: 3

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

REPORT FOR: 2005

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM
 PQAO: (0229) Cleveland Air Pollution Control Agency

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0640		5
2	.0520		5
3	.0940		5
4	.0880		4
5	.1300		5
6	.1100		5
7	.1100		4
8	.0810		5
9	.2600		5
10	.1400		6
11	.0740		5
12	.0280		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.446667
 LONGITUDE: -81.451111
 UTM ZONE: 17
 UTM NORTHING: 4588330
 UTM EASTING: 445600
 ELEVATION-MSL: 213
 PROBE HEIGHT: 3

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 SITE ID: 39-035-0049 POC: 1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: E. 56TH ST.
 SITE COMMENTS:
 MONITOR COMMENTS:

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2006

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0580		5
2	.0500		5
3	.0660		5
4	.1100		5
5	.0620		5
6	.0910		5
7	.1400		5
8	.0830		5
9	.0760		4
10	.0460		5
11	.0310		5
12	.0300		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.446667
 LONGITUDE: -81.651111
 UTM ZONE: 17
 UTM NORTHING: 4588330
 UTM EASTING: 445600
 ELEVATION-MSL: 213
 PROBE HEIGHT: 3

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 POC: 1
 SITE ID: 39-035-0049
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: E. 56TH ST.
 SITE COMMENTS:
 MONITOR COMMENTS:

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0760		5
2	.0800		4
3	.0410		6
4	.0260		5
5	.1200		5
6	.0370		4
7	.0920		5
8	.1300		5
9	.1200		5
10	.1500		5
11	.2200		5
12	.0960		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.446667
 LONGITUDE: -81.651111
 UTM ZONE: 17
 UTM NORTHING: 4588330
 UTM EASTING: 445600
 ELEVATION-MSL: 213
 PROBE HEIGHT: 3

STATE: (39) Ohio
 AOCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 SITE ID: 39-035-0049 POC: 1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: E. 56TH ST.
 SITE COMMENTS:
 MONITOR COMMENTS:

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2008

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0380		5
2	.0250		3
3	.1700		5
4	.0670		5
5	.1900		4
6	.0880		5
7	.1300		5
8	.2100		5
9	.1100		5
10	.2000		5
11	.0500		5
12	.0550		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.4425
 LONGITUDE: -81.649167
 UTM ZONE: 17
 UTM NORTHING: 4587875
 UTM EASTING: 445760
 ELEVATION-MSL: 213
 PROBE HEIGHT: 3

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

(12128) Lead (TSP) SIP
 SITE ID: 39-035-0050 POC: 1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: GRANT RD.
 SITE COMMENTS:
 MONITOR COMMENTS:

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM
 PQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2005

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0240		5
2	.0520		5
3	.0750		5
4	.0940		5
5	.0310		4
6	.0400		5
7	.0820		5
8	.0260		5
9	.0300		4
10	.0490		6
11	.0086		5
12	.0026		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP
 SITE ID: 39-035-0050 POC:1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: GRANT RD.
 SITE COMMENTS:
 MONITOR COMMENTS:

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

CAS NUMBER: 7439-92-1
 LATITUDE: 41.4425
 LONGITUDE: -81.649167
 UTM ZONE: 17
 UTM NORTHING: 4587875
 UTM EASTING: 445760
 ELEVATION-MSL: 213
 PROBE HEIGHT: 3

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2006

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0093		5
2	.0240		5
3	.0870		4
4	.0260		5
5	.0200		5
6	.0180		5
7	.0170		5
8	.0200		5
9	.0130		5
10	.0098		5
11	.0088		5
12	.0085		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.4425
 LONGITUDE: -81.649167
 UTM ZONE: 17
 UTM NORTHING: 4587875
 UTM EASTING: 445760
 ELEVATION-MSL: 213
 PROBE HEIGHT: 3

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 SITE ID: 39-035-0050 POC: 1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: GRANT RD.
 SITE COMMENTS:
 MONITOR COMMENTS:

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 FQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0069		5
2	.0140		4
3	.0140		6
4	.0730		5
5	.0340		5
6	.0380		5
7	.0370		5
8	.0440		5
9	.0270		5
10	.0130		5
11	.0190		5
12	.0230		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.4425
 LONGITUDE: -81.649167
 UTM ZONE: 17
 UTM NORTHING: 4587875
 UTM EASTING: 445760
 ELEVATION-MSL: 213
 PROBE HEIGHT: 3

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12126) Lead (TSP) STP
 POC: 1
 SITE ID: 39-035-0050
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: GRANT RD.
 SITE COMMENTS:
 MONITOR COMMENTS:

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2008

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0063		5
2	.0066		4
3	.0220		5
4	.0200		5
5	.0340		5
6	.0240		4
7	.0420		5
8	.0130		5
9	.0590		5
10	.0230	MD	5
11	.0140	MD	5
12	.0041	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (*) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.475064
 LONGITUDE: -81.675962
 UTM ZONE: 17
 UTM NORTHING: 4591496
 UTM EASTING: 443559
 ELEVATION-MSL: 181
 PROBE HEIGHT: 2

STATE: (39) OHIO
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

REPORT FOR: 2005

(12128) Lead (TSP) STP
 POC: 2
 SITE ID: 39-035-0061
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: W. SIDE OF WEST 3RD.
 SITE COMMENTS: SITE LOCATED NEAR THE FORMER MASPTER METALS PLANT.
 MONITOR COMMENTS: POC 2 IS COMPOSITE LEAD DATA COLLECTED AT THIS SITE

SUPPORT AGENCY: (1100) US EPA - Region 5
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOI, ATOMIC ABSORPTION (AA) FRM
 PQAO: (0225) Cleveland Air Pollution Control Agency

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0160		5
2	.0140		5
3	.0160		5
4	.0230		4
5	.0150		5
6	.0170		5
7	.0150		5
8	.0180		5
9	.0150		5
10	.0150		4
11	.0091		3
12	.0051		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.475064
 LONGITUDE: -81.675962
 UTM ZONE: 17
 UTM NORTHING: 4591496
 UTM EASTING: 443559
 ELEVATION-MSL: 181
 PROBE HEIGHT: 2

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

REPORT FOR: 2006

(12128) Lead (TSP) STP
 FOC: 2
 SITE ID: 39-035-0061
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: W. SIDE OF WEST 3RD.
 SITE COMMENTS: SITE LOCATED NEAR THE FORMER MASPTER METALS PLANT.
 MONITOR COMMENTS: POC 2 IS COMPOSITE LEAD DATA COLLECTED AT THIS SITE

SUPPORT AGENCY: (1100) US EPA - Region 5
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0229) Cleveland Air Pollution Control Agency

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0100		4
2	.0024		5
3	.0260		3
4	.0230		5
5	.0600		5
6	.0190		5
7	.0150		5
8	.0150		5
9	.0120		5
10	.0100		5
11	.0110		5
12	.0072		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.475064
 LONGITUDE: -81.675962
 UTM ZONE: 17
 UTM NORTHING: 4591496
 UTM EASTING: 443559
 ELEVATION-MSL: 181
 PROBE HEIGHT: 2

STATE: (39) OHIO
 ACCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2007

(12128) Lead (TSP) STP
 SITE ID: 39-035-0061 POC: 2
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: W. SIDE OF WEST 3RD.
 SITE COMMENTS: SITE LOCATED NEAR THE FORMER MASPTER METALS PLANT.
 MONITOR COMMENTS: POC 2 IS COMPOSITE LEAD DATA COLLECTED AT THIS SITE

SUPPORT AGENCY: (1100) US EPA - Region 5
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECIETA ICAP (ICP-
 PQAO: (0229) Cleveland Air Pollution Control Agency

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0081		5
2	.0080		4
3	.0100		6
4	.0130		5
5	.0230		3
6	.0260		5
7	.0360		5
8	.0210		5
9	.0220		5
10	.0250		5
11	.0190		5
12	.0120		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.475064
 LONGITUDE: -81.675962
 UTM ZONE: 17
 UTM NORTHING: 4591496
 UTM EASTING: 443559
 ELEVATION-MSL: 181
 PROBE HEIGHT: 2

STATE: (39) Ohio
 AOCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2008

(12128) Lead (TSP) STP
 POC: 2
 SITE ID: 39-035-0061
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: W. SIDE OF WEST 3RD.
 SITE COMMENTS: SITE LOCATED NEAR THE FORMER MASPTER METALS PLANT.
 MONITOR COMMENTS: POC 2 IS COMPOSITE LEAD DATA COLLECTED AT THIS SITE

SUPPORT AGENCY: (1100) US EPA - Region 5
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0229) Cleveland Air Pollution Control Agency

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0120		5
2	.0098		3
3	.0150		5
4	.0390		5
5	.0230		5
6	.0160		5
7	.0410		4
8	.0410		5
9	.0220		5
10	.0170	MD	5
11	.0077	MD	5
12	.0049	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009
 CAS NUMBER: 7439-92-1
 LATITUDE: 41.454791
 LONGITUDE: -81.634757
 UTM ZONE: 17
 UTM NORTHING: 4589242
 UTM EASTING: 446983
 ELEVATION-MSL: 227
 PROBE HEIGHT: 10

STATE: (39) Ohio
 AOCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: COMMERCIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

(12128) Lead (TSP) STP
 FOC: 1
 SITE ID: 39-035-0068
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 7629 BROADWAY
 SITE COMMENTS: ON THE ROOF OF FIRE STATION #11
 MONITOR COMMENTS: ANDERSON HI-VOL INSTRUMENT TO COLLECT ON FILTER TSP AND COMPOSITE METALS

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM
 PQAO: (0229) Cleveland Air Pollution Control Agency
 REPORT FOR: 2005

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0065		2
2	.0460		3
3	.0460		2
4	.0240		2
5	.0380		2
6	.0340		3
7	.0250		4
8	.0160		5
9	.0250		5
10	.0200		6
11	.0100		5
12	.0087		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP
 SITE ID: 39-035-0068 FOC: 1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 7629 BROADWAY
 SITE COMMENTS: ON THE ROOF OF FIRE STATION #11
 MONITOR COMMENTS: ANDERSON HI-VOL INSTRUMENT TO COLLECT ON FILTER TSP AND COMPOSITE METALS

STATE: (39) Ohio
 AQCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: COMMERCIAL
 LOCATION SETTING: URBAN AND CENTER CITY

CAS NUMBER: 7439-92-1
 LATITUDE: 41.454791
 LONGITUDE: -81.634757
 UTM ZONE: 17
 UTM NORTHING: 4589242
 UTM EASTING: 446983
 ELEVATION-MSL: 227
 PROBE HEIGHT: 10

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

REPORT FOR: 2006

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQA0: (0229) Cleveland Air Pollution Control Agency

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0120		5
2	.0140		3
3	.0240		3
4	.0230		4
5	.0150		4
6	.0160		5
7	.0160		5
8	.0240		4
9	.0160		5
10	.0140		5
11	.0098		5
12	.0069		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP

POC: 1

SITE ID: 39-035-0068
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland

SITE ADDRESS: 7629 BROADWAY

SITE COMMENTS: ON THE ROOF OF FIRE STATION #11

MONITOR COMMENTS: ANDERSON HI-VOL INSTRUMENT TO COLLECT ON FILTER TSP AND COMPOSITE METALS

STATE: (39) Ohio

AOCR: (174) GREATER METROPOLITAN CLEVELAND

URBANIZED AREA: (1680) CLEVELAND, OH

LAND USE: COMMERCIAL

LOCATION SETTING: URBAN AND CENTER CITY

CAS NUMBER: 7439-92-1
 LATITUDE: 41.454791
 LONGITUDE: -81.634757
 UTM ZONE: 17
 UTM NORTHING: 4589242
 UTM EASTING: 446983
 ELEVATION-MSL: 227
 PROBE HEIGHT: 10

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)

MIN DETECTABLE: .01

REPORT FOR: 2007

PARA: ()

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency

MONITOR TYPE: OTHER

COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM

SAMPLE PERIOD	MONTHLY COMPOSITE OF 24-HOUR SAMPLES		NUMBER SAMPLES
	VALUE	EX DATA	
1	.0085		4

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.519181
 LONGITUDE: -81.637939
 UTM ZONE: 17
 UTM NORTHING: 4596364
 UTM EASTING: 446770
 ELEVATION-MSL: 193
 PROBE HEIGHT: 7

STATE: (39) Ohio
 AOCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

(12128) Lead (TSP) STP
 SITE ID: 39-035-0069 POC: 1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 7300 SUPERIOR
 SITE COMMENTS: THIS IS A SPECIAL STUDY AIR TOXICS MONITORING SITE, PART OF A THREE SITE NETWORK,
 MONITOR COMMENTS: ANDERSON HI-VOL SAMPLING TSP AND COMPOSITE METALS BEING ANALYZED.

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency
 MONITOR TYPE: SPECIAL PURPOSE
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM
 PQA0:(0229) Cleveland Air Pollution Control Agency

REPORT FOR: 2005

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0065		2
2	.0110		3
3	.0065		2
4	.0200		3
5	.0140		5
7	.0200		4
8	.0160		4
9	.0270		5
10	.0160		3
11	.0074		5
12	.0065		2

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP

POC: 1

SITE ID: 39-035-0069

COUNTY: (035) Cuyahoga

CITY: (16000) Cleveland

SITE ADDRESS: 7300 SUPERIOR

SITE COMMENTS: THIS IS A SPECIAL STUDY AIR TOXICS MONITORING SITE, PART OF A THREE SITE NETWORK, LOCATION SETTING: URBAN AND CENTER CITY
 MONITOR COMMENTS: ANDERSON HI-VOL SAMPLING TSP AND COMPOSITE METALS BEING ANALYZED.

STATE: (39) Ohio

AQCR: (174) GREATER METROPOLITAN CLEVELAND

URBANIZED AREA: (1680) CLEVELAND, OH

LAND USE: RESIDENTIAL

LOCATION SETTING: URBAN AND CENTER CITY

CAS NUMBER: 7439-92-1
 LATITUDE: 41.519181
 LONGITUDE: -81.637939
 UTM ZONE: 17
 UTM NORTHING: 4596364
 UTM EASTING: 446770
 ELEVATION-MSL: 193
 PROBE HEIGHT: 7

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)

MIN DETECTABLE: .003

REPORT FOR: 2006

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency

MONITOR TYPE: SPECIAL PURPOSE

COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP

PQAO: (0229) Cleveland Air Pollution Control Agency

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0044		3
2	.0100		5
3	.0100		5
4	.0160		4
5	.0160		5
6	.0190		5
7	.0240		3
8	.0130		5
9	.0120		5
10	.0140		5
11	.0086		5
12	.0100		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP

SITE ID: 39-035-0069 FOC: 1
 COUNTY: (035) Cuyahoga
 CITY: (16000) Cleveland
 SITE ADDRESS: 7300 SUPERIOR
 SITE COMMENTS: THIS IS A SPECIAL STUDY AIR TOXICS MONITORING SITE, PART OF A THREE SITE NETWORK, LOCATION SETTING: URBAN AND CENTER CITY
 MONITOR COMMENTS: ANDERSON HI-VOL SAMPLING TSP AND COMPOSITE METALS BEING ANALYZED.

STATE: (39) Ohio
 AOCR: (174) GREATER METROPOLITAN CLEVELAND
 URBANIZED AREA: (1680) CLEVELAND, OH
 LAND USE: RESIDENTIAL

CAS NUMBER: 7439-92-1
 LATITUDE: 41.519181
 LONGITUDE: -81.637939
 UTM ZONE: 17
 UTM NORTHING: 4596364
 UTM EASTING: 446770
 ELEVATION-MSL: 193
 PROBE HEIGHT: 7

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

REPORT FOR: 2007

SUPPORT AGENCY: (0229) Cleveland Air Pollution Control Agency

MONITOR TYPE: SPECIAL PURPOSE
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP

FOAO: ()

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0077		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

(12128) Lead (TSP) STP

FOC:1

SITE ID: 39-049-0025

COUNTY: (049) Franklin

CITY: (18000) Columbus

SITE ADDRESS: 1700 ANN ST.

SITE COMMENTS: SITE IS WITHIN .4KM OF GLASS FACTORY .8KM OF FOUNDRY AND 1.8KM OF AGGREGATE PIT
 MONITOR COMMENTS: HI-VOL ON ROOF OF A CITY SWIMMING POOL

STATE: (39) Ohio

AQCR: (176) METROPOLITAN COLUMBUS

URBANIZED AREA: (1840) COLUMBUS, OH

LAND USE: INDUSTRIAL

LOCATION SETTING: URBAN AND CENTER CITY

CAS NUMBER: 7439-92-1
 LATITUDE: 39.928056
 LONGITUDE: -82.981111
 UTM ZONE: 17
 UTM NORTHING: 4421450
 UTM EASTING: 330700
 ELEVATION-MSL: 234
 PROBE HEIGHT: 4

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

REPORT FOR: 2005

SUPPORT AGENCY: (0805) Ohio EPA, Central District Office
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FPM
 PQAO: (0805) Ohio EPA, Central District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0026		5
2	.0068		5
3	.0090		5
4	.0075		5
5	.0100		5
6	.0069		5
7	.0030		5
8	.0084		5
9	.0140		5
10	.0130		6
11	.0055		5
12	.0026		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.928056
 LONGITUDE: -82.981111
 UTM ZONE: 17
 UTM NORTHING: 4421450
 UTM EASTING: 330700
 ELEVATION-MSL: 234
 PROBE HEIGHT: 4

STATE: (39) Ohio
 AQCR: (176) METROPOLITAN COLUMBUS
 URBANIZED AREA: (1840) COLUMBUS, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 SITE ID: 39-049-0025 POC: 1
 COUNTY: (049) Franklin
 CITY: (18000) Columbus
 SITE ADDRESS: 1700 ANN ST.
 SITE COMMENTS: SITE IS WITHIN .4KM OF GLASS FACTORY .8KM OF FOUNDRY AND 1.8KM OF AGGREGATE PIT
 MONITOR COMMENTS: HI-VOL ON ROOF OF A CITY SWIMMING POOL

SUPPORT AGENCY: (0805) Ohio EPA, Central District Office
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQ30: (0805) Ohio EPA, Central District Office

REPORT FOR: 2006

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0027		5
2	.0110		5
3	.0027		5
4	.0120		5
5	.0076		5
6	.0076		5
7	.0110		5
8	.0110		5
9	.0081		5
10	.0088		5
11	.0066		5
12	.0067		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.928056
 LONGITUDE: -82.981111
 UTM ZONE: 17
 UTM NORTHING: 4421450
 UTM EASTING: 330700
 ELEVATION-MSL: 234
 PROBE HEIGHT: 4

STATE: (39) Ohio
 AQCR: (176) METROPOLITAN COLUMBUS
 URBANIZED AREA: (1840) COLUMBUS, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 FOC:1
 SITE ID: 39-049-0025
 COUNTY: (049) Franklin
 CITY: (18000) Columbus
 SITE ADDRESS: 1700 ANN ST.
 SITE COMMENTS: SITE IS WITHIN .4KM OF GLASS FACTORY .8KM OF FOUNDRY AND 1.8KM OF AGGREGATE PIT
 MONITOR COMMENTS: HI-VOL ON ROOF OF A CITY SWIMMING POOL

SUPPORT AGENCY: (0805) Ohio EPA, Central District Office
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0805) Ohio EPA, Central District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0080		5
2	.0068		4
3	.0066		6
4	.0060		5
5	.0100		5
6	.0072	MD	5
7	.0100		5
8	.0140		5
9	.0084		5
10	.0083		5
11	.0110		4
12	.0040		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP
 SITE ID: 39-049-0025 FOC: 1
 COUNTY: (049) Franklin
 CITY: (18000) Columbus
 SITE ADDRESS: 1700 ANN ST.
 SITE COMMENTS: SITE IS WITHIN .4KM OF GLASS FACTORY .8KM OF FOUNDRY AND 1.8KM OF AGGREGATE PIT
 MONITOR COMMENTS: HI-VOL ON ROOF OF A CITY SWIMMING POOL

STATE: (39) Ohio
 AOCR: (176) METROPOLITAN COLUMBUS
 URBANIZED AREA: (1840) COLUMBUS, OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

CAS NUMBER: 7439-92-1
 LATITUDE: 39.928056
 LONGITUDE: -82.981111
 UTM ZONE: 17
 UTM NORTHING: 4421450
 UTM EASTING: 330700
 ELEVATION-MSL: 234
 PROBE HEIGHT: 4

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2008

SUPPORT AGENCY: (0805) Ohio EPA, Central District Office
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 POAO: (0805) Ohio EPA, Central District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMELES
1	.0059		5
2	.0047		4
3	.0051		6
4	.0130		5
5	.0093		5
6	.0094	MD	4
7	.0140		5
8	.0110		5
9	.0110		5
10	.0120	MD	5
11	.0066	MD	5
12	.0047	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

(12128) Lead (TSP) STP

SITE ID: 39-051-0001 POC:1

COUNTY: (051) Fulton

CITY: (21616) Delta

SITE ADDRESS: 200 VAN BUREN

SITE COMMENTS: MONITOR ON SCAFFOLDING IN PARKING LOT

MONITOR COMMENTS:

SUPPORT AGENCY: (0808) Ohio EPA, Northwest District Office

MONITOR TYPE: OTHER

COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FRM

FORM: (0808) Ohio EPA, Northwest District Office

STATE: (39) Ohio

AOCR: (177) NORTHWEST OHIO

URBANIZED AREA: (0000) NOT IN AN URBAN AREA

LAND USE: RESIDENTIAL

LOCATION SETTING: URBAN AND CENTER CITY

REPORT FOR: 2005

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)

MIN DETECTABLE: .01

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0800		5
2	.3600		3
3	.1200		5
4	.6100		1
5	.4200		1
6	.3100		5
7	.0620		5
8	.0480		5
9	.1200		5
10	.0210		6
11	.1100		4
12	.0740		3

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP

SITE ID: 39-051-0001 POC:1
 COUNTY: (051) Fulton
 CITY: (21616) Delta
 SITE ADDRESS: 200 VAN BUREN
 SITE COMMENTS: MONITOR ON SCAFFOLDING IN PARKING LOT
 MONITOR COMMENTS:

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

CAS NUMBER: 7439-92-1
 LATITUDE: 41.575278
 LONGITUDE: -83.996389
 UTM ZONE: 17
 UTM NORTHING: 4606777
 UTM EASTING: 250183
 ELEVATION-MSL: 220
 PROBE HEIGHT: 3

SUPPORT AGENCY: (0808) Ohio EPA, Northwest District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0808) Ohio EPA, Northwest District Office

REPORT FOR: 2006

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.1300		5
2	.0660		5
3	.0170		3
4	.0220		4
5	.2600		3
6	.0660		4
7	.0260		1
8	.3800		4
9	.2400		5
10	.2300		5
11	.1600		5
12	.4200		4

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 41.575278
 LONGITUDE: -83.996389
 UTM ZONE: 17
 UTM NORTHING: 4606777
 UTM EASTING: 250183
 ELEVATION-MSL: 220
 PROBE HEIGHT: 3

STATE: (39) OHIO
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0025

(12128) Lead (TSP) STP
 POC: 1
 SITE ID: 39-051-0001
 COUNTY: (051) Fulton
 CITY: (21616) Delta
 SITE ADDRESS: 200 VAN BUREN
 SITE COMMENTS: MONITOR ON SCAFFOLDING IN PARKING LOT
 MONITOR COMMENTS:

SUPPORT AGENCY: (0808) Ohio EPA, Northwest District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQRO:(0808) Ohio EPA, Northwest District Office

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.6900	MD	3
2	.2400	MD	3
3	.1400		1
4	.3200		4
5	.0990		4
6	.1900		5
7	.2500		5
8	.3000		5
9	.0660		5
10	.3600		5
11	.5900		3
12	.6200		3

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009
 CAS NUMBER: 7439-92-1
 LATITUDE: 41.575278
 LONGITUDE: -83.996389
 UTM ZONE: 17
 UTM NORTHING: 4606777
 UTM EASTING: 250183
 ELEVATION-MSL: 220
 PROBE HEIGHT: 3

STATE: (39) Ohio
 AOCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2008

(12128) Lead (TSP) STP
 POC: 1
 SITE ID: 39-051-0001
 COUNTY: (051) Fulton
 CITY: (21616) Delta
 SITE ADDRESS: 200 VAN BUREN
 SITE COMMENTS: MONITOR ON SCAFFOLDING IN PARKING LOT
 MONITOR COMMENTS:

SUPPORT AGENCY: (0808) Ohio EPA, Northwest District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 POAO: (0808) Ohio EPA, Northwest District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.4900		3
2	.2500		4
3	.4200		4
4	.0920		4
5	.2000		4
6	.5100		5
7	.2400		5
8	.1200		5
9	.1500		5
10	.4400		4
11	.3700		4
12	.0640		2

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AIR QUALITY SYSTEM

RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.343056
 LONGITUDE: -83.755
 UTM ZONE: 17
 UTM NORTHING: 4469300
 UTM EASTING: 266000
 ELEVATION-MSL: 378
 PROBE HEIGHT: 5

STATE: (39) Ohio
 ACCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

(12128) Lead (TSP) STP
 SITE ID: 39-091-0003 POC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1222 SUPERIOR
 SITE COMMENTS:
 MONITOR COMMENTS:

REPORT FOR: 2005

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (AA) FPM
 PQA0: (0810) Ohio EPA, Southwest District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0650		5
2	.0960		5
3	.1600		5
4	.0670		5
5	.0640		5
6	.1700		5
7	.0220		5
8	.0270		5
9	.2000		5
10	.0220		6
11	.0280		5
12	.0180		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.343056
 LONGITUDE: -83.755
 UTM ZONE: 17
 UTM NORTHING: 4469300
 UTM EASTING: 266000
 ELEVATION-MSL: 378
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AOCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 SITE ID: 39-091-0003 POC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1222 SUPERIOR
 SITE COMMENTS:
 MONITOR COMMENTS:

REPORT FOR: 2006

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQA0: (0810) Ohio EPA, Southwest District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0800		5
2	.0680		4
3	.0060		5
4	.0300		5
5	.0380		5
6	.0370		5
7	.1900		5
8	.0310		5
9	.0430		5
10	.0230		5
11	.0049		5
12	.0160		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP
 SITE ID: 39-091-0003 FOC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1222 SUPERIOR
 SITE COMMENTS:
 MONITOR COMMENTS:

STATE: (39) Ohio
 AOCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

CAS NUMBER: 7439-92-1
 LATITUDE: 40.343056
 LONGITUDE: -83.755
 UTM ZONE: 17
 UTM NORTHING: 4469300
 UTM EASTING: 266000
 ELEVATION-MSL: 378
 PROBE HEIGHT: 5

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0054

REPORT FOR: 2007

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0810) Ohio EPA, Southwest District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0480	MD	5
2	.0140	MD	4
3	.0740		6
4	.0300		5
5	.0470		5
6	.0900		5
7	.0240		5
8	.0920		5
9	.0770		5
10	.0810		4
11	.1900		5
12	.0210		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (ISP) STP
 SITE ID: 39-091-0003 POC:1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1222 SUPERIOR
 SITE COMMENTS:
 MONITOR COMMENTS:

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: SUBURBAN

CAS NUMBER: 7439-92-1
 LATITUDE: 40.343056
 LONGITUDE: -83.755
 UTM ZONE: 17
 UTM NORTHING: 4469300
 UTM EASTING: 266000
 ELEVATION-MSL: 378
 PROBE HEIGHT: 5

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2008

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0810) Ohio EPA, Southwest District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0550		5
2	.0580		4
3	.0230		6
4	.0480		5
5	.0640		5
6	.0760		5
7	.0330		5
8	.0130		5
9	.0230		5
10	.0430	MD	5
11	.0140	MD	5
12	.0110	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.342778
 LONGITUDE: -83.760278
 UTM ZONE: 17
 UTM NORTHING: 4469238
 UTM EASTING: 266547
 ELEVATION-MSL: 379
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 POC: 1
 SITE ID: 39-091-0005
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1229 S. MAIN ST.
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS: MONITOR ON A SMALL BUILDING-GRAVE STONE SHOP

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0443) Glacier daido America

REPORT FOR: 2005

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.2200		4
2	.1100		5
3	.1100		5
4	.1100		5
5	.0900		5
6	.0800		5
7	.1900		5
8	.0900		5
9	.1000		5
10	.1200		5
11	.1000		5
12	.0500		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP

SITE ID: 39-091-0005 FOC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1229 S. MAIN ST.
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS: MONITOR ON A SMALL BUILDING-GRAVE STONE SHOP

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

CAS NUMBER: 7439-92-1
 LATITUDE: 40.342778
 LONGITUDE: -83.760278
 UTM ZONE: 17
 UTM NORTHING: 4469238
 UTM EASTING: 265547
 ELEVATION-MSL: 379
 PROBE HEIGHT: 5

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2006

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0443) Glacier Daido America

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.1800		5
2	.0600		5
3	.1300		5
4	.1500		5
5	.1600		5
6	.0900		5
7	.1100		5
8	.1000		5
10	.2700		3

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.341111
 LONGITUDE: -83.757778
 UTM ZONE: 17
 UTM NORTHING: 4469083
 UTM EASTING: 265750
 ELEVATION-MSL: 377
 PROBE HEIGHT: 5

STATE: (39) Ohio
 AOCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 SITE ID: 39-091-0006 FCC:1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 320 RICHARD
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS: MONITOR IN BACKYARD OF RESIDENT ON RICHARD AVE.

REPORT FOR: 2005

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0443) Glacier Daido America

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.1100		5
2	.2800		5
3	.2400		5
4	.0900		5
5	.1000		5
6	.1600		5
7	.3600		5
8	.2400		5
9	.0800		5
10	.1700		5
11	.1100		5
12	.1600		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.341111
 LONGITUDE: -83.757778
 UTM ZONE: 17
 UTM NORTHING: 4469083
 UTM EASTING: 265750
 ELEVATION-MSL: 377
 PROBE HEIGHT: 5

STATE: (39) Ohio
 ACQR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2006

(12128) Lead (TSP) STP
 SITE ID: 39-091-0006 POC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 320 RICHARD
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS: MONITOR IN BACKYARD OF RESIDENT ON RICHARD AVE.

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0443) Glacier Daido America

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.1600		5
2	.1300		5
3	.2300		5
4	.1000		5
5	.0900		5
6	.2100		5
7	.2200		5
8	.2300		5
10	.1900		5
11	.1200		5
12	.1500		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP

SITE ID: 39-091-0006 POC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 320 RICHARD
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS: MONITOR IN BACKYARD OF RESIDENT ON RICHARD AVE.

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

CAS NUMBER: 7439-92-1
 LATITUDE: 40.341111
 LONGITUDE: -83.757778
 UTM ZONE: 17
 UTM NORTHING: 4469083
 UTM EASTING: 265750
 ELEVATION-MSL: 377
 PROBE HEIGHT: 5

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.2200		5
2	.2900		5
3	.2600		5
4	.1900		5
5	.1200		5
6	.0900		5
7	.0900		5
8	.0900		5
9	.0700		5
10	.0800		5
11	.0800		5
12	.0500		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQNO:(0443) Glacier Daido America

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AIR QUALITY SYSTEM

RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.341111
 LONGITUDE: -83.757778
 UTM ZONE: 17
 UTM NORTHING: 4469083
 UTM EASTING: 265750
 ELEVATION-MSL: 377
 PROBE HEIGHT: 5

STATE: (39) Ohio
 ADDR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2008

(12128) Lead (TSP) STP
 SITE ID: 39-091-0006 FOC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 320 RICHARD
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS: MONITOR IN BACKYARD OF RESIDENT ON RICHARD AVE.

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0443) Glacier Daido America

MONTHLY COMPOSITE OF 24-HOUR SAMELES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.1200		5
2	.1000		5
3	.0700		5
4	.0700		5
5	.0600		5
6	.0500		5
7	.0900		5
8	.0900		5
9	.1100		5
10	.1000		5
11	.0600		5
12	.0600		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.344722
 LONGITUDE: -83.754444
 UTM ZONE: 17
 UTM NORTHING: 4469452
 UTM EASTING: 266048
 ELEVATION-MSL: 384
 PROBE HEIGHT: 7

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2005

(12128) Lead (TSP) STP
 POC: 1
 SITE ID: 39-091-0007
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1205 SUPERIOR
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS: MONITOR IN BACKYARD OF A RESIDENT ACROSS THE STREET FROM GLACIER DIADO

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0443) Glacier Daido America

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.1700		5
2	.1800		5
3	.1400		5
4	.1700		5
5	.1900		5
6	.1500		5
7	.1600		5
8	.1800		5
9	.1200		5
10	.2300		5
11	.1400		5
12	.0900		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.344722
 LONGITUDE: -83.754444
 UTM ZONE: 17
 UTM NORTHING: 4469452
 UTM EASTING: 266048
 ELEVATION-MSL: 384
 PROBE HEIGHT: 7

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP POC: 1

SITE ID: 39-091-0007
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine

SITE ADDRESS: 1205 SUPERIOR

SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS: MONITOR IN BACKYARD OF A RESIDENT ACROSS THE STREET FROM GLACIER DIADO

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office

MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-

PQAO:(0443) Glacier Daido America

REPORT FOR: 2006

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.1800		5
2	.1000		5
3	.1900		5
4	.1200		5
5	.2700		5
6	.2700		5
7	.1700		5
8	.1800		5
10	.0800		5
11	.1100		5
12	.0600		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.344722
 LONGITUDE: -83.754444
 UTM ZONE: 17
 UTM NORTHING: 4469452
 UTM EASTING: 266048
 ELEVATION-MSL: 384
 PROBE HEIGHT: 7

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 POC: 1

SITE ID: 39-091-0007
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1205 SUPERIOR
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS: MONITOR IN BACKYARD OF A RESIDENT ACROSS THE STREET FROM GLACIER DIADO

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 POAO:(0443) Glacier Daido America

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0900		5
2	.1900		5
3	.1400		5
4	.1500		5
5	.1900		5
6	.0400		5
7	.0900		5
8	.0800		5
9	.0900		5
10	.0700		5
11	.0500		5
12	.0600		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (**) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.344722
 LONGITUDE: -83.754444
 UTM ZONE: 17
 UTM NORTHING: 4469452
 UTM EASTING: 266048
 ELEVATION-MSL: 384
 PROBE HEIGHT: 7

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 SITE ID: 39-091-0007 POC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1205 SUPERIOR
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS: MONITOR IN BACKYARD OF A RESIDENT ACROSS THE STREET FROM GLACIER DIADO

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0443) Glacier Daido America

REPORT FOR: 2008

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0600		5
2	.0600		5
3	.0300		5
4	.0500		5
5	.0600		5
6	.0800		5
7	.1100		5
8	.0900		5
9	.1000		5
10	.1000		5
11	.0500		5
12	.0400		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

AIR QUALITY SYSTEM

RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.433611
 LONGITUDE: -81.5025
 UTM ZONE: 17
 UTM NORTHING: 4364800
 UTM EASTING: 456750
 ELEVATION-MSL: 300
 PROBE HEIGHT: 7

STATE: (39) Ohio
 AOCR: (179) PARKERSBURG-MARLETTA
 URBANIZED AREA: (6020) PARKERSBURG, WV-OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

(12128) Lead (TSP) STP
 SITE ID: 39-167-0008 POC: 1
 COUNTY: (167) Washington
 CITY: (47628) Marietta
 SITE ADDRESS: S.R. 676 WASHINGTON CAREER CENTER
 SITE COMMENTS: SAMPLING FOR TARGET AIR TOXICS COMPOUNDS BEGAN IN JUNE 1999
 MONITOR COMMENTS: URBAN AIR TOXICS SITE-COMPLAINT INVESTIGATION

SUPPORT AGENCY: (0809) Ohio EPA, Southeast District Office
 MONITOR TYPE: OTHER
 REPORT FOR: 2005

COLLECTION AND ANALYSIS METHOD: (803) HI-YOL ATOMIC ABSORPTION (AA) FRM
 PQAO: (0809) Ohio EPA, Southeast District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0023		5
2	.0023		5
3	.0026		5
4	.0021		5
5	.0052		5
6	.0022		5
7	.0022		5
8	.0022		5
9	.0054		5
10	.0040		6
11	.0050		5
12	.0062		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP
 SITE ID: 39-091-0008 POC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1215 GREENWOOD ST.
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS:

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

CAS NUMBER: 7439-92-1
 LATITUDE: 40.343684
 LONGITUDE: -83.759842
 UTM ZONE: 17
 UTM NORTHING: 4469370
 UTM EASTING: 265585
 ELEVATION-MSL: 369
 PROBE HEIGHT: 4

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

REPORT FOR: 2006

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0443) Glacier Daido America

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
11	.1600		4
12	.2700		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.343684
 LONGITUDE: -83.759842
 UTM ZONE: 17
 UTM NORTHING: 4469370
 UTM EASTING: 265585
 ELEVATION-MSL: 369
 PROBE HEIGHT: 4

STATE: (39) Ohio
 AOCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 SITE ID: 39-091-0008 POC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1215 GREENWOOD ST.
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS:

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 FOAO: (0443) Glacier Daido America

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.1100		5
2	.1200		5
3	.1100		5
4	.0700		5
5	.0500		5
6	.0300		5
7	.0600		5
8	.0400		5
9	.0400		5
10	.0400		5
11	.0800		5
12	.0300		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 40.343684
 LONGITUDE: -83.759842
 UTM ZONE: 17
 UTM NORTHING: 4469370
 UTM EASTING: 265585
 ELEVATION-MSL: 369
 PROBE HEIGHT: 4

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

STATE: (39) Ohio
 AQCR: (177) NORTHWEST OHIO
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: INDUSTRIAL
 LOCATION SETTING: URBAN AND CENTER CITY

REPORT FOR: 2008

(12128) Lead (TSP) STP
 SITE ID: 39-091-0008 POC: 1
 COUNTY: (091) Logan
 CITY: (05130) Bellefontaine
 SITE ADDRESS: 1215 GREENWOOD ST.
 SITE COMMENTS: MONITORS LEAD EMISSIONS FROM GLACIER DAIDO INDUSTRIES
 MONITOR COMMENTS:

SUPPORT AGENCY: (0810) Ohio EPA, Southwest District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO:(0443) Glacier Daido America

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.1000		5
2	.0900		5
3	.0500		5
4	.0500		5
5	.0700		5
6	.0600		5
7	.0800		5
8	.0600		5
9	.0800		5
10	.0800		5
11	.1100		5
12	.0900		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP
 SITE ID: 39-167-0006 POC: 1
 COUNTY: (167) Washington
 CITY: (05424) Belpre
 SITE ADDRESS: S.R. 7, ELKEM METALS
 SITE COMMENTS: SITE IS LOCATED ON A HILL OVERLOOKING PLANT. THIS SITE IS THE PREDI
 MONITOR COMMENTS: THIS IS THE EVERY-SIX DAY MONITOR. THE PARTISOL 2000H IS USED.

CAS NUMBER: 7439-92-1
 LATITUDE: 39.374444
 LONGITUDE: -81.525833
 UTM ZONE: 17
 UTM NORTHING: 4358250
 UTM EASTING: 454715
 ELEVATION-MSL: 244
 PROBE HEIGHT: 2

STATE: (39) Ohio
 AOCR: (179) PARKERSBURG-MARIETTA
 URBANIZED AREA: (6020) PARKERSBURG, WV-OH
 LAND USE: INDUSTRIAL
 LOCATION SETTING: RURAL

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

REPORT FOR: 2006

SUPPORT AGENCY: (0809) Ohio EPA, Southeast District Office
 MONITOR TYPE: SPECIAL PURPOSE
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0809) Ohio EPA, Southeast District Office

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
3	.0096		3
4	.0125		5
5	.0130		5
6	.0071		4
7	.0055		2
8	.0024		5
9	.0023		5
10	.0110		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.433611
 LONGITUDE: -81.5025
 UTM ZONE: 17
 UTM NORTHING: 4364800
 UTM EASTING: 456750
 ELEVATION-MSL: 300
 PROBE HEIGHT: 7

STATE: (39) Ohio
 AOCR: (179) PARKERSBURG-MARIETTA
 URBANIZED AREA: (6020) PARKERSBURG, WV-OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 SITE ID: 39-167-0008 FOC: 1
 COUNTY: (167) Washington
 CITY: (47628) Marietta
 SITE ADDRESS: S.R. 676 WASHINGTON CAREER CENTER
 SITE COMMENTS: SAMPLING FOR TARGET AIR TOXICS COMPOUNDS BEGAN IN JUNE 1999
 MONITOR COMMENTS: URBAN AIR TOXICS SITE-COMPLAINT INVESTIGATION

SUPPORT AGENCY: (0809) Ohio EPA, Southeast District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: (0809) Ohio EPA, Southeast District Office

REPORT FOR: 2006

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0024		5
2	.0125		1
4	.0028		4
5	.0048		5
6	.0022		5
7	.0079		5
8	.0022		5
9	.0021		5
10	.0021		5
11	.0021		5
12	.0048		6

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.433611
 LONGITUDE: -81.5025
 UTM ZONE: 17
 UTM NORTHING: 4364800
 UTM EASTING: 456750
 ELEVATION-MSL: 300
 PROBE HEIGHT: 7

STATE: (39) Ohio
 AOCR: (179) PARKERSBURG-MARIETTA
 URBANIZED AREA: (6020) PARKERSBURG, WV-OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 SITE ID: 39-167-0008 POC: 1

COUNTY: (167) Washington
 CITY: (47628) Marietta

SITE ADDRESS: S.R. 676 WASHINGTON CAREER CENTER
 SITE COMMENTS: SAMPLING FOR TARGET AIR TOXICS COMPOUNDS BEGAN IN JUNE 1999
 MONITOR COMMENTS: URBAN AIR TOXICS SITE-COMPLAINT INVESTIGATION

SUPPORT AGENCY: (0809) Ohio EPA, Southeast District Office

MONITOR TYPE: OTHER

COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-FAO)
 (0809) Ohio EPA, Southeast District Office

REPORT FOR: 2007

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0060		5
2	.0071		4
3	.0049		5
4	.0028		5
5	.0040	MD	4
6	.0033	MD	5
7	.0041	MD	5
8	.0038	MD	4
9	.0043	MD	5
10	.0058	MD	5
11	.0038	MD	4
12	.0034	MD	4

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.433611
 LONGITUDE: -81.5025
 UTM ZONE: 17
 UTM NORTHING: 4364800
 UTM EASTING: 456750
 ELEVATION-MSL: 300
 PROBE HEIGHT: 7

STATE: (39) Ohio
 AQCR: (179) PARKERSBURG-MARIETTA
 URBANIZED AREA: (6020) PARKERSBURG, WV-OH
 LAND USE: RESIDENTIAL
 LOCATION SETTING: SUBURBAN

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .0075

(12128) Lead (TSP) STP
 SITE ID: 39-167-0008 POC: 1
 COUNTY: (167) Washington
 CITY: (47628) Marietta
 SITE ADDRESS: S.R. 676 WASHINGTON CAREER CENTER
 SITE COMMENTS: SAMPLING FOR TARGET AIR TOXICS COMPOUNDS BEGAN IN JUNE 1999
 MONITOR COMMENTS: URBAN AIR TOXICS SITE-COMPLAINT INVESTIGATION

SUPPORT AGENCY: (0809) Ohio EPA, Southeast District Office
 MONITOR TYPE: OTHER
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAC: (0809) Ohio EPA, Southeast District Office

REPORT FOR: 2008

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0035		6
2	.0043		4
3	.0027		6
4	.0045		5
5	.0050		5
6	.0029	MD	5
7	.0047	MD	5
8	.0037	MD	5
9	.0032	MD	5
10	.0039	MD	5
11	.0047	MD	5
12	.0029	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 30, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.376964
 LONGITUDE: -81.537298
 UTM ZONE: 17
 UTM NORTHING: 4358521
 UTM EASTING: 453721
 ELEVATION-MSL: 300
 PROBE HEIGHT: 2

STATE: (39) Ohio
 AOCR: (179) PARKERSBURG-MARIETTA
 URBANIZED AREA: (6020) PARKERSBURG, WV-OH
 LAND USE: FOREST
 LOCATION SETTING: RURAL

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .01

(12128) Lead (TSP) STP
 SITE ID: 39-167-0009 POC: 1
 COUNTY: (167) Washington
 CITY: (47628) Marietta
 SITE ADDRESS: 2543 BLUE KNOB RD.
 SITE COMMENTS: METALS SITE MONITORING ELKEM METALS.
 MONITOR COMMENTS: METALS SAMPLING FOR MARIETTA, OHIO AND ELKEM METALS

SUPPORT AGENCY: (0809) Ohio EPA, Southeast District Office
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (803) HI-VOL ATOMIC ABSORPTION (RA) FRM
 PQAO: (0806) Ohio EPA, Division Of Environmental Services

REPORT FOR: 2005

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMELES
1	.0054		5
2	.0063		5
3	.0018		5
4	.0063		5
5	.0094		5
6	.0022		5
7	.0048		5
8	.0130		5
9	.0140		5
10	.0066		6
11	.0083		5
12	.0094		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

CAS NUMBER: 7439-92-1
 LATITUDE: 39.376964
 LONGITUDE: -81.537298
 UTM ZONE: 17
 UTM NORTHING: 4358521
 UTM EASTING: 453721
 ELEVATION-MSL: 300
 PROBE HEIGHT: 2

STATE: (39) Ohio
 AOCR: (179) PARKERSBURG-MARIETTA
 URBANIZED AREA: (6020) PARKERSBURG, WV-OH
 LAND USE: FOREST
 LOCATION SETTING: RURAL

DURATION: COMPOSITE DATA

UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .003

(12128) Lead (TSP) STP
 SITE ID: 39-167-0009 POC: 1
 COUNTY: (167) Washington
 CITY: (47628) Marietta
 SITE ADDRESS: 2543 BLUE KNOB RD.
 SITE COMMENTS: METALS SITE MONITORING ELKEM METALS.
 MONITOR COMMENTS: METALS SAMPLING FOR MARIETTA, OHIO AND ELKEM METALS

SUPPORT AGENCY: ()
 MONITOR TYPE: INDUSTRIAL
 COLLECTION AND ANALYSIS METHOD: (090) HI-VOL EMISSION SPECTRA ICAP
 PQAO: ()

REPORT FOR: 2006

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
1	.0069		5
2	.0019		5
3	.0025		4
4	.0063		4
5	.0047		5
6	.0053		5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (**) indicates that the region has reviewed the value and does not concur with the qualifier.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 AIR QUALITY SYSTEM
 RAW DATA REPORT

Jul. 29, 2009

(12128) Lead (TSP) STP
 SITE ID: 39-167-0010 FOC: 1
 COUNTY: (167) Washington
 CITY: (47628) Marietta
 SITE ADDRESS: 115 VICTORY PLACE
 SITE COMMENTS: HAMAR VILLAGE
 MONITOR COMMENTS:

CAS NUMBER: 7439-92-1
 LATITUDE: 39.4137294803
 LONGITUDE: -81.470405310
 UTM ZONE:
 UTM NORTHING:
 UTM EASTING:
 ELEVATION-MSL: 252
 PROBE HEIGHT: 8

STATE: (39) Ohio
 AQCR: (179) PARKERSBURG-MARIETTA
 URBANIZED AREA: (0000) NOT IN AN URBAN AREA
 LAND USE: RESIDENTIAL
 LOCATION SETTING: URBAN AND CENTER CITY

DURATION: COMPOSITE DATA
 UNITS: Micrograms/cubic meter (25 C)
 MIN DETECTABLE: .00026

SUPPORT AGENCY: (0809) Ohio EPA, Southeast District Office
 MONITOR TYPE: SLAMS
 COLLECTION AND ANALYSIS METHOD: (045) HI-VOL EMISSION SPECTRA ICAP (ICP-
 PQAO: (0809) Ohio EPA, Southeast District Office

REPORT FOR: 2008

MONTHLY COMPOSITE OF 24-HOUR SAMPLES

SAMPLE PERIOD	VALUE	EX DATA	NUMBER SAMPLES
11	.0039	MD	5
12	.0021	MD	5

Note: Qualifier codes with regional concurrence are shown in upper case, and those without regional review are shown in lower case. An asterisk (***) indicates that the region has reviewed the value and does not concur with the qualifier.

QUALIFIER CODES:

Qualifier Type

Qualifier Code Qualifier Description

MD Value less than MDL

ND No Value Detected

QA

QA

Note: Qualifier codes with regional concurrence are shown in upper case,
and those without regional concurrence are shown in lower case.



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

CERTIFIED MAIL

June 30, 2009

Cheryl L. Newton, Director
Air and Radiation Division
U.S.EPA, Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

RE: 2008 SLAMS Data Certification

Dear Ms Newton:

Please find enclosed our SLAMS Report (AMP-450 and AMP-255) for calendar year 2008 as required in 40 CFR, Part 58, Section 58.15. The ambient concentration and the quality assurance data have been completely submitted to the AQS database.

The PM_{2.5} data were previously certified in our letter of January 30, 2009 and the ozone data were certified in our letter of February 4, 2009. Those data are not present in this submittal.

I certify that the data in the report are accurate to the best of our knowledge taking into consideration the quality assurance findings and only to the extent of the activities performed by Ohio EPA.

There were no incidents of air pollution that reached or exceeded levels as specified by Section 51.151 which could cause significant harm to the health of persons.

Sincerely,

Robert Hodanbosi
Chief, Division of Air Pollution Control

Enclosure

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

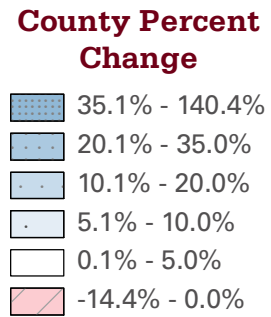
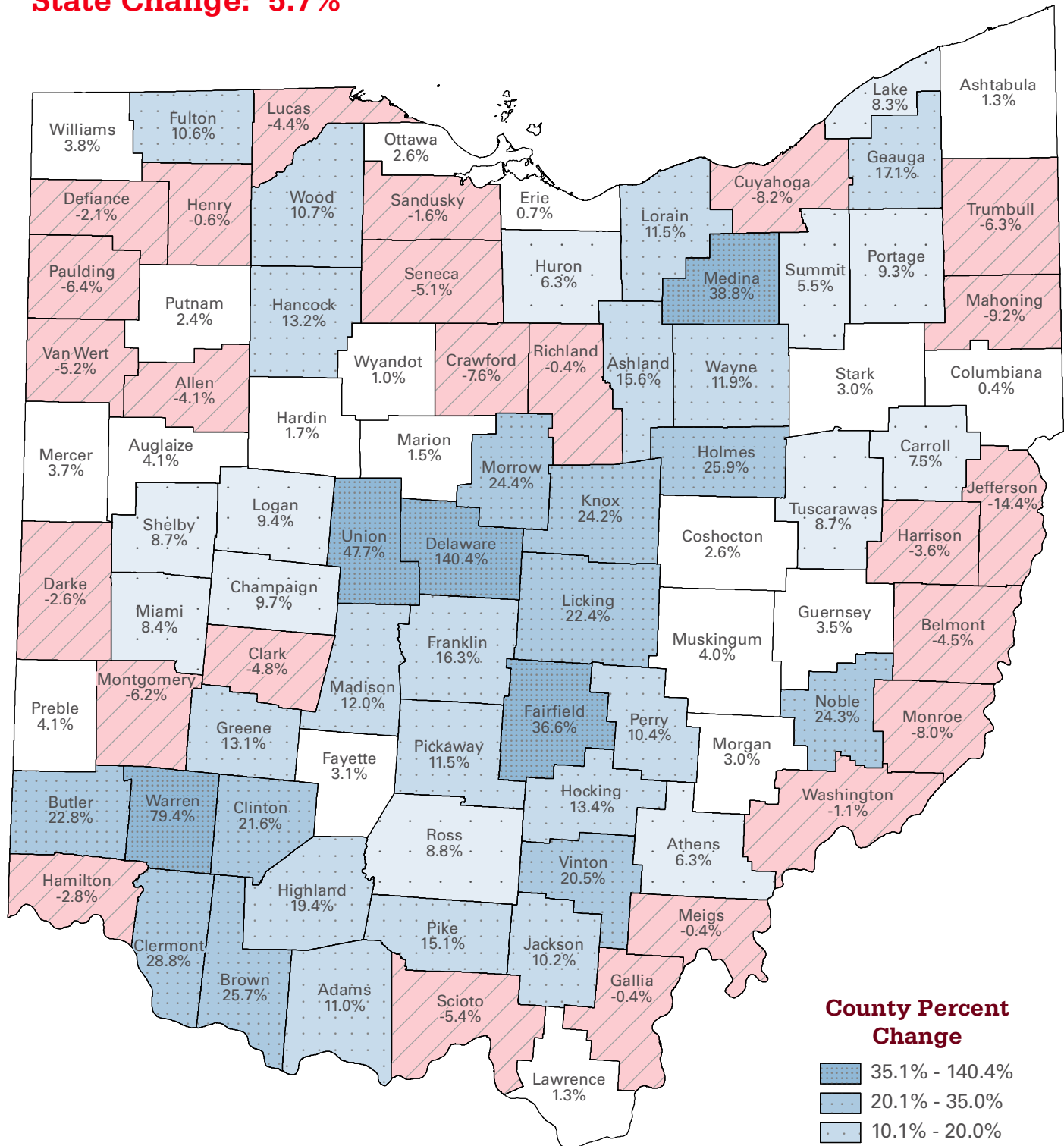
Ohio EPA is an Equal Opportunity Employer

Percent Population Change 1990 to 2007

State Change: 5.7%



Department of Development



Source: U.S. Census Bureau

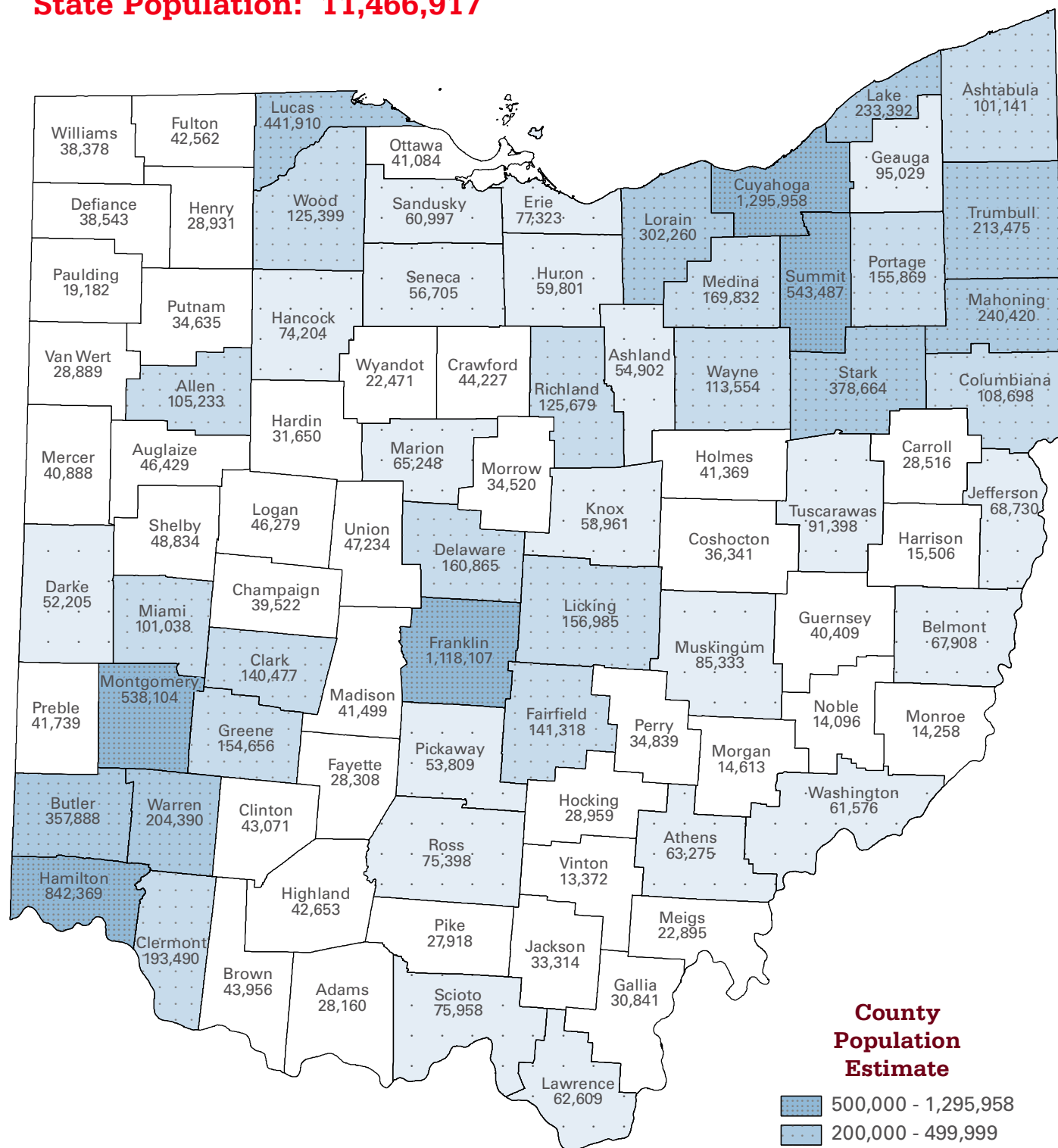
Prepared by: Ohio Department of Development, Policy Research and Strategic Planning (June 2008)

Population Distribution 2007

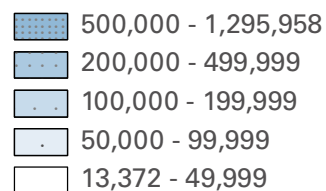
State Population: 11,466,917



Department of Development



County Population Estimate

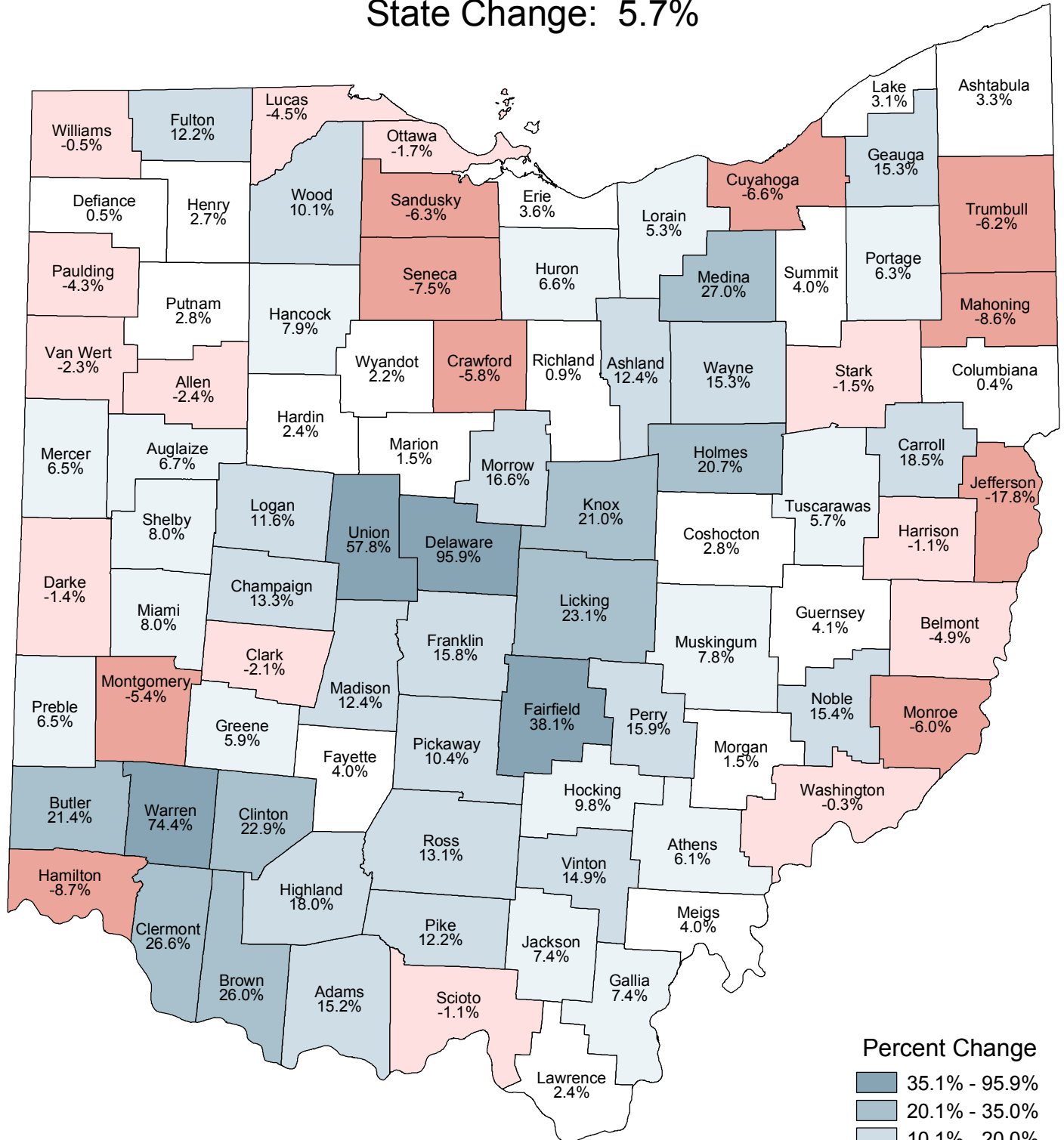


Source: U.S. Census Bureau

Prepared by: Ohio Department of Development, Policy Research and Strategic Planning (June 2008)

Projected Percent Population Change 2000 to 2020

State Change: 5.7%



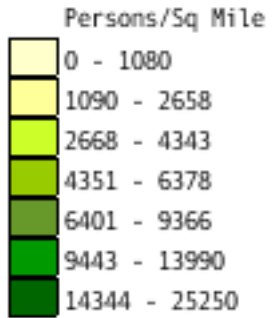
Source: Ohio Department of Development, Office of Strategic Research

Prepared by: Ohio Department of Development, Office of Strategic Research (June 2007)

TM-P002. Persons per Square Mile: 2000
 Universe: Total population
 Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data
 Ohio by Census Tract

NOTE: For information on confidentiality protection, nonsampling error, definitions, and count corrections see <http://factfinder.census.gov/home/en/datanotes/expsf1u.htm>.

Data Classes



Boundaries

⚡ '00 County

Features

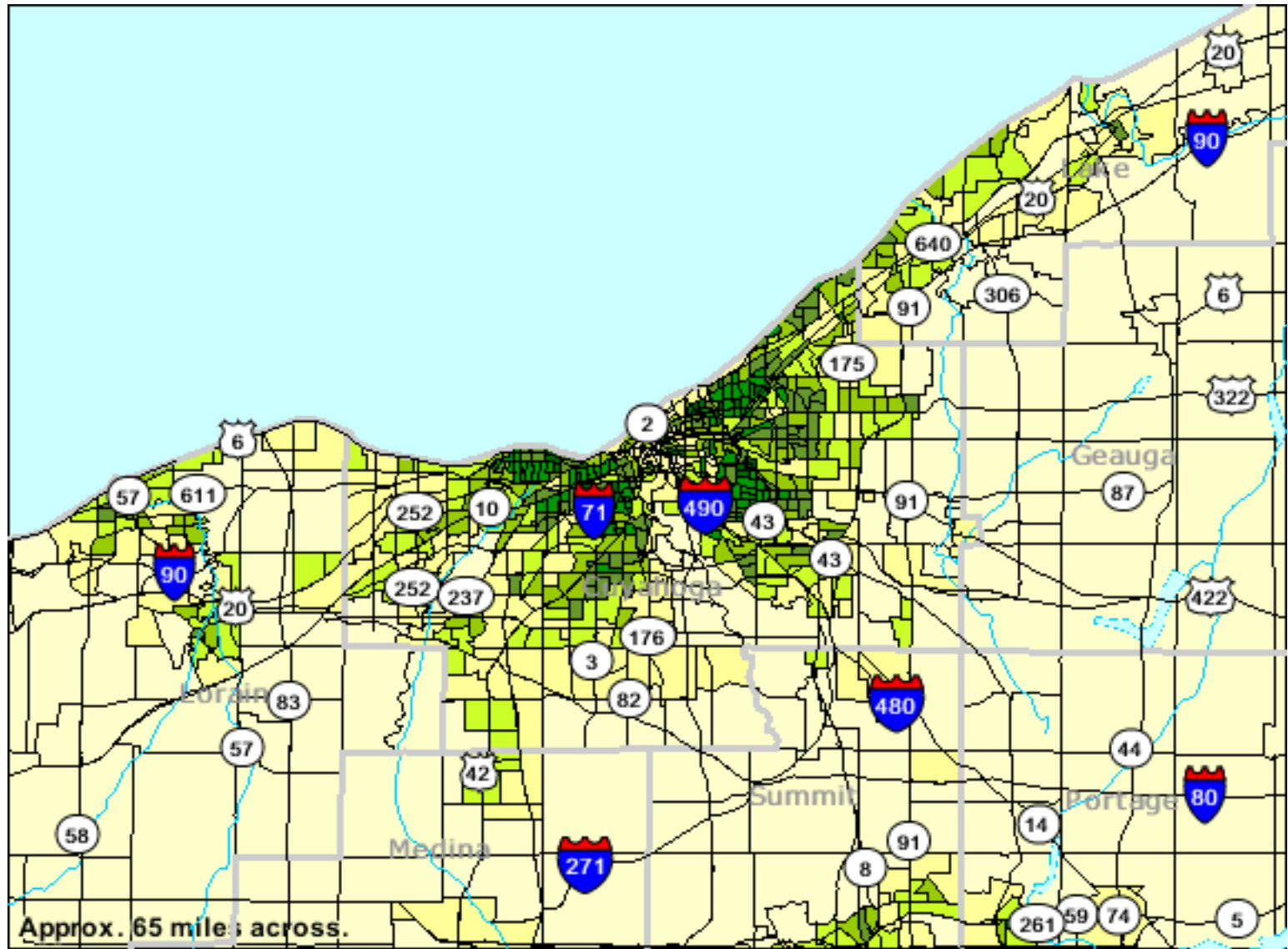
⚡ Major Road

Street

Stream/Waterbody

Stream/Waterbody

Items in gray text are not visible at this zoom level

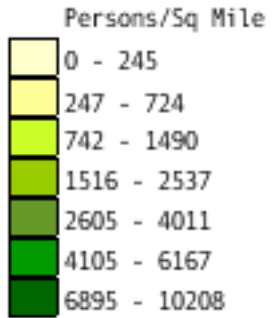


Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrix P1.

TM-P002. Persons per Square Mile: 2000
 Universe: Total population
 Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data
 Ohio by County Subdivision

NOTE: For information on confidentiality protection, nonsampling error, definitions, and count corrections see <http://factfinder.census.gov/home/en/datanotes/expsf1u.htm>.

Data Classes



Boundaries

⚡ '00 County

Features

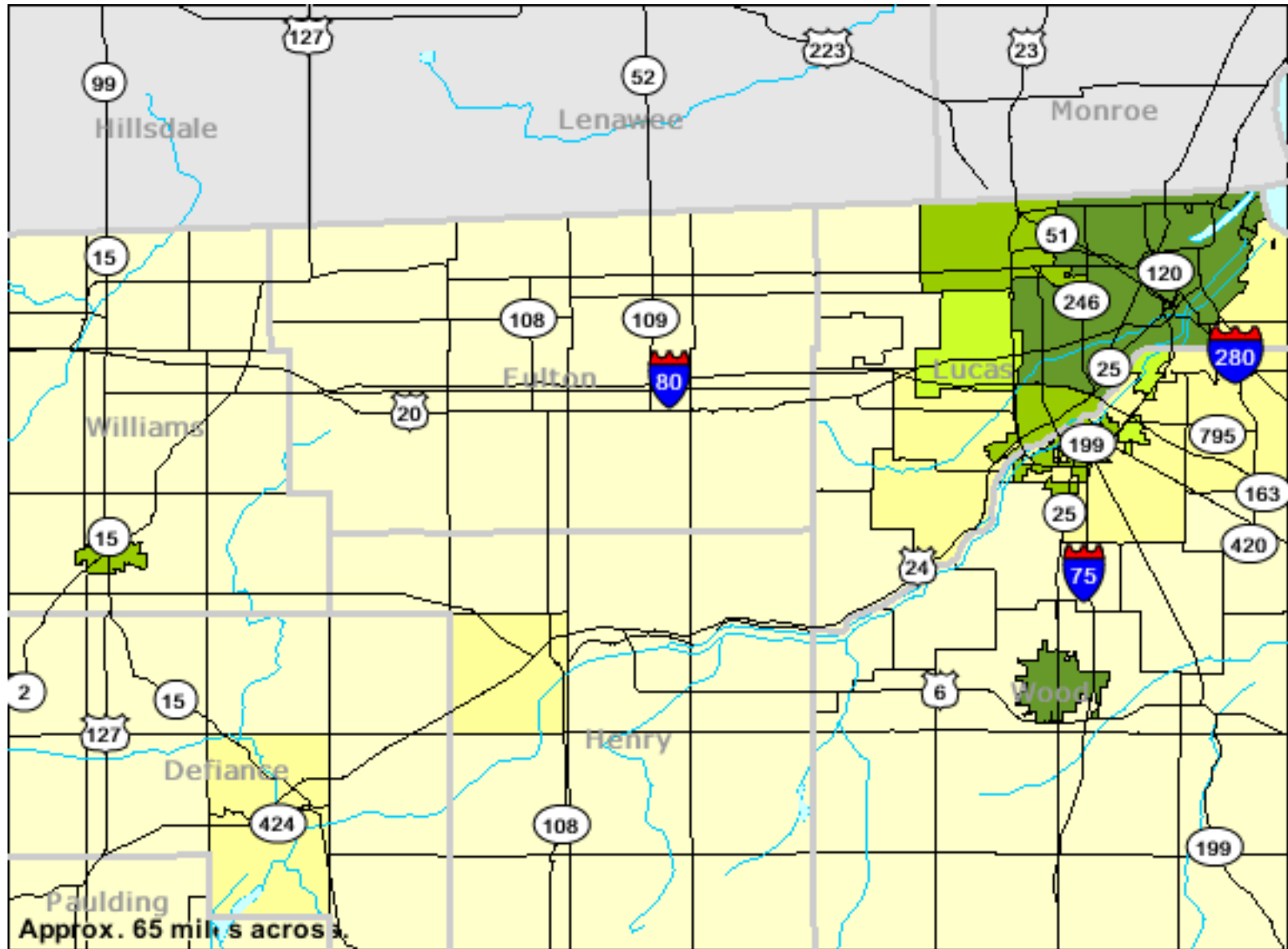
⚡ Major Road

Street

Stream/Waterbody

Stream/Waterbody

Items in gray text are not visible at this zoom level

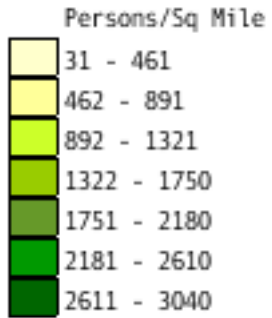


Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrix P1.

TM-P002. Persons per Square Mile: 2000
 Universe: Total population
 Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data
 Ohio by County

NOTE: For information on confidentiality protection, nonsampling error, definitions, and count corrections see <http://factfinder.census.gov/home/en/datanotes/expsf1u.htm>.

Data Classes



Boundaries

⚡ '00 County

Features

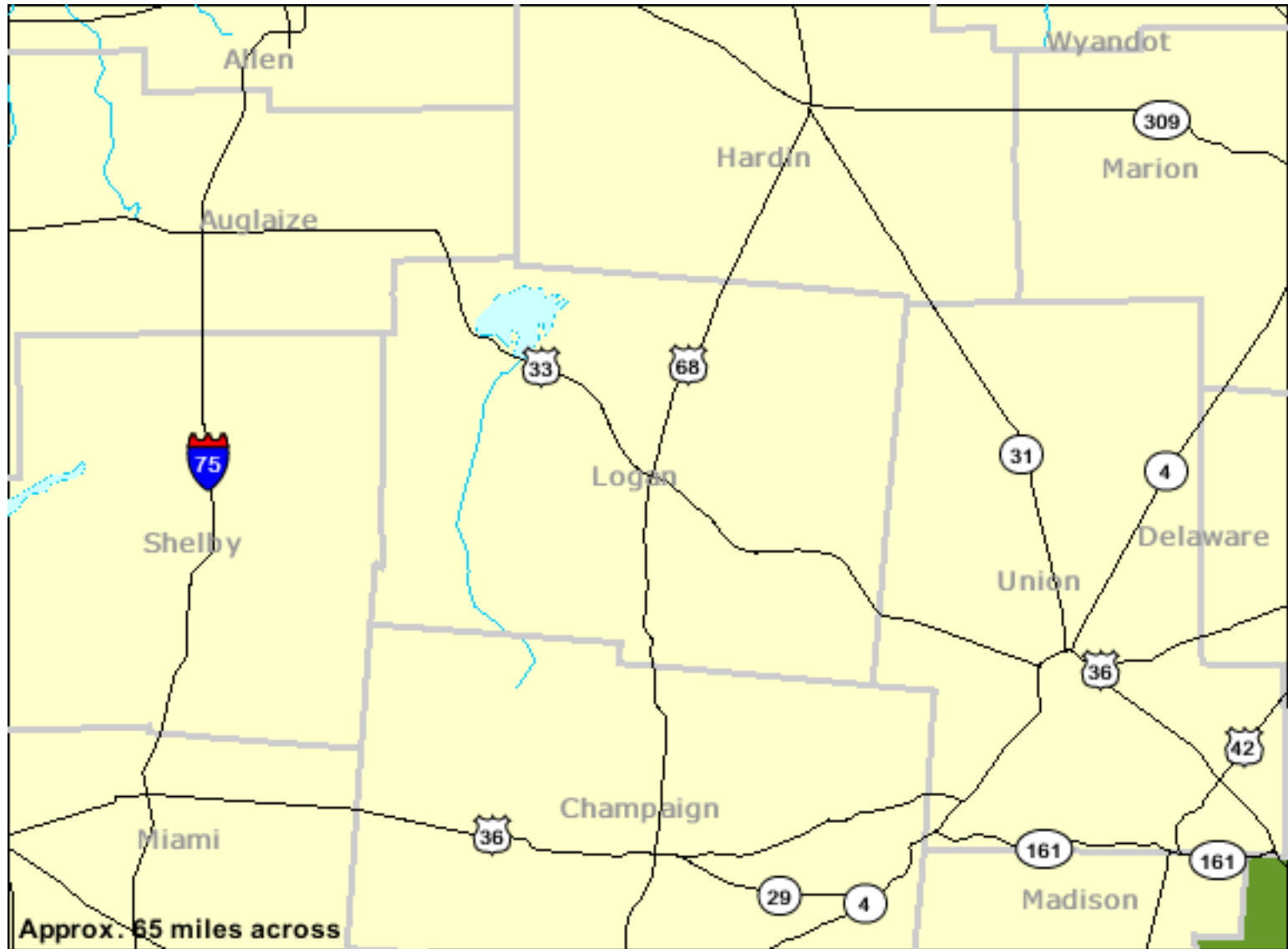
⚡ Major Road

Street

Stream/Waterbody

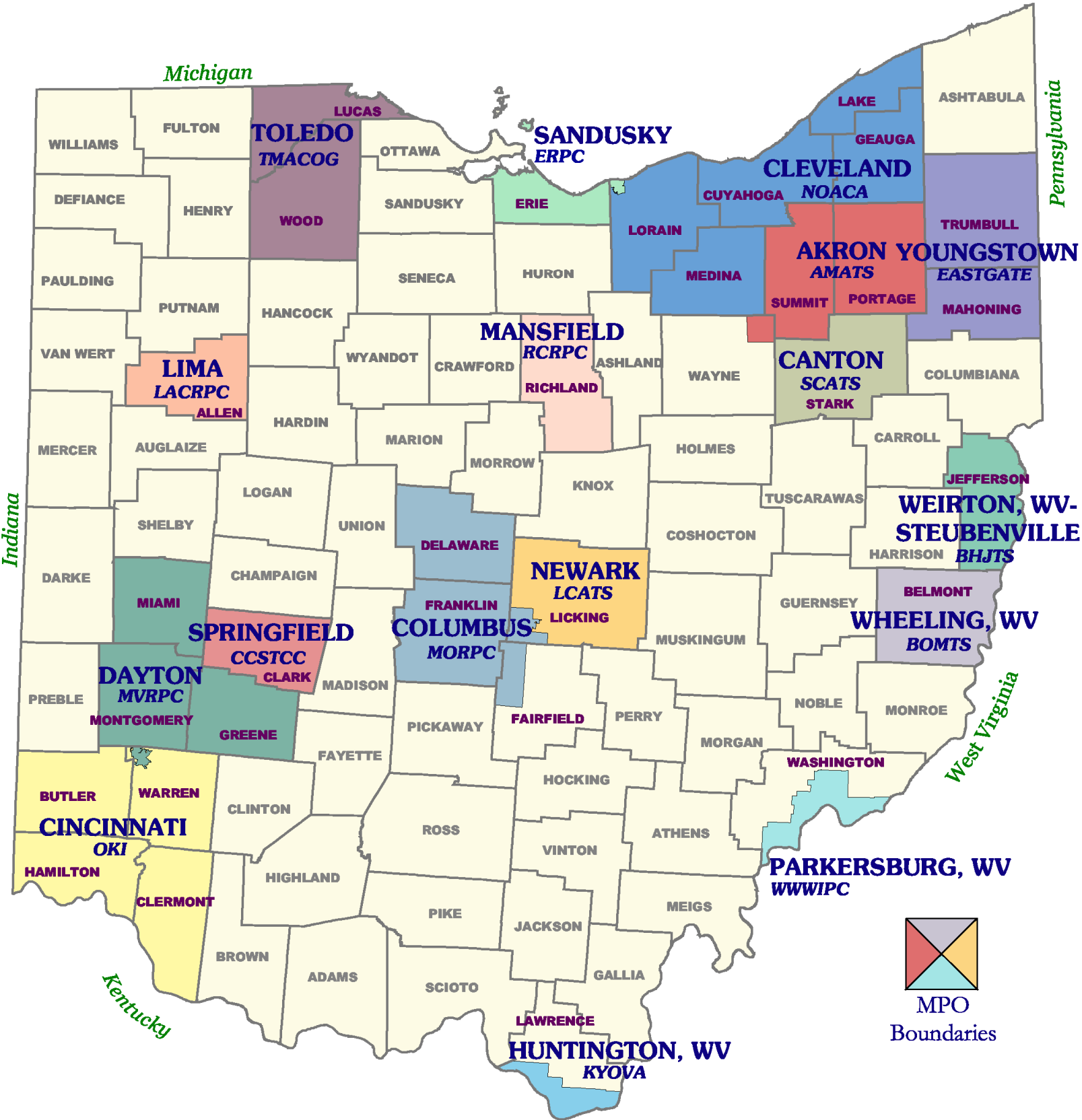
Stream/Waterbody

Items in gray text are not visible at this zoom level



Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrix P1.

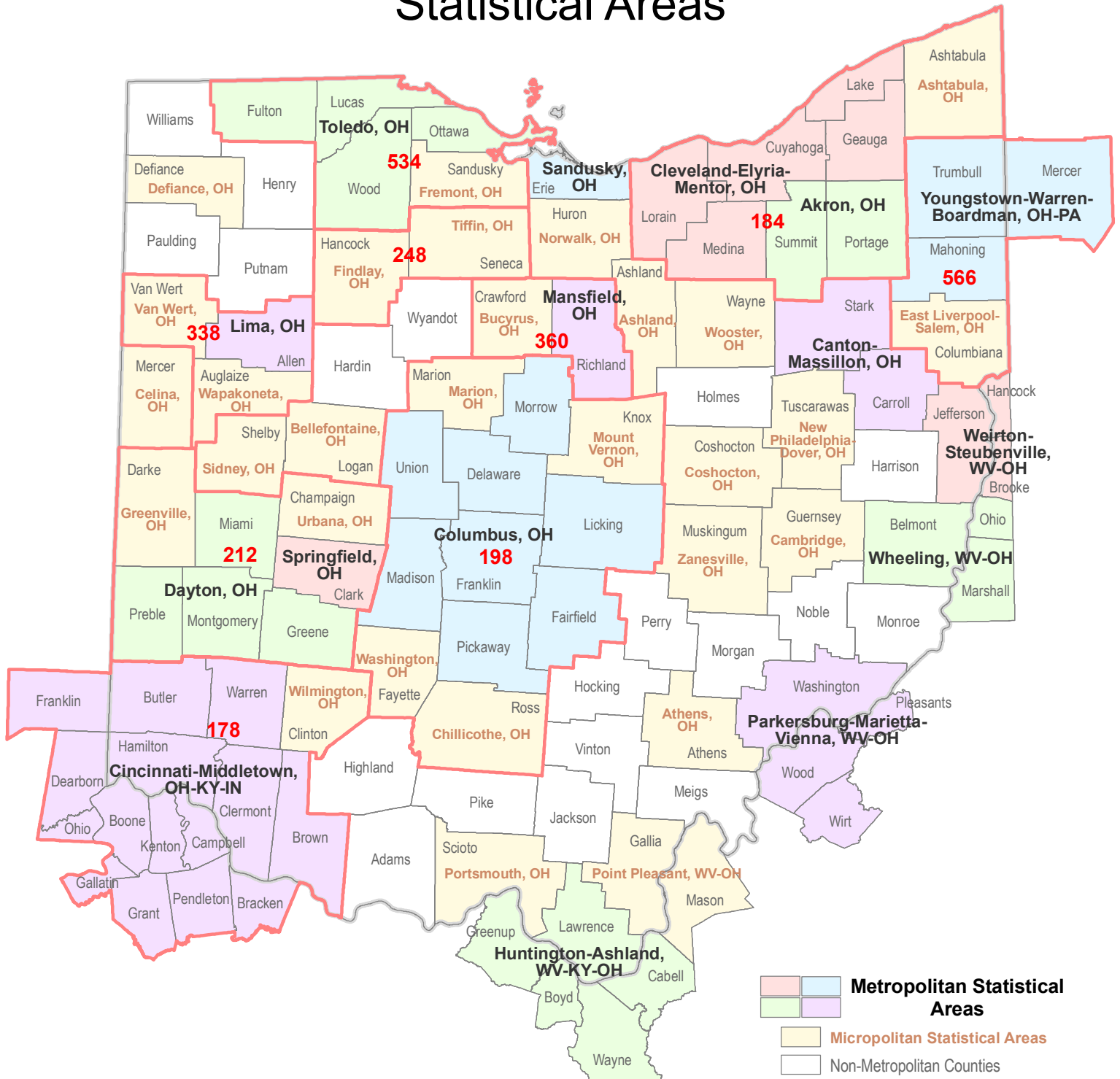
Ohio MPO Boundaries



MPO Boundaries

Ohio

Metropolitan, Micropolitan and Combined Statistical Areas



Source: Counties with metropolitan and micropolitan statistical area codes, Dec. 2006
 Excel file obtained from www.census.gov/population/www/estimates/metrodef.html

Prepared by: Ohio Department of Development
 Office of Strategic Research (July 2007)

- 178 Cincinnati-Middletown-Wilmington, OH-KY-IN
- 184 Cleveland-Akron-Elyria, OH
- 198 Columbus-Marion-Chillicothe, OH
- 212 Dayton-Springfield-Greenville, OH
- 248 Findlay-Tiffin, OH
- 338 Lima-Van Wert-Wapakoneta, OH
- 360 Mansfield-Bucyrus, OH
- 534 Toledo-Fremont, OH
- 566 Youngstown-Warren-East Liverpool, OH-PA

Spatial Interpolation Analysis for Cuyahoga County

Technical Support for Lead Nonattainment Area Boundary Determination

August 2009

As a result of the recent enactment of a more-stringent National Ambient Air Quality Standard for lead, a single monitor in Cuyahoga County which shows compliance under the previous standard, now will show non-compliance under the new standard if it continues to exhibit readings similar to those of the recent past. Ohio is required to propose a suggested non-attainment area boundary indicative of the area where violations occur, which is defined as the region over which there may occur an airborne concentration greater than 0.15 microgram per cubic meter ($\mu\text{g}/\text{m}^3$), expressed as a rolling three-month average. The perimeter of that region will be estimated by constructing isopleths of concentration based on spatial averaging of nearby monitors. Because a value of 0.145 rounds upwards to 0.15, a concentration of 0.145 $\mu\text{g}/\text{m}^3$ will be taken as the bounding isopleth. The Kriging algorithm is commonly used for spatial averaging in various atmospheric and earth science contexts, is recommended by the U.S. EPA, and will be used here.

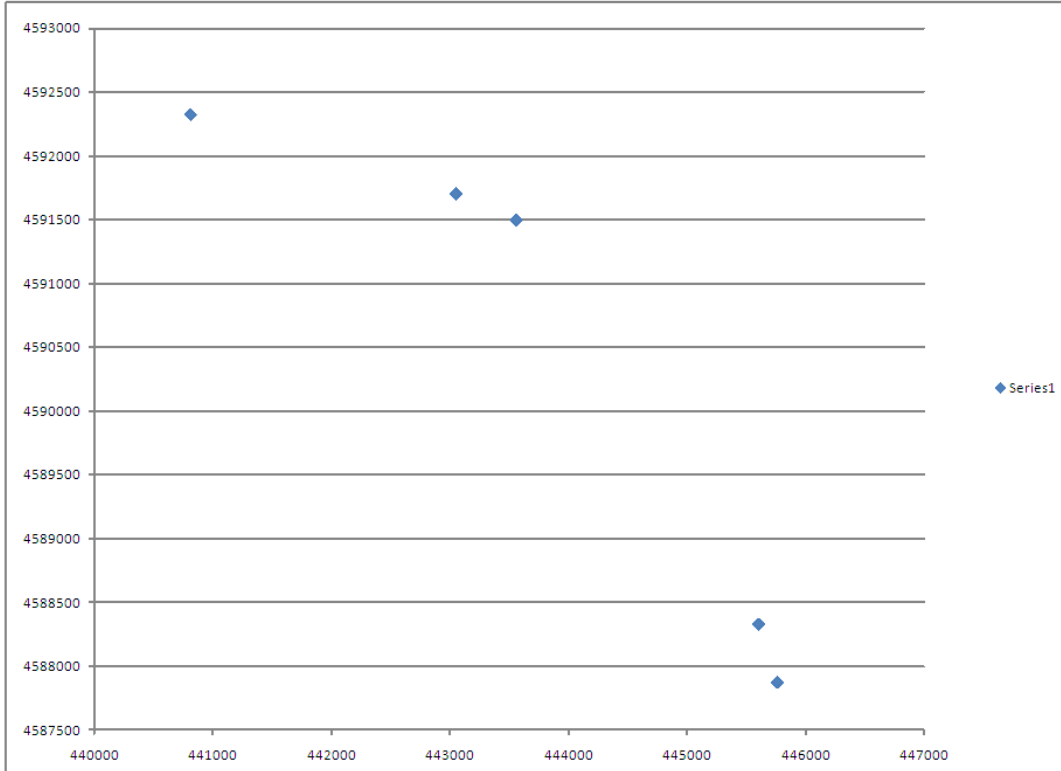
Five lead monitors are presently in operation in Cuyahoga County, including the one exceeding the 0.15 $\mu\text{g}/\text{m}^3$ limit, which is located near a facility on 56th Street operated by the Ferro Corporation. The five monitors are at the following locations:

Active lead monitoring sites in Cuyahoga Co.

Site name	AQS number	latitude	longitude	easting	northing
St. Tikhon	39-035-0038	41.476944	-81.681944	443050	4591700
Fire Sta. 4	39-035-0042	41.482222	-81.708889	440815	4592320
E. 56th Ferro	39-035-0049	41.446667	-81.651111	445600	4588330
Grant Road	39-035-0050	41.4425	-81.64917	445760	4587875
MM South	39-035-0061	41.472222	-81.675278	443559	4591496

They are shown on this plot:

Active lead monitors in Cuyahoga County
(zone 17 eastings and northings in meters)



Review of the Ferro Corporation monitor data shows three three-month periods with average concentrations above 0.15 ug/m3. It was decided that those three values would be spatially-averaged with the readings from the other four monitors for the identical time periods. Those three periods and associated concentrations for the five monitors are as follows:

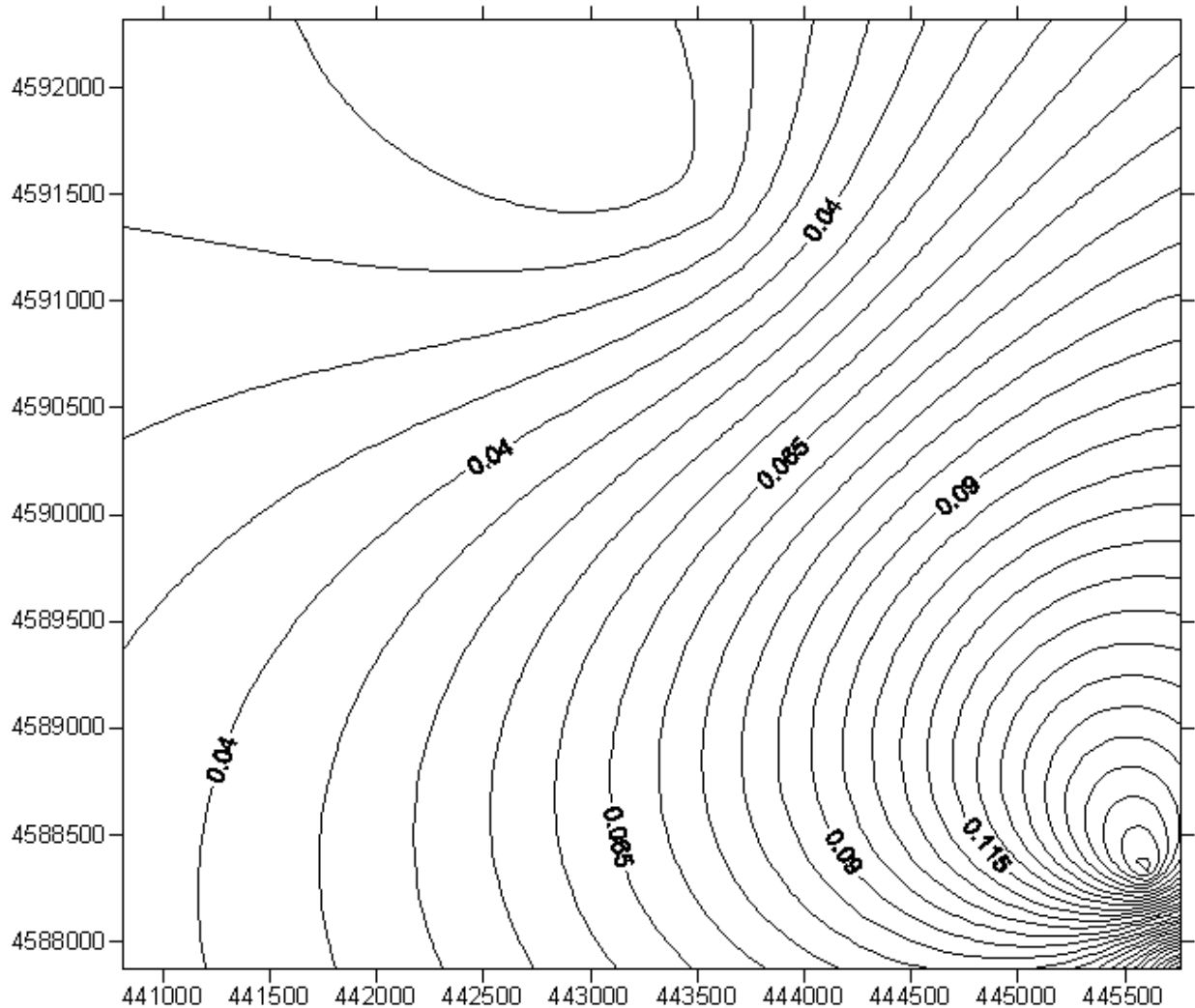
Concentrations for selected periods at active lead monitoring sites in Cuyahoga County

(ug/m3 - 3-month averages ending on the stated month)

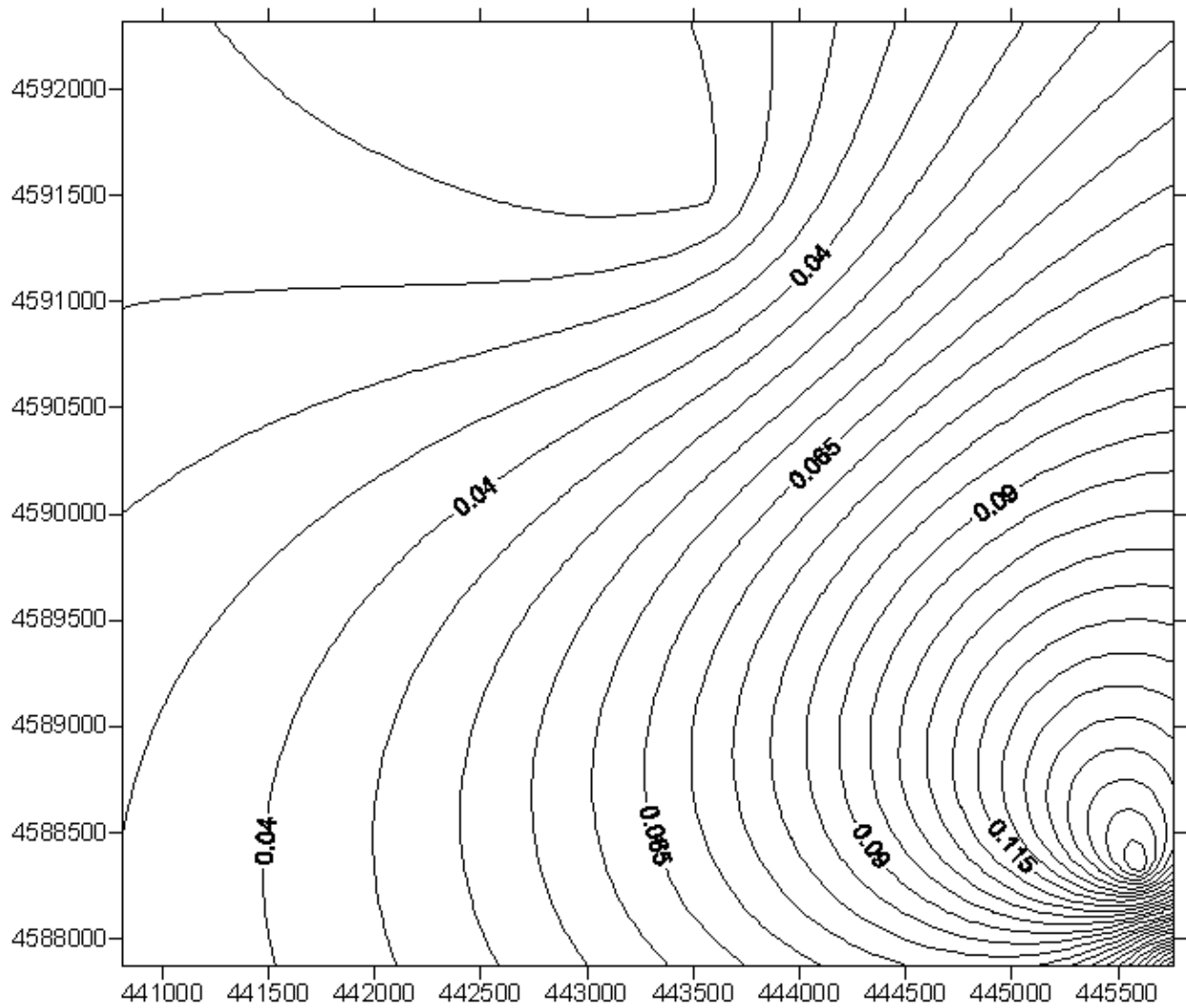
Period	<u>39-035-0038</u>	<u>39-035-0042</u>	<u>39-035-0049</u>	<u>39-035-0050</u>	<u>39-035-0061</u>
Nov. 2007	0.015	0.023	0.163	0.020	0.022
Dec. 2007	0.016	0.021	0.155	0.018	0.019
Oct. 2008	0.015	0.015	0.173	0.032	0.027

The procedure involves generating Krige plots for each of these time periods individually, and defining the non-attainment area to be every point falling inside the 0.145 isopleth on any of the plots. The plots were generated by Golden Software Surfer 8, using default Krige settings. Here they are:

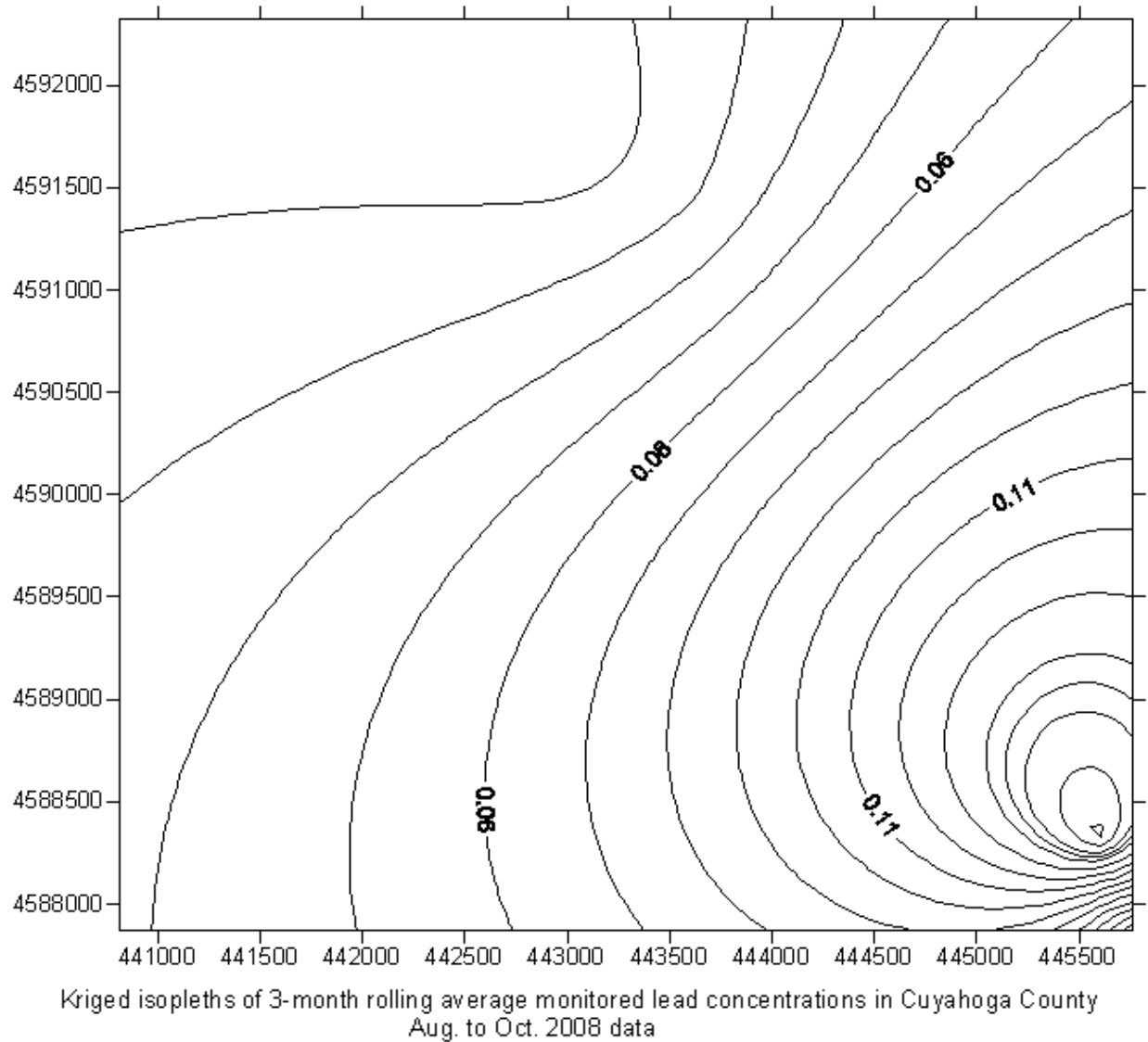
Kriged plots of 3-month average concentrations at lead monitors in Cuyahoga County



Kriged isopleths of 3-month rolling average monitored lead concentrations in Cuyahoga County
Sept. to Nov. 2007 data

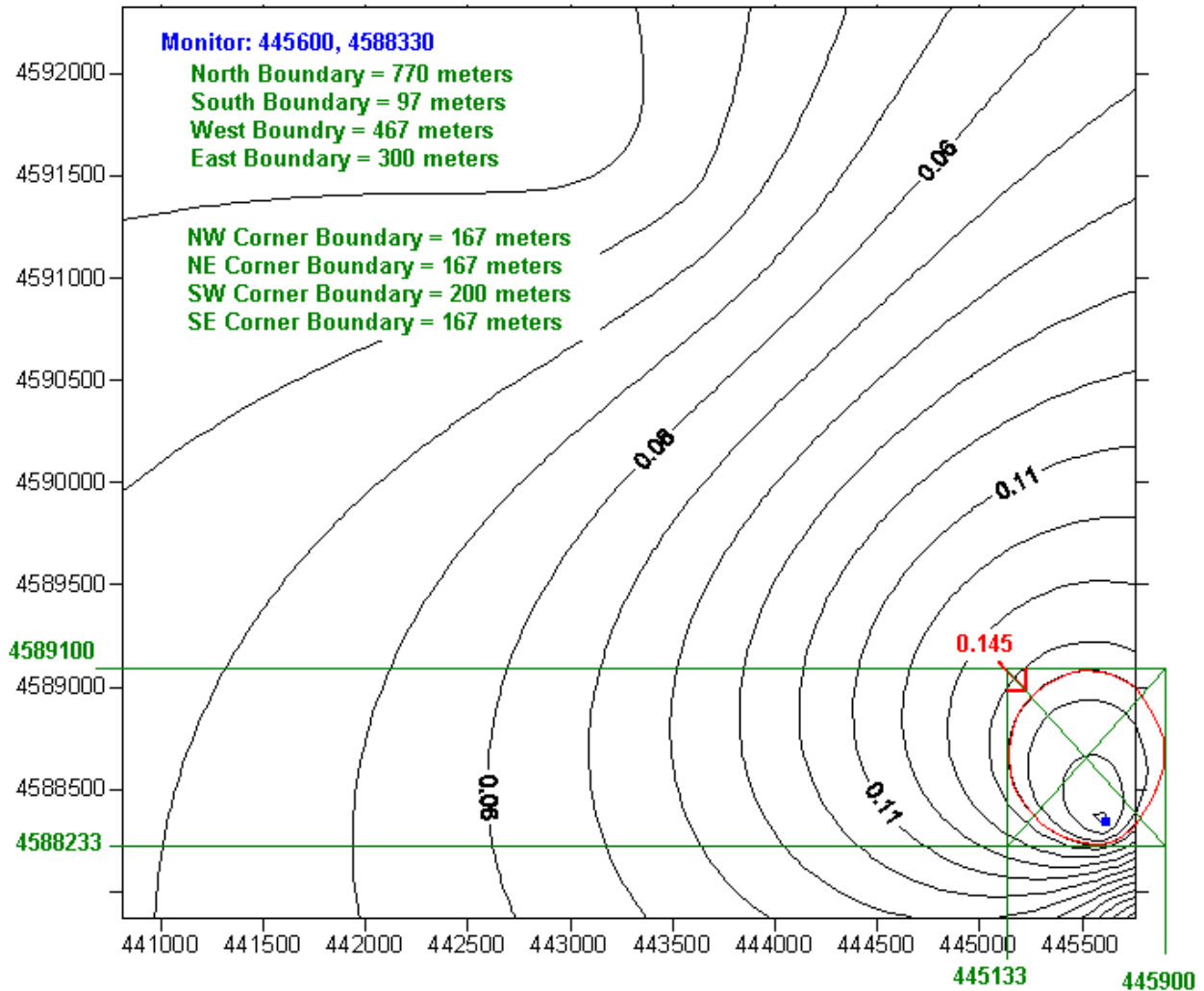


Kriged isopleths of 3-month rolling average monitored lead concentrations in Cuyahoga County
Oct. to Dec. 2007 data



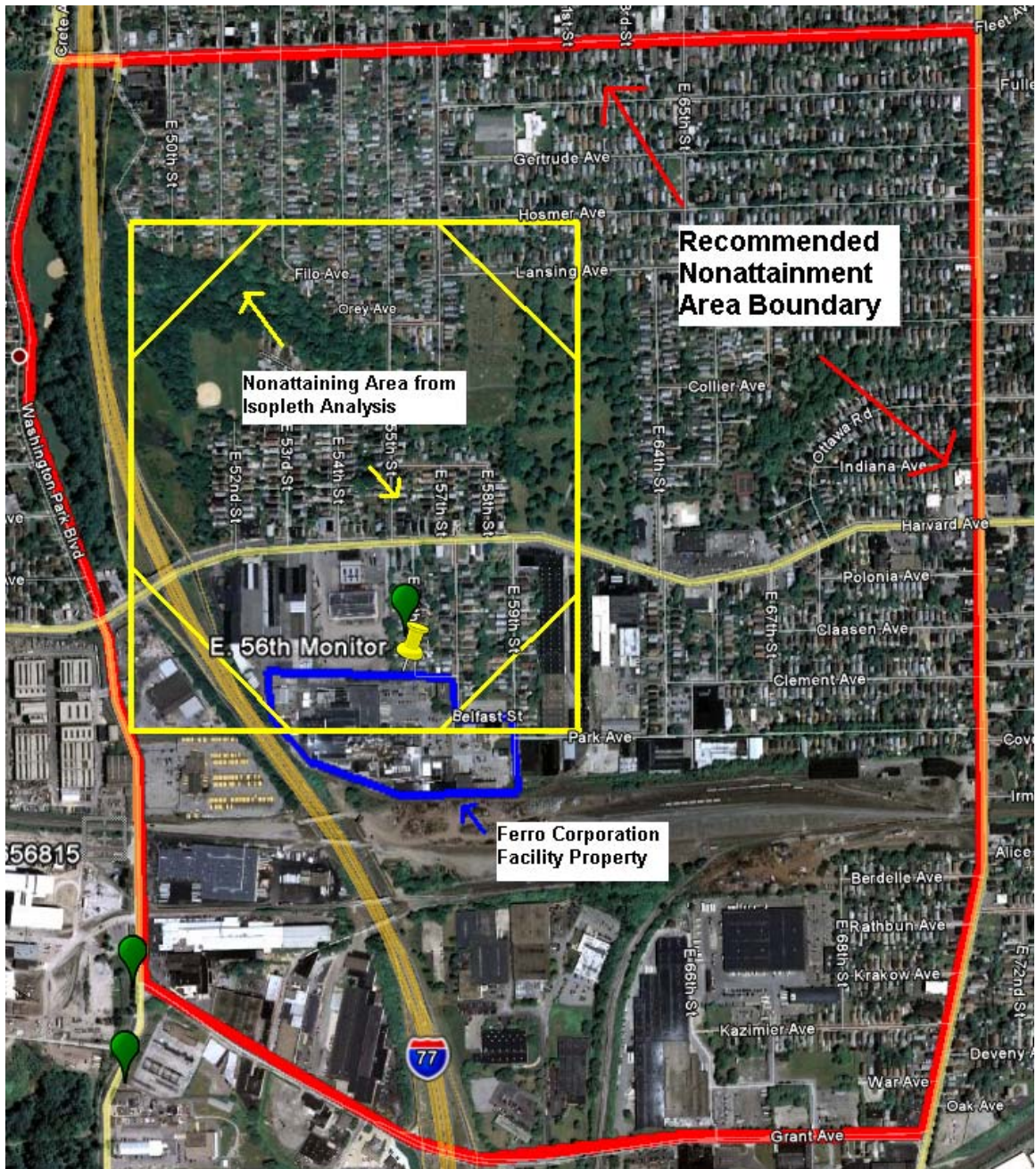
The Oct. 2008 period proved to be controlling, *i.e.* the area inside the 0.145 ug/m³ isopleth was large enough to fully enclose the corresponding isopleth in each of the other two plots. Therefore, further analysis was conducted only on these isopleths. As depicted below, the outer north, south, east and west boundary edges of the 0.145 ug/m³ isopleth were used to calculate the distance, in meters, from the violating monitor location. In addition, a similar computation was conducted to find the point at each corner tangent to the same isopleths of concern.

Kriged isopleths of 3-month rolling average monitored lead concentrations in Cuyahoga County
Aug. to Oct. 2008 data



The image shows a strong north-south asymmetry, with the bounds of the enclosed area extending about 770 meters to the north but only 97 meters to the south, relative to the violating monitor. The symmetry is good in the east-west direction, with an extension about 467 meters west and 300 meters east of the monitor, at the widest place.

These distances from the Krigé plot were then overlaid on a map of the area to help define an appropriate boundary that would conservatively encompass an area where violations could occur, as depicted below:



As can be seen above, the recommended nonattainment boundary is very conservative in encompassing the 0.145 ug/m3 boundary. The following streets demark the boundary for recommendation:

The area enclosed on the west by Washington Park Boulevard/Crete Avenue/East 49th Street, on the east by East 71st Street, on the north by Fleet Avenue, and on the south by Grant Avenue.

Dispersion Modeling and Historic Monitoring Data Analysis for Fulton County

Technical Support for Lead Nonattainment Area Boundary Determination

August 2009

As a result of the recent enactment of a more-stringent National Ambient Air Quality Standard for lead, a single monitor in Fulton County which shows compliance under the previous standard, now will show non-compliance under the new standard if it continues to exhibit readings similar to those of the recent past. Ohio is required to propose a suggested non-attainment area boundary indicative of the area where violations occur, which is defined as the region over which there may occur an airborne concentration greater than 0.15 microgram per cubic meter (ug/m^3), expressed as a rolling three-month average.

The technique of spatial interpolation of monitored data is inapplicable in this situation, due to the presence of only one monitor in the area. Therefore, a hybrid approach was followed, involving the use of the AERMOD dispersion model in conjunction with historic monitoring data. The model is used to generate reasonable concentration gradients through the study area, while the monitor data is used to generate an actual/modeled concentration ratio that can serve as a "correction factor" for adjustment of any apparent systematic tendency of the model to over, or under, predict monitor values. The Krige algorithm is used for spatial interpolation of modeled concentrations and drawing of isopleths. Because a value of 0.145 rounds upwards to 0.15, a concentration of 0.145 ug/m^3 (after application of the actual/modeled correction factor) is to be taken as the bounding isopleth.

The following monitor is included in the analysis:

Lead monitoring site in Fulton Co. (zone 16; base plane NAD83)

<u>Site name</u>	<u>AQS number</u>	<u>probe height</u>	<u>latitude</u> ¹	<u>longitude</u>	<u>easting</u>	<u>northing</u>
Bunting Bearing	39-051-0001	3.	41.57598	-83.99571	4607059	750467

The historic data for this site shows the highest average to be 0.567 ug/m^3 for the three-month period ending on January, 2008. Modeling of all known lead sources in the

¹ Note: the latitude and longitude are corrected in this analysis. AQS identifies the latitude and longitude as 41.575278 and -83.996389' however, upon further review it was found to be slightly mis-located from its actual location.

county was conducted with AERMOD. Below is a list of all lead sources along with the modeled values:

Fulton County Lead Sources

Longitude	Latitude	Facility Name	2005 NEI Emissions (tpy)	TRI2005 TRI Emissions (tpy)	Maximum Modeled Value (tpy)
-84.0377	41.57077	NORTHSTAR BLUESCOPE STEEL, LLC	0.2545	0.2545	0.2545
-84.1417	41.55333	MULTI-CAST CORP	0.03	0.0766	0.0766
-83.9975	41.57508	SAUDER WOODWORKING COGENERATION FACILITY	0.0003	0.048	0.048
-84.2942	41.51237	BUNTING BEARINGS LLC	0.0035	0.0035	0.54

Additional details for these facilities can be found in Appendix A.

The release points of the Bunting Bearing Corporation in the town of Delta are located within a couple of hundred meters of the monitor in question, and are believed to be predominantly responsible for the elevated readings. All the sources at the Bunting Bearings facility were modeled individually. The sources parameters modeled are identical to those modeled in the individual facility lead modeling submitted to U.S. EPA as part of Ohio's proposed lead monitoring network plan². Building downwash from the Bunting Bearings facility was included in the modeling.

Multi-Cast Corporation, Northstar Bluescope Steel and Sauder Woodworking Cogeneration facilities were modeled as single point sources using the emissions identified in the table above. Stack information from lead sources provided to Ohio EPA by the Northstar Bluescope Steel facility were averaged to create a single lead emission source. Stack information from lead sources provided to Ohio EPA by the Sauder

² <http://www.epa.state.oh.us/dapc/ams/plans/OhioLeadMonitoring.pdf>

Woodworking Cogeneration facility were also averaged to create a single lead emission source; however, the stack height itself for the lead source was not provided; therefore, a conservative stack height for similar sources at the facility was used. Stack information from lead sources for the Multi-Cast facility was not provided to the Ohio EPA. The averaged source parameters for Bunting Bearing facility were used for the Multi-Cast facility because it was determined they were the most conservative.

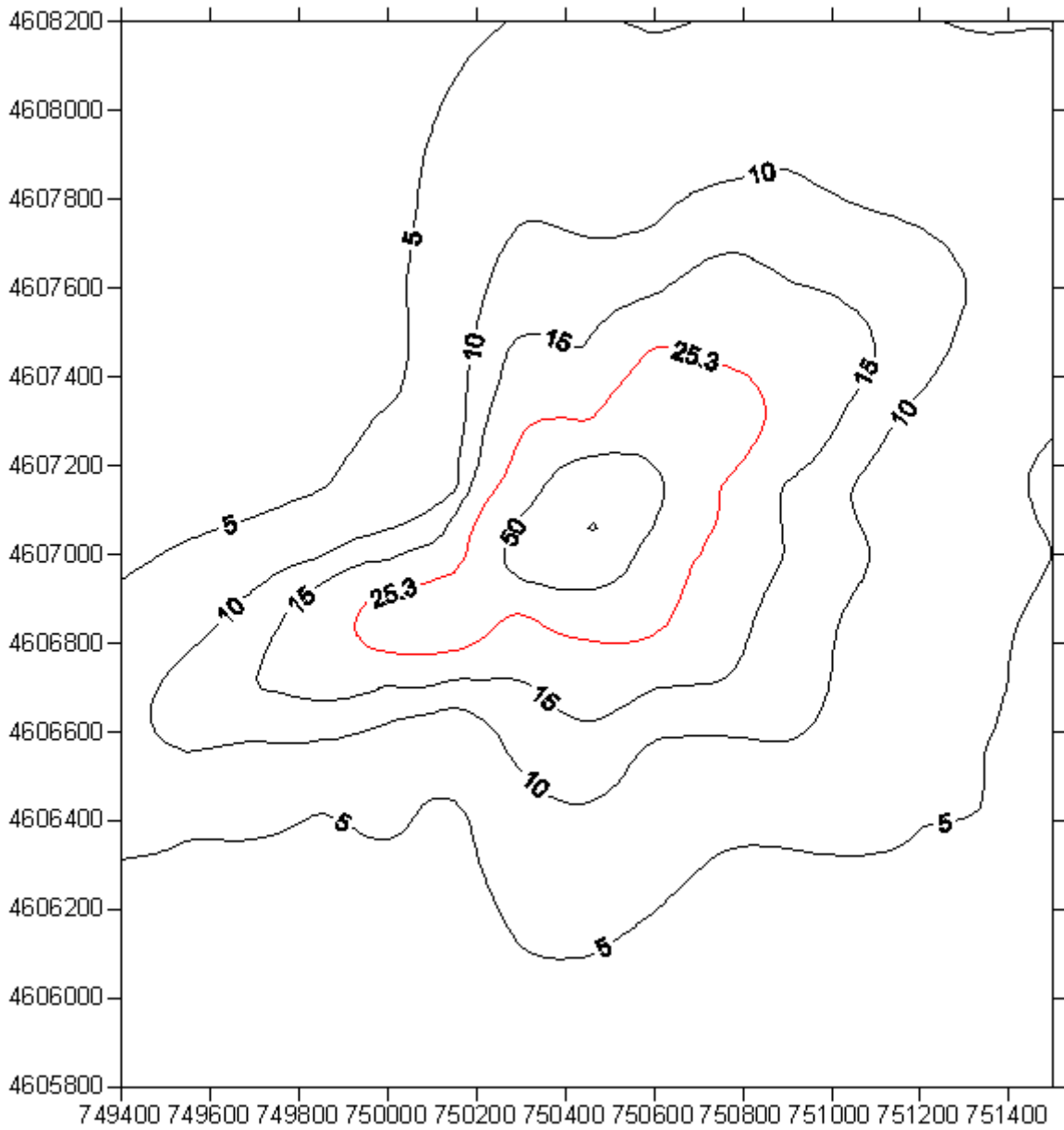
Surface data from Toledo, Ohio (National Weather Service Site 94830) and Upper Air data from Flint, Michigan (National Weather Service Site 14826) were determined to be representative of Fulton County. AERSURFACE was run using one sector and four seasons.

A total of 255 receptors, with 150 meters spacing, were modeled. One receptor was removed from the receptor grid because it was located on a Bunting Bearing building. A discrete receptor was added at the monitor location. A background concentration was not added to the modeled concentration because all surrounding sources were included in the modeling.

Most of the sources were located in zone 16, while a few were located in zone 17. All source UTMs were converted to zone 16 using the US Army Corps of Engineers Corpscon program.

The lead post processor results showed the highest modeled concentration at the location of the monitor to be 0.09897 ug/m^3 while historic actual monitor data has shown values as high as 0.567 ug/m^3 .

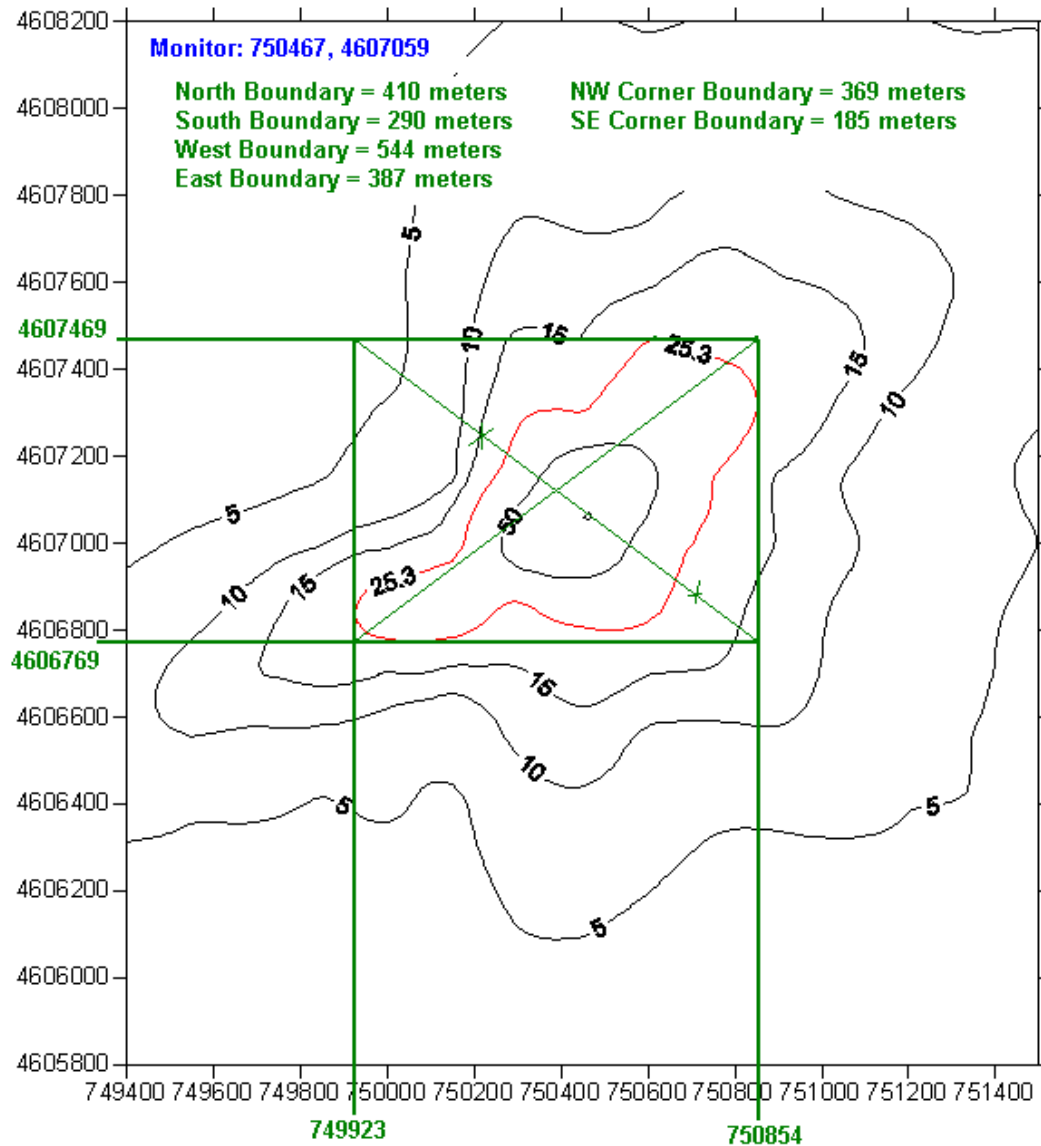
In order to establish an appropriate nonattainment boundary that is conservative for this area it was necessary to correct for the discrepancy between the modeled monitor value and the worst case historical actual monitor value. A monitor/model correction ratio was computed to be $0.567/0.09897 = 5.729$, and the bounding isopleth of the non-attainment area then becomes $145/5.729 = 25.31 \text{ nanograms/m}^3$, as shown on the plot below, generated with the help of Golden Software Surfer 8, using default settings for the Krige algorithm:



Kriged isopleths of highest (non-concurrent) 3-month rolling average modeled lead concentrations in Fulton County nanogram per cubic meter

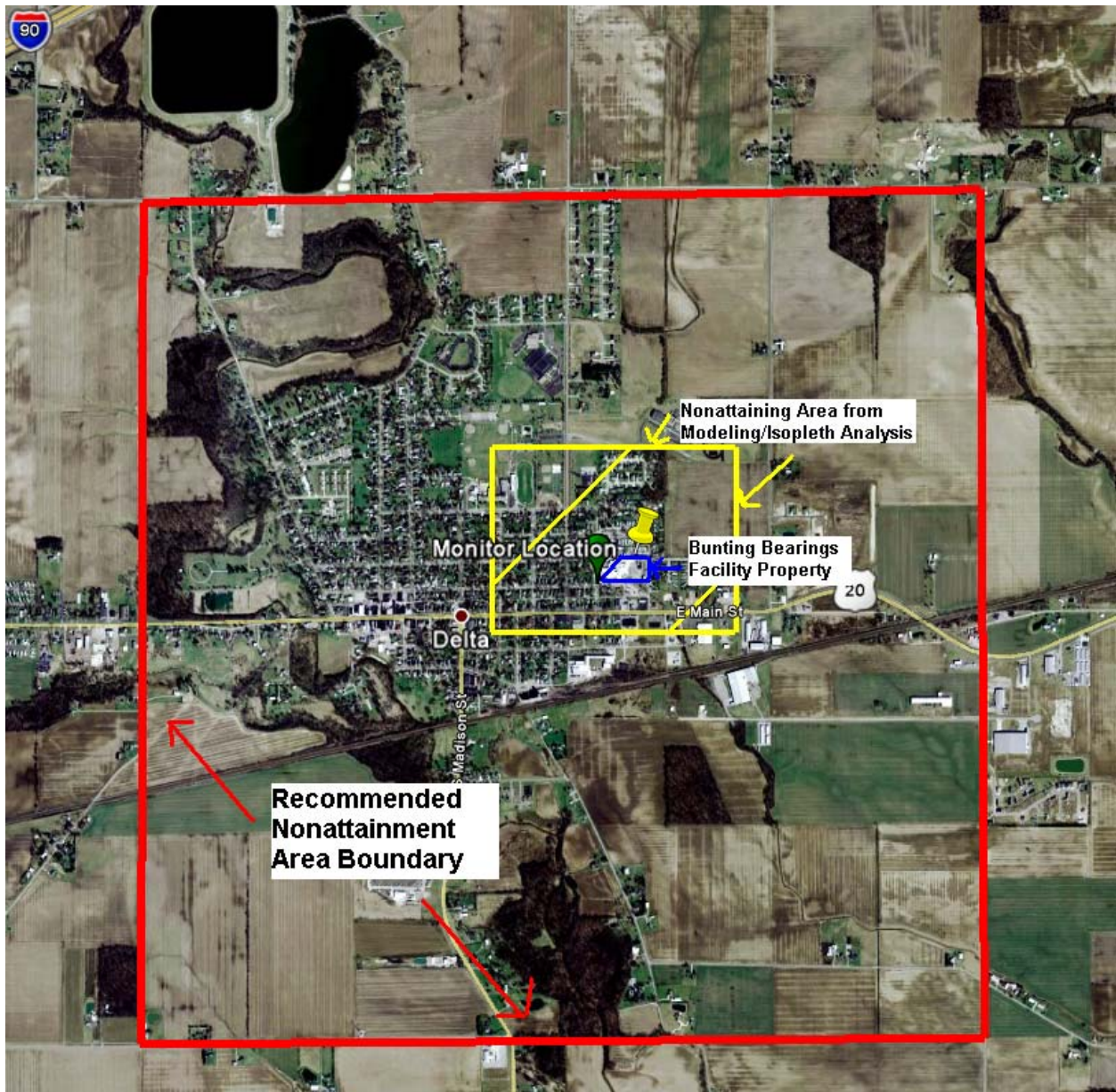
As depicted below, the outer north, south, east and west boundary edges of the 25.31 nanogram/m³ isopleth were used to calculate the distance, in meters, from the violating monitor location. In addition, a similar computation was conducted to find the point at the northwest and southeast corners tangent to the same isopleths of concern.

Kriged isopleths of highest (non-concurrent) 3-month rolling average modeled lead concentrations in Fulton County
nanogram per cubic meter



The image shows a west-east asymmetry, with the bounds of the enclosed area extending about 410 meters to the north and 290 meters to the south while it extends 544 meters to the west and 387 meters to the east.

These distances from the Krigé plot were then overlaid on a map of the area to help define an appropriate boundary that would conservatively encompass an area where violations could occur, as depicted below:

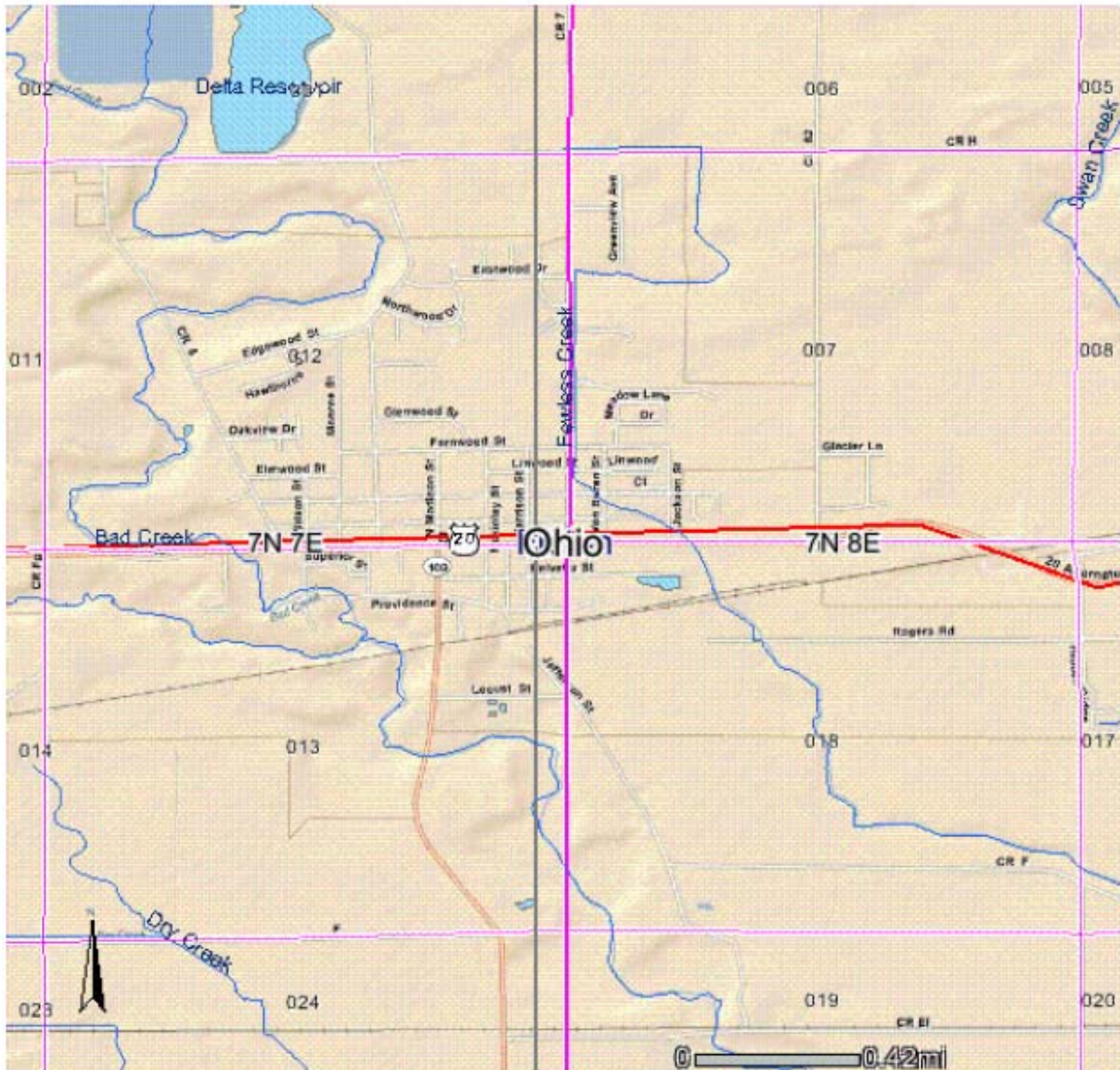


As can be seen above, the recommended nonattainment boundary is very conservative in encompassing the 25.3 nanogram/m³ boundary. This boundary was selected by viewing Fulton County township and township-section boundaries. The following township sections demark the boundary for recommendation:

York Township – Sections 12 and 13

Swan Creek Township – Sections 7 and 18

As depicted in the township section map below:



Dispersion Modeling and Historic Monitoring Data Analysis for Logan County

Technical Support for Lead Nonattainment Area Boundary Determination

August 2009

As a result of the recent enactment of a more-stringent National Ambient Air Quality Standard for lead, three of four monitors in Logan County that showed compliance under the previous standard will now show non-compliance under the new standard if they continue to exhibit readings similar to those of the recent past. Ohio is required to propose a suggested non-attainment area boundary indicative of the area where violations occur, which is defined as the region over which there may occur an airborne concentration greater than 0.15 microgram per cubic meter ($\mu\text{g}/\text{m}^3$), expressed as a rolling three-month average.

As part of the proposed monitoring plan for lead, Logan County will only be monitored in the future by one monitor. Historical monitoring in this area was a result of one facility, Daido, located in Bellefontaine, Ohio. In June of 2009 the Daido facility permanently shut down all operations related to lead. However, Ohio EPA will continue to monitor the area, using the one worst case monitor, until three years of clean data are obtained. For the purpose of this analysis, to determine an appropriate nonattainment boundary, all four historical monitors are being used to evaluate historical trends.

The simplest procedure for defining the perimeter of that region, involving spatial interpolation of historic monitor data, was found to be inapplicable due to an unsuitable number and distribution of monitors showing exceedances of the standard. Rather, a hybrid approach was followed, involving the use of the AERMOD dispersion model in conjunction with historic data. The model is used to generate reasonable concentration gradients throughout the study area, while the monitor data is used to generate actual/modeled concentration ratios that can serve as "correction factors" for adjustment of any apparent systematic tendency of the model to over, or under, predict monitor values. The Kriging algorithm is used for spatial interpolation of modeled concentrations and drawing of isopleths. Because a value of 0.145 rounds upwards to 0.15, a concentration of $0.145 \mu\text{g}/\text{m}^3$ (after application of the actual/modeled correction factor) is to be taken as the bounding isopleth.

The following four monitors at three sites are included in the analysis:

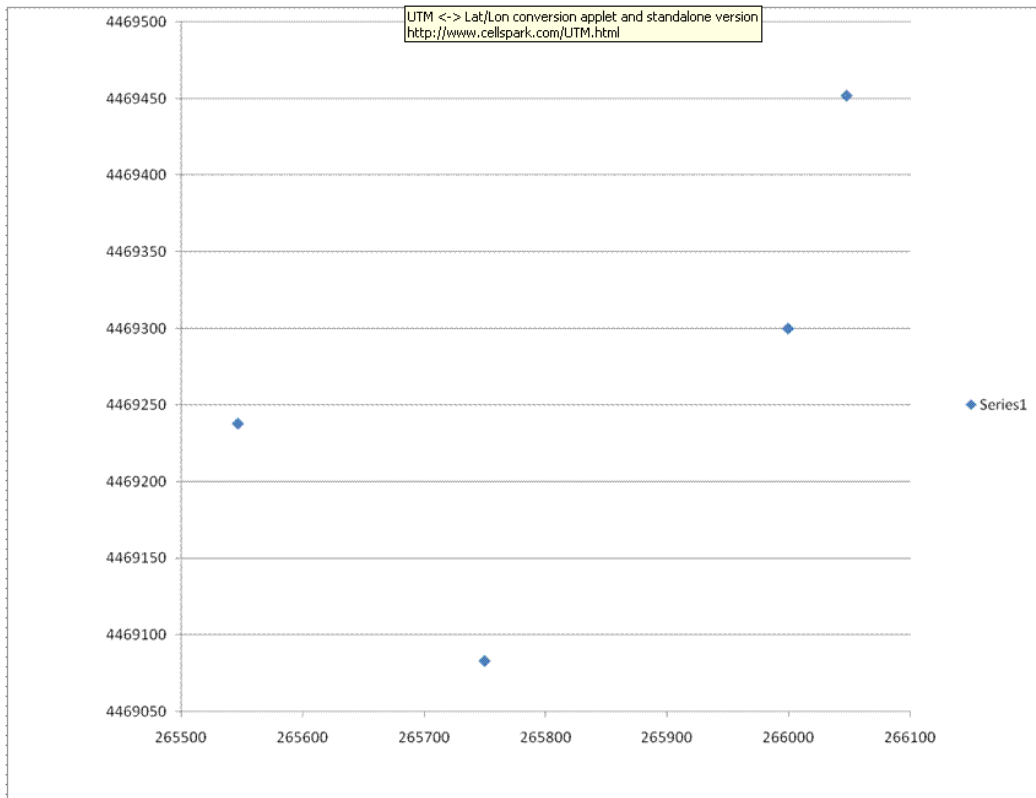
Selected lead monitoring sites in Logan Co.
(zone 17; base plane NAD83)

Site name	AQS number	probe height	uncorrected latitude	uncorrected longitude	corrected latitude	corrected longitude	easting	northing
1222 Superior	39-091-0003	5.	40.34306	-83.755	40.34394	-83.75610	265910	4469579
1205 Superior	39-091-0007	5.	40.34472	-83.75444	40.34394	-83.75610	265910	4469579
S. Main	39-091-0005	5.	40.34278	-83.76028	N/A	N/A	265551	4469461
Richard Ave.	39-091-0006	5.	40.34111	-83.75778	40.34147	-83.75868	265682	4469311

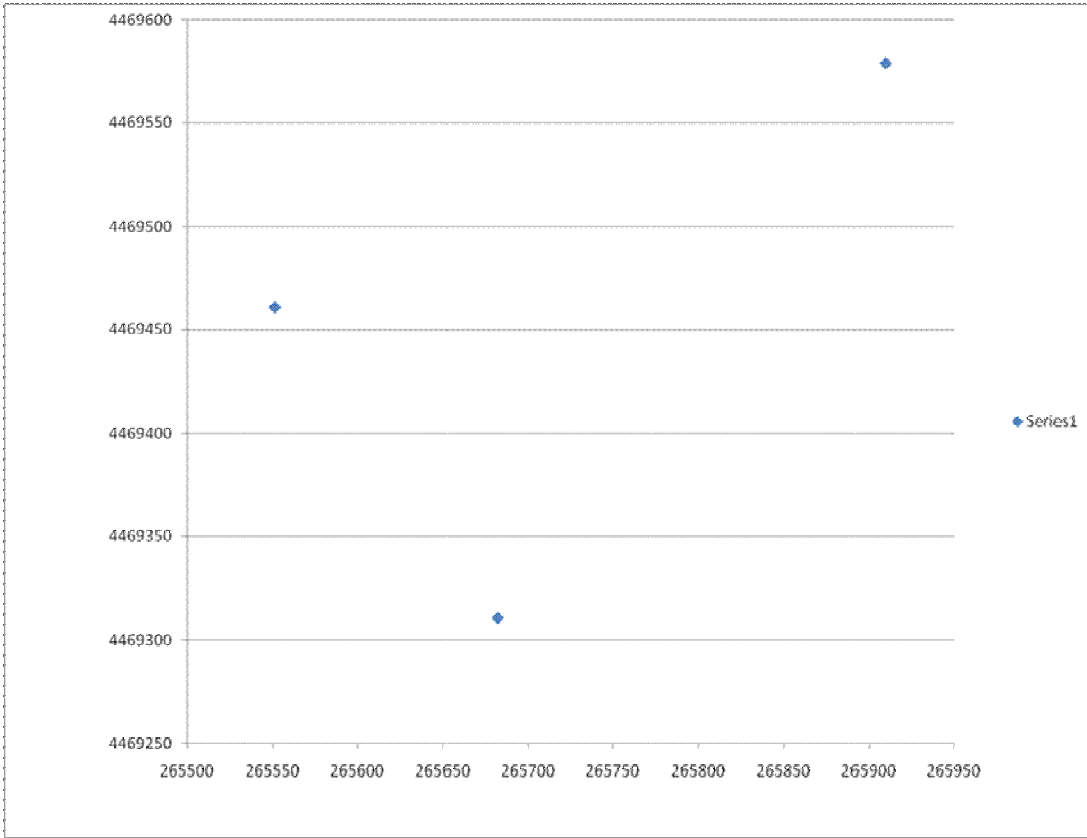
At the Superior Avenue location, the 39-091-003 and 39-091-007 monitors are mounted on the same pedestal, despite having different street addresses. The coordinates of the Richard Avenue and Superior Avenue monitors in the AQS database were found to be somewhat imprecise, so improved locations were used for this study. They are shown on these plots:

selected lead monitors in Logan County
(zone 17 eastings and northings in meters)

(prior to corrections)



(corrected)



The historic data for these sites showed the following time periods to be of interest, based on rolling three-month averages:

Selected concentrations at lead monitor sites in Logan Co.
ug/m³ 3-month averages ending on the stated month

Site name	August, 2005	July, 2006	August, 2006
1222 Superior	0.073	0.088	0.086
S. Main	0.120	0.128	0.100
Richard Ave.	0.253	0.173	0.220
1205 Superior	0.163	0.237	0.207

Modeling of all known lead sources in the county was conducted with AERMOD. Below is a list of all lead sources along with the modeled values:

Logan County Lead Sources

Longitude	Latitude	Facility Name	2005 NEI Emissions (tpy)	TRI2005 TRI Emissions (tpy)	Maximum Modeled Value (tpy)
-83.7598	40.34411	QUINCY CASTINGS INC.	0.035	0.035	0.035
-83.5664	40.33883	HONDA OF AMERICA, EAST LIBERTY PLANT	0.0075	0.0075	0.0075
-83.88	40.46	HONDA TRANSMISSION MANUFACTURING OF AMERICA INC	0.0075	0.0075	0.0075
-83.9726	40.29898	DAIDO METAL BELLEFONTAINE LLC	0.121	0.121	0.1447

Additional details for these facilities can be found in Appendix A.

The release points of the Daido facility in the town of Bellefontaine are located in close proximity to the monitors in question, and are believed to be predominantly responsible for the elevated readings. Source information from lead sources for Daido was not provided to the Ohio EPA due to the shutdown of facility as discussed above. The entire facility was modeled as an area source. Property dimensions were used as the size of the area source.

Both the Honda East Liberty Plant and Honda Transmission Manufacturing facilities were modeled as single point sources using the emissions identified in the table above. Stack information from lead sources provided to Ohio EPA by the Honda East Liberty facility were averaged to create a single lead emission source. Stack information from lead sources for the Honda Transmission Manufacturing facility was not provided to the Ohio EPA. The averaged source parameters for the Honda East Liberty facility were also used for the Honda Transmission Manufacturing facility.

Source information from lead sources for Quincy Castings was not provided to the Ohio EPA. It is believed that the lead source at Quincy Castings is an area source; therefore, it was modeled as such. Building dimensions provided to Ohio EPA were used as the size of the area source.

Surface data from Columbus, Ohio (National Weather Service Site 14821) and Upper Air data from Dayton, Ohio (National Weather Service Site 13840) were determined to

be representative of Logan County. AERSURFACE was run using one sector and four seasons.

A total of 1001 receptors, with 200 meters spacing, were modeled. A discrete receptor was added at each of the monitor locations. Because the monitors at 1222 Superior Avenue and 1205 Superior Avenue are co-located only one discrete receptor was modeled for these monitors. A background concentration was not added to the modeled concentration because all surrounding sources were included in the modeling.

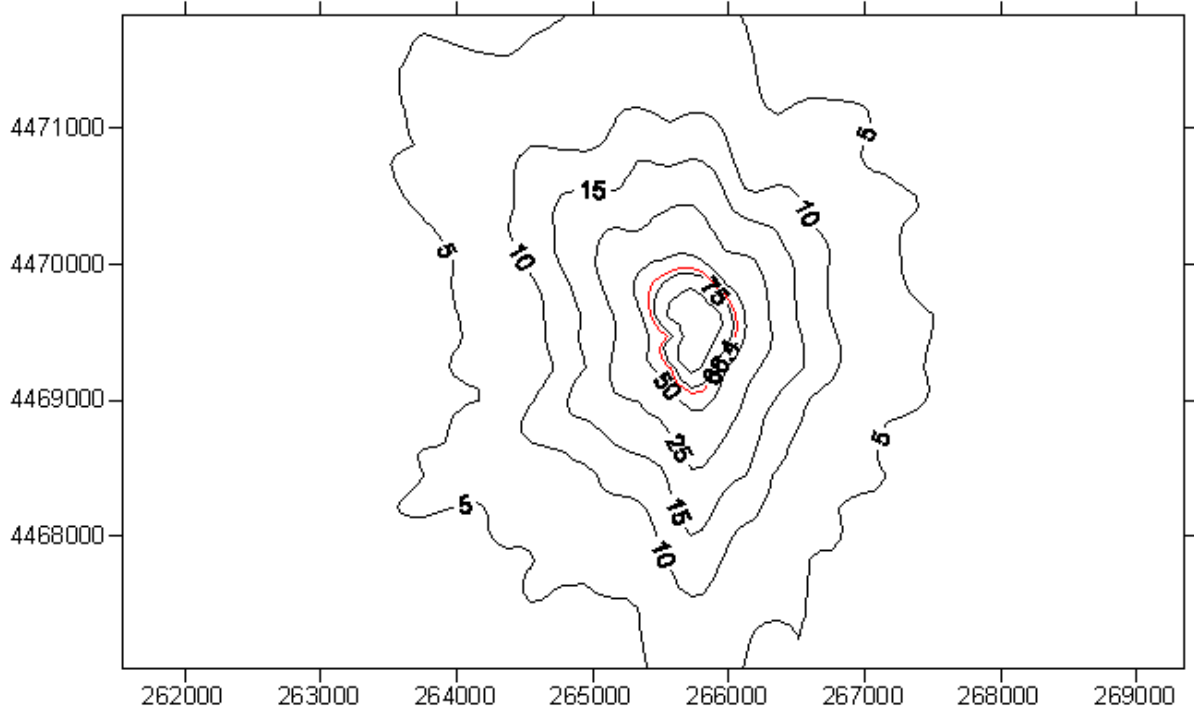
The lead post processor results showed the highest modeled concentration at three of the four monitors well below historical actual monitored data. In order to establish an appropriate nonattainment boundary that is conservative for this area it was necessary to correct for the discrepancy between the modeled monitor value and the worst case historical actual monitor value. The following depicts the modeled results and computed correction factors by monitor location:

Modeled and corrected concentrations at lead monitor sites in Logan Co.
 ug/m³ 3-month averages ending on the stated month
 with highest modeled concentration over a three-year period, and corresponding
 monitor/model correction factor

Site name	August, 2005	July, 2006	August, 2006	modeled conc.	monitor/model factor
1222 Superior	0.073	0.088	0.086	0.1167	0.754
S. Main	0.120	0.128	0.100	0.0586	2.184
Richard Ave.	0.253	0.173	0.220	0.1159	2.183
1205 Superior	0.163	0.237	0.207	0.1167	2.031

Using the worst case (to be conservative) monitor/model correction factor of 2.184, the isopleth defining the boundary of the nonattainment area was taken as $145/2.184 = 66.4$ nanograms/m³. Use of Golden Software Surfer 8 to generate a Krige concentration plot of the highest 3-month rolling averages of all the modeled receptors gives the following result (with the 66.4 nanogram/m³ isopleth defining the proposed nonattainment area drawn in red):

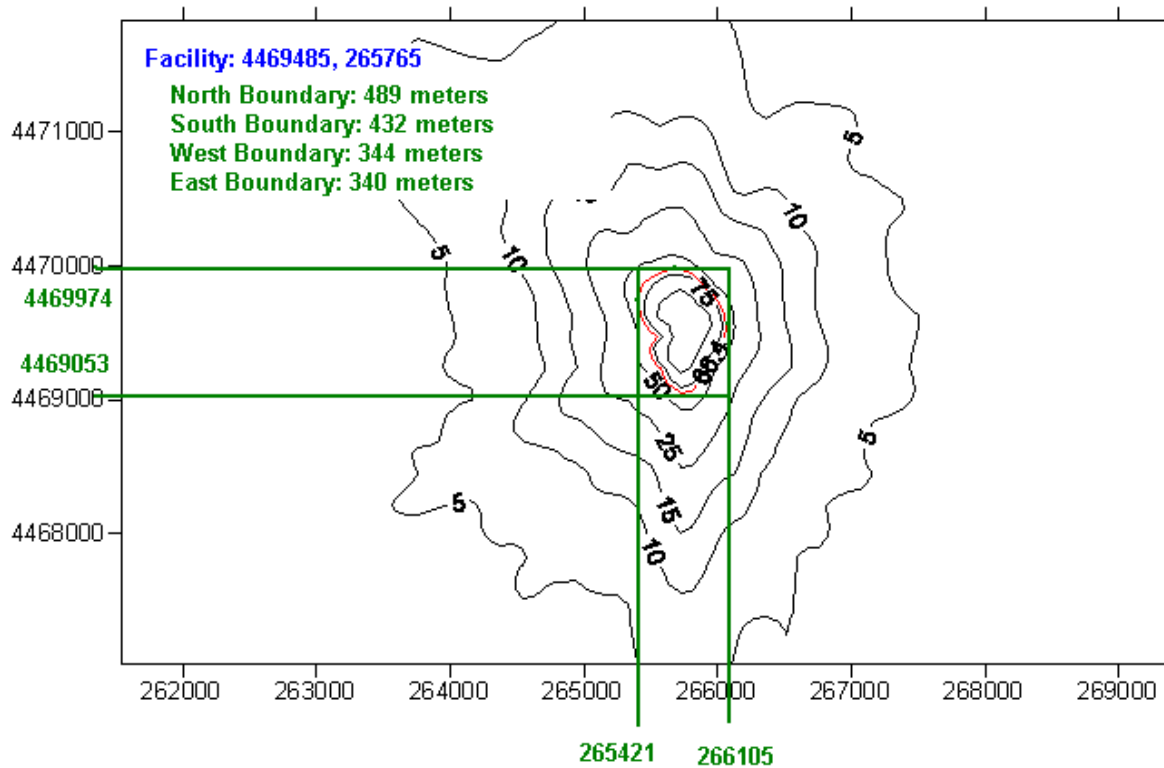
Modeled lead concentration isopleths and proposed lead nonattainment area for Logan County
(zone 17 eastings and northings, NAD83 base plane)



Kriged isopleths of highest (non-concurrent) 3-month rolling average modeled lead concentrations in Logan County nanogram per cubic meter

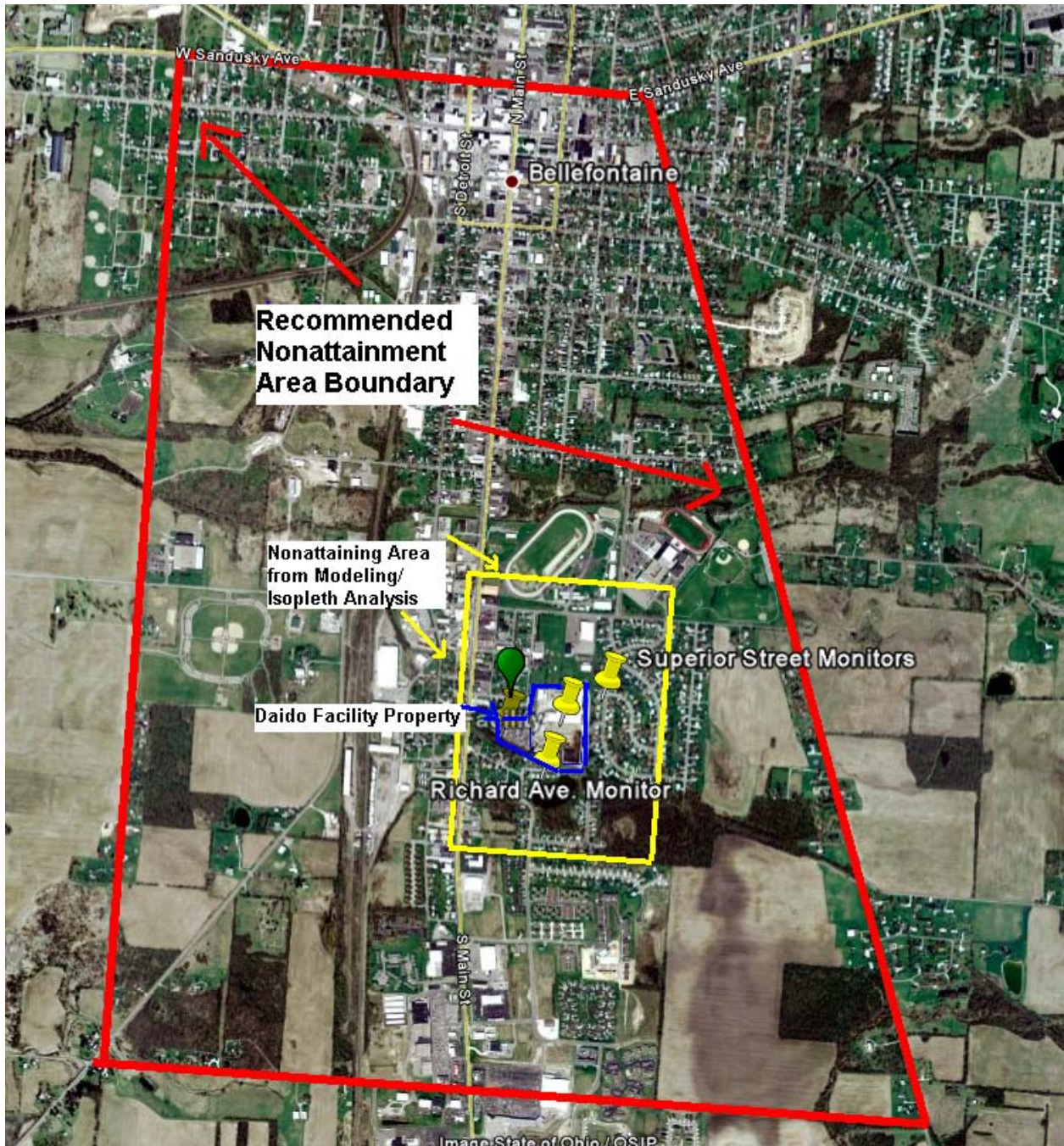
As depicted below, the outer north, south, east and west boundary edges of the 66.4 nanogram/m³ isopleth were used to calculate the distance, in meters, from the Daido facility.

Kriged isopleths of highest (non-concurrent) 3-month rolling average modeled lead concentrations in Logan County nanogram per cubic meter



The image shows good symmetry in all directions, with the bounds of the enclosed area extending about 489 meters to the north and 432 meters to the south while it extends 344 meters to the west and 340 meters to the east.

These distances from the Krigé plot were then overlaid on a map of the area to help define an appropriate boundary that would conservatively encompass an area where violations could occur, as depicted below:



As can be seen above, the recommended nonattainment boundary is very conservative in encompassing the 66.4 nanogram/m³ boundary. This boundary was selected by viewing Logan County township and township-section boundaries. The following township sections demark the boundary for recommendation:

Lake Township – Sections 27, 28, 33 and 34

As depicted in the township section map below:

