Attachment D

Revised 2011 Base-Year Emissions Inventory

Appendix D1

2011 Base-Year National Emissions Inventory, version 2 Technical Support

Appendix D2

MOVES2014 Input Data and Parameters Northwest Indiana Regional Planning Commission (NIRPC) Lake, Porter, and LaPorte Counties, Indiana

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REVISED 2011 BASE-YEAR EMISSIONS INVENTORY FOR INDIANA'S PORTION OF THE CHICAGO-NAPERVILLE, ILLINOIS-INDIANA-WISCONSIN (IL-IN-WI), 2008 8-HOUR OZONE NONATTAINMENT AREA

Lake and Porter Counties, Indiana

Developed By:
The Indiana Department of Environmental Management

February 2017

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Appendix D2 MOVES2014 Input Data and Parameters Northwest Indiana Regional Planning Commission (NIRPC) Lake, Porter, and LaPorte Counties, Indiana

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REVISED 2011 BASE-YEAR EMISSIONS INVENTORY FOR INDIANA'S PORTION OF THE CHICAGO-NAPERVILLE, ILLINOIS-INDIANA-WISCONSIN (IL-IN-WI), 2008 8-HOUR OZONE NONATTAINMENT AREA

LAKE AND PORTER COUNTIES, INDIANA

1.0 INTRODUCTION

On May 31, 2012 (77 FR 34221), United States Environmental Protection Agency (U.S. EPA) designated the Chicago-Naperville, Illinois-Indiana-Wisconsin, (IL-IN-WI), area as nonattainment for the 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS) in 40 (Code of Federal Regulations (CFR) 81.315 and classified the area as "Marginal" under Subpart 2 of Part D, Title I of the Clean Air Act (CAA).

For areas designated nonattainment for the 2008 NAAQS, Section 182(a)(1) of the CAA requires the development of a comprehensive, accurate, and current inventory of actual emissions from all sources in the nonattainment area, including periodic revisions as the Administrator may determine necessary to assure that the requirements for this part are met. U.S. EPA guidance requires the submittal of a comprehensive state implementation plan quality emissions inventory of ozone precursor emissions (i.e. oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) representative of the base year. In consultation with U.S. EPA, Illinois, Wisconsin, and other stakeholders, the base-year of 2011 was selected for this demonstration.

This revised 2011 base-year emissions inventory for Lake and Porter counties updates and replaces the inventory included as Appendix F of the Request for Redesignation Petition and Maintenance Plan for attainment of the 2008 8-Hour Ozone NAAQS submitted June 15, 2016, and fulfills the base-year emissions inventory requirement of Clean Air Act (CAA) Section 182(a)(1). As such, Indiana formally withdraws the June 15, 2016, 2011 base-year emissions inventory submittal.

2.0 BACKGROUND

The Chicago-Gary-Lake County, Illinois-Indiana nonattainment area (which included Lake and Porter counties in Indiana) was subjected to nonattainment area rulemakings under the 1979 1-hour ozone standard and the 1997 8-hour ozone standard. On April 15, 2004, U.S. EPA designated Lake and Porter counties nonattainment as a portion of the Chicago-Gary-Lake County, Illinois-Indiana, 1997 8-hour ozone nonattainment area and classified the area as "Moderate" under Subpart 2 of Part D of the CAA. On June 15, 2005, the 1979 1-hour ozone standard was revoked. On April 22, 2010 (75 FR 26113), U.S. EPA approved Indiana's Redesignation Request for attainment and classified it as maintenance under the 1997 8-hour ozone standard.

On March 12, 2008, U.S. EPA significantly strengthened the 8-hour ozone standard to a level of 0.075 parts per million (ppm) (73 FR 16435). After the Chicago-Naperville, IL-IN-WI, area was designated nonattainment (as mentioned above) it was subjected to the new 8-hour ozone requirements.

On December 5, 2012, Indiana submitted a Request for Redesignation Petition and Maintenance Plan for attainment of the 2008 8-Hour Ozone NAAQS that would have designated Lake and Porter counties separately from the rest of the Chicago nonattainment area. This also included a maintenance plan and motor vehicle emission budgets (MVEBs) for VOCs and NO_x. These requests were denied by U.S. EPA effective January 9, 2015.

On April 11, 2016 (81 FR 26697), U.S. EPA finalized its determination that the Chicago nonattainment area failed to attain the 2008 8-hour ozone standard by the attainment date of July 20, 2015. This determination was made using 2012-2014 monitoring data. As required by Section 181(b)(2)(A) of the CAA, the area was reclassified to moderate for the 2008 8-hour ozone NAAQS, effective June 3, 2016.[1] This final rule aligned a new attainment date of July 20, 2018.

On June 15, 2016, Indiana submitted a Request for Redesignation and Maintenance Plan for Ozone Attainment for Indiana's Portion of the Chicago nonattainment area based on 2013-2015 monitoring data indicating attainment of the standard. This submittal requested that Lake and Porter counties be redesignated to attainment and awarded a completeness determination prior to any actions that may be required subsequent to being reclassified to moderate.

Preliminary 2016 monitoring data from the Chiwaukee monitor in Kenosha County, WI, indicated a 2014-2016 design value above the 2008 standard. In anticipation of that data being certified, Indiana has also prepared an attainment demonstration and technical support document for Lake and Porter counties in order to demonstrate attainment of the 2008 standard by the new attainment date.

3.0 BASE-YEAR EMISSIONS INVENTORY

U.S. EPA's proposed 2008 ozone standard SIP requirements rule recommends states use 2011 as the base-year to fulfill the emission inventory requirements. The year 2011 is also a required reporting year for U.S. EPA's National Emissions Inventory (NEI) submission under the existing Air Emission Reporting Requirements Rule. NEIs are a collaborative process between U.S. EPA, states, localities, and tribes (S/L/T) to build a comprehensive national inventory.

In consultation with U.S. EPA, Illinois, Wisconsin, and other stakeholders, the base-year of 2011 was selected to fulfill the requirement of a base-year inventory. The Indiana Department of Environmental Management (IDEM) has prepared a comprehensive and accurate inventory of ozone precursor emissions (i.e. NO_x and VOCs) for Lake and Porter counties, Indiana, organized by anthropogenic source categories: electric-generating units (EGUs), non-EGUs, non-point (area), non-road, and on-road. IDEM's Office of Air Quality (OAQ) collects data, calculates, and stores emissions for point sources on an annual basis in the Emission Inventory Tracking

[1] https://www.gpo.gov/fdsys/pkg/FR-2016-05-04/pdf/2016-09729.pdf

System (EMITS). These point source emissions are uploaded to the NEI each year. Indiana has elected to use U.S. EPA's 2011 National Emissions Inventory (NEI)[2] for point, non-point, and non-road (area) anthropogenic emission sources. On-road values were back casted from emission factors produced by U.S. EPA's 2014 version of the MOVES software program. Biogenic emissions are not included in these summaries.

3.1 Point (EGU and Non-EGU)

Indiana submitted point source data through the Emission Inventory System (EIS) and has provided feedback to U.S. EPA on a variety of other estimates. Point Source data was collected through the Indiana's Emission Statement program (326 IAC 2-6). This data is collected electronically or submitted on hardcopy. All data is collated into the EMITS, developed by the State of Indiana, and submitted to U.S. EPA through the EIS Gateway. U.S. EPA has added to this inventory - incorporating data from various sources such as data submitted to the Clean Air Markets Database. U.S. EPA has also added other sources such as airport operations, which are now handled as point sources in the database (see Section 3.11 of the "2011 Base-Year National Emissions Inventory, version 2 Technical Support Document" Appendix D1).

3.2 Non-Point

Non-Point sources were developed by U.S. EPA with comments provided by the state, see inset from section 3.1.7 U.S. EPA Non-Point data from the "2011 Base-Year National Emissions Inventory, version 2 Technical Support Document" (Appendix D1);

> For the 2011 NEI, U.S. EPA developed emission estimates for many Non-Point sectors in collaboration with a consortium of state and regional planning organizations called the Eastern Regional Technical Advisory Committee (ERTAC, http://www.ertac.us/). This task is referred to by ERTAC as the "Area Source Comparability" project on the ERTAC website, and a subgroup was developed to work on this project. The purpose of the subgroup and project was to agree on methodologies, emission factors, and SCCs for a number of important Non-Point sectors, allowing U.S. EPA to prepare the emissions estimates for all states using the group's final approaches. During the 2011 NEI inventory development cycle, S/L/T agencies could accept the ERTAC/EPA estimates to fulfill their Non-Point emissions reporting requirements. U.S. EPA encouraged S/L/T agencies that did not use U.S. EPA's estimates or tools to improve upon these "default" methodologies and submit further improved data.

Section 3, Stationary sources, in the "2011 Base-Year National Emissions Inventory, version 2 Technical Support Document" (Appendix D1) details the emission estimation methods, sources of data for inputs, where states provided input and how controls were taken into account.

3.3 Non-Road

Non-road sources were also developed by U.S. EPA using the National Mobile Inventory Model. See Section 4.5 of the "2011 Base-Year National Emissions Inventory, version 2 Technical

[2] https://www.epa.gov/air-emissions-inventories/2011-national-emissions-inventory-nei-data

Support Document" (Appendix D1) for more information on the inputs and the estimation techniques.

3.4 On-Road

On-road sources were estimated for the Northwest Indiana Regional Planning Commission (NIRPC) by The Corradino Group. As stated within the document;

> This report contains a discussion of the input settings used in MOVES2014 and the development of the input datasets. These MOVES2014 runs are intended to develop a default set of emission rates that can be used for conformity determination and is part of a statewide effort being conducted by the Indiana Department of Transportation (INDOT) for all participating municipal planning organizations (MPOs) or other jurisdictions with air quality conformity needs.

These estimates were used for the Emissions Inventory to align with the Conformity Inventories. See Attachment 2.

4.0 TEMPORAL ALLOCATION OF ANNUAL EMISSIONS

Indiana used U.S. EPA's temporal files found on the Emissions Modeling Clearinghouse[3] to estimate the average ozone season day emissions following the guidance from the Greg Stella memo, "Temporal Allocation of Annual Emissions Using EMCH Temporal Profiles".[4]

4.1 Summary and Detailed Tables

The following tables contain summaries and detailed data on the Lake and Porter Counties Inventory. The tables show NO_x and VOC emission estimates in tons per ozone season (unless otherwise noted) based upon U.S. EPA NEI data tables using the above and attached references.

Table 4.1 Tons Ozone Season Day Emissions by Data Category

County	Data Category	NO_X	VOC
Lake	EGU	24.62	0.44
Lake	Non-Point	5.80	12.54
Lake	Non-Road	8.07	7.55
Lake	Point	43.10	15.39
Lake	On-road	17.85	6.92
Porter	EGU	5.53	0.19
Porter	Non-Point	3.89	5.53
Porter	Non-Road	4.62	6.64
Porter	Point	23.36	1.68
Porter	On-road	6.85	2.66

[3] http://www3.epa.gov/ttn/chief/emch/index.html
[4] http://www3.epa.gov/ttn/chief/emch/temporal/temporal_factors_042902.pdf

Table 4.2 Tons per Ozone Season Day Emissions by SCC Level One

County	Data Category	SCC Level One	NO_X	VOC
Lake	EGU	External Combustion Boilers	24.32	0.33
Lake	EGU	Internal Combustion Engines	0.31	0.12
Lake	Non-Point	Industrial Processes	0.00	0.05
Lake	Non-Point	Miscellaneous Area Sources	0.00	0.00
Lake	Non-Point	Mobile Sources	3.78	0.19
Lake	Non-Point	Solvent Utilization		9.28
Lake	Non-Point	Stationary Source Fuel Combustion	2.02	0.57
Lake	Non-Point	Storage and Transport		2.42
Lake	Non-Point	Waste Disposal, Treatment, and Recovery		0.03
Lake	Non-Road	Mobile Sources	8.07	7.55
Lake	Point	External Combustion	0.00	0.00
Lake	Point	External Combustion Boilers	10.73	0.31
Lake	Point	Industrial Processes	30.41	12.31
Lake	Point	Internal Combustion Engines	1.91	0.11
Lake	Point	MACT Source Categories	0.01	0.35
Lake	Point	Mobile Sources	0.01	0.02
Lake	Point	Petroleum and Solvent Evaporation	0.01	2.27
Lake	Point	Waste Disposal	0.01	0.01
Lake	On-road	Highway Vehicles	17.85	6.92
Porter	EGU	External Combustion Boilers	5.38	0.18
Porter	EGU	Internal Combustion Engines	0.15	0.01
Porter	Non-Point	Industrial Processes	0.00	0.02
Porter	Non-Point	Miscellaneous Area Sources	0.00	0.00
Porter	Non-Point	Mobile Sources	3.20	0.16
Porter	Non-Point	Oil and Gas Exploration and Production	0.00	0.00
Porter	Non-Point	Solvent Utilization		3.77
Porter	Non-Point	Stationary Source Fuel Combustion	0.62	0.19
Porter	Non-Point	Storage and Transport		1.25
Porter	Non-Point	Waste Disposal, Treatment, and Recovery	0.07	0.14
Porter	Non-Road	Mobile Sources	4.62	6.64
Porter	Point	External Combustion	0.00	0.00
Porter	Point	External Combustion Boilers	3.01	0.10
Porter	Point	Industrial Processes	20.26	1.34
Porter	Point	Internal Combustion Engines	0.06	0.00
Porter	Point	Mobile Sources	0.01	0.01
Porter	Point	Petroleum and Solvent Evaporation	0.02	0.23
Porter	On-road	Highway Vehicles	6.85	2.66

Table 4.3 Tons per Ozone Season Day Emissions by SCC Level Two

County	Data Category	SCC Level One	SCC Level Two	NO_X	VOC
Lake	EGU	External Combustion Boilers	Electric Generation	24.32	0.33
Lake	EGU	Internal Combustion Engines	Electric Generation	0.31	0.12
Lake	Non-Point	Industrial Processes	Food and Kindred Products: SIC 20		0.05
Lake	Non-Point	Industrial Processes	Oil and Gas Exploration and Production	0.00	0.00
Lake	Non-Point	Miscellaneous Area Sources	Agriculture Production - Crops - as Non-Point	0.00	0.00
Lake	Non-Point	Miscellaneous Area Sources	Other Combustion	0.00	0.00
Lake	Non-Point	Mobile Sources	Marine Vessels, Commercial	0.22	0.01
Lake	Non-Point	Mobile Sources	Railroad Equipment	3.56	0.18
Lake	Non-Point	Solvent Utilization	Dry Cleaning		0.00
Lake	Non-Point	Solvent Utilization	Graphic Arts		0.13
Lake	Non-Point	Solvent Utilization	Miscellaneous Non-industrial: Commercial		0.51
Lake	Non-Point	Solvent Utilization	Miscellaneous Non-industrial: Consumer and Commercial		5.69
Lake	Non-Point	Solvent Utilization	Surface Coating		2.94
Lake	Non-Point	Stationary Source Fuel Combustion	Commercial/Institutional	0.86	0.03
Lake	Non-Point	Stationary Source Fuel Combustion	Industrial	0.28	0.02
Lake	Non-Point	Stationary Source Fuel Combustion	Residential	0.88	0.52
Lake	Non-Point	Storage and Transport	Petroleum and Petroleum Product Storage		2.23
Lake	Non-Point	Storage and Transport	Petroleum and Petroleum Product Transport		0.20
Lake	Non-Point	Waste Disposal, Treatment, and Recovery	Wastewater Treatment		0.03
Lake	Non-Road	Mobile Sources	CNG	0.04	0.00
Lake	Non-Road	Mobile Sources	LPG	0.52	0.14
Lake	Non-Road	Mobile Sources	Off-highway Vehicle Diesel	4.50	0.39

County	Data Category	SCC Level One	SCC Level Two	NO_X	VOC
Lake	Non-Road	Mobile Sources	Off-highway Vehicle Gasoline, 2-Stroke	0.02	0.75
Lake	Non-Road	Mobile Sources	Off-highway Vehicle Gasoline, 4-Stroke	0.54	1.76
Lake	Non-Road	Mobile Sources	Pleasure Craft	2.44	4.50
Lake	Non-Road	Mobile Sources	Railroad Equipment	0.01	0.00
Lake	Point	External Combustion	Space Heaters	0.00	0.00
Lake	Point	External Combustion Boilers	Commercial/Institutional	0.07	0.01
Lake	Point	External Combustion Boilers	Industrial	10.66	0.30
Lake	Point	Industrial Processes	Chemical Manufacturing	0.85	1.48
Lake	Point	Industrial Processes	Cooling Tower		0.01
Lake	Point	Industrial Processes	Fabricated Metal Products	0.02	0.00
Lake	Point	Industrial Processes	Food and Agriculture	0.02	0.34
Lake	Point	Industrial Processes	In-process Fuel Use	6.50	0.20
Lake	Point	Industrial Processes	Mineral Products	5.06	0.09
Lake	Point	Industrial Processes	Miscellaneous Manufacturing Industries	1.59	0.31
Lake	Point	Industrial Processes	Petroleum Industry	6.06	3.66
Lake	Point	Industrial Processes	Primary Metal Production	10.26	5.85
Lake	Point	Industrial Processes	Pulp and Paper and Wood Products	0.00	0.13
Lake	Point	Industrial Processes	Secondary Metal Production	0.05	0.24
Lake	Point	Industrial Processes	Transportation Equipment		0.00
Lake	Point	Internal Combustion Engines	Commercial/Institutional	0.17	0.02
Lake	Point	Internal Combustion Engines	Industrial	1.39	0.07
Lake	Point	Internal Combustion Engines	Off-highway Diesel Engines	0.00	0.00
Lake	Point	Internal Combustion Engines	Railroad Equipment	0.36	0.03
Lake	Point	MACT Source Categories	Miscellaneous Processes (Chemicals)	0.01	0.35
Lake	Point	Mobile Sources	Aircraft	0.01	0.02

County	Data Category	SCC Level One	SCC Level Two	NO_X	VOC
Lake	Point	Mobile Sources	CNG	0.00	0.00
Lake	Point	Mobile Sources	LPG	0.00	0.00
Lake	Point	Mobile Sources	Off-highway Vehicle Diesel	0.00	0.00
Lake	Point	Mobile Sources	Off-highway Vehicle Gasoline, 4-Stroke	0.00	0.00
Lake	Point	Petroleum and Solvent Evaporation			0.02
Lake	Point	Petroleum and Solvent Evaporation	Organic Chemical Storage		0.01
Lake	Point	Petroleum and Solvent Evaporation	Organic Chemical Transportation		0.00
Lake	Point	Petroleum and Solvent Evaporation	Organic Solvent Evaporation		0.01
Lake	Point	Petroleum and Solvent Evaporation	Petroleum Liquids Storage (non-Refinery)	0.01	1.28
Lake	Point	Petroleum and Solvent Evaporation	Petroleum Product Storage at Refineries	0.00	0.73
Lake	Point	Petroleum and Solvent Evaporation	Printing/Publishing		0.00
Lake	Point	Petroleum and Solvent Evaporation	Surface Coating Operations		0.19
Lake	Point	Petroleum and Solvent Evaporation	Transportation and Marketing of Petroleum Products	0.00	0.03
Lake	Point	Waste Disposal	Solid Waste Disposal - Government	0.01	0.01
Lake	Point	Waste Disposal	Solid Waste Disposal - Industrial		0.00
Lake	On-road	Highway Vehicles		17.85	6.92
Porter	EGU	External Combustion Boilers	Electric Generation	5.38	0.18
Porter	EGU	Internal Combustion Engines	Electric Generation	0.15	0.01
Porter	Non-Point	Industrial Processes	Food and Kindred Products: SIC 20		0.02
Porter	Non-Point	Industrial Processes	Oil and Gas Exploration and Production	0.00	0.00
Porter	Non-Point	Miscellaneous Area Sources	Agriculture Production - Crops - as Non-Point	0.00	0.00

County	Data Category	SCC Level One	SCC Level Two	NO_X	VOC
Porter	Non-Point	Miscellaneous Area Sources	Other Combustion	0.00	0.00
Porter	Non-Point	Mobile Sources	Marine Vessels, Commercial	0.21	0.01
Porter	Non-Point	Mobile Sources	Railroad Equipment	2.99	0.15
Porter	Non-Point	Oil and Gas Exploration and Production	Coal Bed Methane Natural Gas	0.00	0.00
Porter	Non-Point	Solvent Utilization	Dry Cleaning		0.00
Porter	Non-Point	Solvent Utilization	Graphic Arts		0.05
Porter	Non-Point	Solvent Utilization	Miscellaneous Non-industrial: Commercial		0.37
Porter	Non-Point	Solvent Utilization	Miscellaneous Non-industrial: Consumer and Commercial		1.89
Porter	Non-Point	Solvent Utilization	Surface Coating		1.46
Porter	Non-Point	Stationary Source Fuel Combustion	Commercial/Institutional	0.23	0.01
Porter	Non-Point	Stationary Source Fuel Combustion	Industrial	0.11	0.01
Porter	Non-Point	Stationary Source Fuel Combustion	Residential	0.27	0.17
Porter	Non-Point	Storage and Transport	Petroleum and Petroleum Product Storage		1.11
Porter	Non-Point	Storage and Transport	Petroleum and Petroleum Product Transport		0.13
Porter	Non-Point	Waste Disposal, Treatment, and Recovery	Open Burning	0.07	0.13
Porter	Non-Point	Waste Disposal, Treatment, and Recovery	Wastewater Treatment		0.01
Porter	Non-Road	Mobile Sources	CNG	0.02	0.00
Porter	Non-Road	Mobile Sources	LPG	0.22	0.06
Porter	Non-Road	Mobile Sources	Off-highway Vehicle Diesel	2.10	0.19
Porter	Non-Road	Mobile Sources	Off-highway Vehicle Gasoline, 2-Stroke	0.02	1.55
Porter	Non-Road	Mobile Sources	Off-highway Vehicle Gasoline, 4-Stroke	0.27	0.99
Porter	Non-Road	Mobile Sources	Pleasure Craft	1.98	3.84
Porter	Non-Road	Mobile Sources	Railroad Equipment	0.01	0.00

County	Data Category	SCC Level One	SCC Level Two	NO_X	VOC
Porter	Point	External Combustion	Space Heaters	0.00	0.00
Porter	Point	External Combustion Boilers	Commercial/Institutional	0.01	0.00
Porter	Point	External Combustion Boilers	Industrial	3.01	0.10
Porter	Point	Industrial Processes	In-process Fuel Use	0.34	0.01
Porter	Point	Industrial Processes	Mineral Products	0.00	0.00
Porter	Point	Industrial Processes	Petroleum Industry		0.00
Porter	Point	Industrial Processes	Primary Metal Production	19.92	1.32
Porter	Point	Industrial Processes	Secondary Metal Production	0.00	0.00
Porter	Point	Internal Combustion Engines	Commercial/Institutional	0.06	0.00
Porter	Point	Internal Combustion Engines	Industrial	0.00	0.00
Porter	Point	Mobile Sources	Aircraft	0.01	0.01
Porter	Point	Mobile Sources	CNG	0.00	0.00
Porter	Point	Mobile Sources	LPG	0.00	0.00
Porter	Point	Mobile Sources	Off-highway Vehicle Diesel	0.00	0.00
Porter	Point	Mobile Sources	Off-highway Vehicle Gasoline, 4-Stroke	0.00	0.00
Porter	Point	Petroleum and Solvent Evaporation	Organic Solvent Evaporation		0.00
Porter	Point	Petroleum and Solvent Evaporation	Petroleum Liquids Storage (non-Refinery)		0.00
Porter	Point	Petroleum and Solvent Evaporation	Surface Coating Operations	0.02	0.22
Porter	Point	Petroleum and Solvent Evaporation	Transportation and Marketing of Petroleum Products		0.00
Porter	On-road	Highway Vehicles		6.85	2.66

Table 4.4 Tons per Ozone Season Day Emissions by SCC

County	Data Category	SCC	NOX	VOC
Lake	EGU	10100222	-	-
Lake	EGU	10100223	14.419	0.162
Lake	EGU	10100226	5.893	0.078
Lake	EGU	10100401	0.001	0.000
Lake	EGU	10100601	4.001	0.086
Lake	EGU	10100602	0.001	0.000
Lake	EGU	10100604	-	-
Lake	EGU	20100101	-	-
Lake	EGU	20100201	0.308	0.119
Lake	EGU	20100202	0.000	0.000
Lake	Non-Point	2102001000	-	-
Lake	Non-Point	2102002000	-	-
Lake	Non-Point	2102004001	0.000	0.000
Lake	Non-Point	2102004002	0.000	0.000
Lake	Non-Point	2102005000	0.000	0.000
Lake	Non-Point	2102006000	0.253	0.014
Lake	Non-Point	2102007000	0.009	0.000
Lake	Non-Point	2102008000	0.012	0.001
Lake	Non-Point	2102011000	0.001	0.000
Lake	Non-Point	2103001000	-	-
Lake	Non-Point	2103002000	-	-
Lake	Non-Point	2103004001	0.009	0.000
Lake	Non-Point	2103004002	0.272	
Lake	Non-Point	2103005000	-	-
Lake	Non-Point	2103006000	0.536	0.030
Lake	Non-Point	2103007000	0.004	0.000
Lake	Non-Point	2103008000	0.034	0.003
Lake	Non-Point	2103011000	0.002	0.000
Lake	Non-Point	2104001000	0.000	0.000
Lake	Non-Point	2104002000	0.000	0.001
Lake	Non-Point	2104004000	0.003	0.000
Lake	Non-Point	2104006000	0.753	0.044
Lake	Non-Point	2104007000	0.059	0.002
Lake	Non-Point	2104008100	0.019	0.135
Lake	Non-Point	2104008210	0.002	0.034
Lake	Non-Point	2104008220	0.000	0.002
Lake	Non-Point	2104008230	0.000	0.001
Lake	Non-Point	2104008310	0.004	0.084
Lake	Non-Point	2104008320	0.001	0.006
Lake	Non-Point	2104008330	0.000	0.003
Lake	Non-Point	2104008400	0.002	0.000
Lake	Non-Point	2104008510	-	-
Lake	Non-Point	2104008610	-	-
Lake	Non-Point	2104008700	0.015	0.112
Lake	Non-Point	2104009000	0.019	0.099

County	Data Category	SCC	NOX	VOC
Lake	Non-Point	2104011000	0.003	0.000
Lake	Non-Point	2280002021	0.198	0.007
Lake	Non-Point	2280002100	0.002	0.000
Lake	Non-Point	2280002200	0.016	0.001
Lake	Non-Point	2280003200		
Lake	Non-Point	2285002006	3.318	0.171
Lake	Non-Point	2285002007	0.243	0.009
Lake	Non-Point	2302002100		0.011
Lake	Non-Point	2302002200		0.032
Lake	Non-Point	2302003000		0.006
Lake	Non-Point	2302003100		0.004
Lake	Non-Point	2302003200		0.000
Lake	Non-Point	2310000220	-	-
Lake	Non-Point	2310000330	-	-
Lake	Non-Point	2310000550		-
Lake	Non-Point	2310000660	-	-
Lake	Non-Point	2310010100	-	-
Lake	Non-Point	2310010200	-	-
Lake	Non-Point	2310010300		-
Lake	Non-Point	2310011000	-	-
Lake	Non-Point	2310011201		-
Lake	Non-Point	2310011501		-
Lake	Non-Point	2310011502		-
Lake	Non-Point	2310011503		-
Lake	Non-Point	2310011505		-
Lake	Non-Point	2310021010	-	-
Lake	Non-Point	2310021030		-
Lake	Non-Point	2310021100	-	-
Lake	Non-Point	2310021202	-	-
Lake	Non-Point	2310021251	-	-
Lake	Non-Point	2310021300		-
Lake	Non-Point	2310021302	-	-
Lake	Non-Point	2310021351	-	-
Lake	Non-Point	2310021400	-	-
Lake	Non-Point	2310021501		-
Lake	Non-Point	2310021502		-
Lake	Non-Point	2310021503		-
Lake	Non-Point	2310021505		-
Lake	Non-Point	2310021506		-
Lake	Non-Point	2310021603	-	-
Lake	Non-Point	2310111100		-
Lake	Non-Point	2310111401		-
Lake	Non-Point	2310121100		-
Lake	Non-Point	2310121401		-
Lake	Non-Point	2310121700	-	-
Lake	Non-Point	2401001000		1.583
Lake	Non-Point	2401005000		0.312

County	Data Category	SCC	NOX	VOC
Lake	Non-Point	2401008000		0.001
Lake	Non-Point	2401015000		0.012
Lake	Non-Point	2401020000		0.240
Lake	Non-Point	2401030000		0.039
Lake	Non-Point	2401055000		0.005
Lake	Non-Point	2401065000		0.000
Lake	Non-Point	2401070000		0.115
Lake	Non-Point	2401085000		0.084
Lake	Non-Point	2401090000		0.100
Lake	Non-Point	2401100000		0.408
Lake	Non-Point	2401200000		0.043
Lake	Non-Point	2420000000		0.003
Lake	Non-Point	2425000000		0.133
Lake	Non-Point	2460100000		1.283
Lake	Non-Point	2460200000		1.216
Lake	Non-Point	2460400000		0.919
Lake	Non-Point	2460500000		0.642
Lake	Non-Point	2460600000		0.385
Lake	Non-Point	2460800000		1.202
Lake	Non-Point	2460900000		0.047
Lake	Non-Point	2461021000		0.014
Lake	Non-Point	2461022000		0.086
Lake	Non-Point	2461850000		0.407
Lake	Non-Point	2501011011		0.213
Lake	Non-Point	2501011012		0.415
Lake	Non-Point	2501011013		0.046
Lake	Non-Point	2501011014		0.017
Lake	Non-Point	2501011015		0.001
Lake	Non-Point	2501012011		0.007
Lake	Non-Point	2501012012		0.013
Lake	Non-Point	2501012013		0.062
Lake	Non-Point	2501012014		0.032
Lake	Non-Point	2501012015		0.002
Lake	Non-Point	2501050120		0.437
Lake	Non-Point	2501055120		0.183
Lake	Non-Point	2501060051		-
Lake	Non-Point	2501060052		0.260
Lake	Non-Point	2501060053		0.188
Lake	Non-Point	2501060201		0.287
Lake	Non-Point	2501080050		0.058
Lake	Non-Point	2501080100		0.003
Lake	Non-Point	2505040120		0.200
Lake	Non-Point	2630020000		0.026
Lake	Non-Point	2801500000	0.000	0.000
Lake	Non-Point	2810060100	0.005	0.000
Lake	Non-Road	2260002006	0.000	0.011
Lake	Non-Road	2260002009	0.000	0.001

County	Data Category	SCC	NOX	VOC
Lake	Non-Road	2260002021	0.000	0.000
Lake	Non-Road	2260002027	0.000	0.000
Lake	Non-Road	2260002039	0.002	0.069
Lake	Non-Road	2260002054	0.000	0.000
Lake	Non-Road	2260003030	0.000	0.000
Lake	Non-Road	2260003040	0.000	0.000
Lake	Non-Road	2260004015	0.000	0.004
Lake	Non-Road	2260004016	0.000	0.006
Lake	Non-Road	2260004020	0.002	0.060
Lake	Non-Road	2260004021	0.003	0.142
Lake	Non-Road	2260004025	0.003	0.074
Lake	Non-Road	2260004026	0.003	0.073
Lake	Non-Road	2260004030	0.002	0.047
Lake	Non-Road	2260004031	0.003	0.072
Lake	Non-Road	2260004035	0.001	0.074
Lake	Non-Road	2260004036	0.001	0.069
Lake	Non-Road	2260004071	0.000	0.000
Lake	Non-Road	2260005035	0.000	0.000
Lake	Non-Road	2260006005	0.000	0.005
Lake	Non-Road	2260006010	0.001	0.039
Lake	Non-Road	2260006015	0.000	0.000
Lake	Non-Road	2260006035	0.000	0.000
Lake	Non-Road	2260007005	0.000	0.001
Lake	Non-Road	2265001050	0.014	0.038
Lake	Non-Road	2265002003	0.000	0.000
Lake	Non-Road	2265002006	0.000	0.000
Lake	Non-Road	2265002009	0.002	0.007
Lake	Non-Road	2265002015	0.001	0.003
Lake	Non-Road	2265002021	0.000	0.001
Lake	Non-Road	2265002024	0.001	0.003
Lake	Non-Road	2265002027	0.000	0.000
Lake	Non-Road	2265002030	0.009	0.018
Lake	Non-Road	2265002033	0.000	0.000
Lake	Non-Road	2265002039	0.005	0.011
Lake	Non-Road	2265002042	0.000	0.001
Lake	Non-Road	2265002045	0.000	0.000
Lake	Non-Road	2265002054	0.000	0.000
Lake	Non-Road	2265002057	0.000	0.000
Lake	Non-Road	2265002060	0.010	0.005
Lake	Non-Road	2265002066	0.006	0.013
Lake	Non-Road	2265002072	0.002	0.001
Lake	Non-Road	2265002078	0.000	0.000
Lake	Non-Road	2265002081	0.001	0.000
Lake	Non-Road	2265003010	0.007	0.005
Lake	Non-Road	2265003020	0.015	0.008
Lake	Non-Road	2265003030	0.002	0.003
Lake	Non-Road	2265003040	0.003	0.012

County	Data Category	SCC	NOX	VOC
Lake	Non-Road	2265003050	0.000	0.000
Lake	Non-Road	2265003060	0.000	0.000
Lake	Non-Road	2265003070	0.000	0.000
Lake	Non-Road	2265004010	0.037	0.339
Lake	Non-Road	2265004011	0.012	0.074
Lake	Non-Road	2265004015	0.003	0.029
Lake	Non-Road	2265004016	0.006	0.045
Lake	Non-Road	2265004025	0.000	0.002
Lake	Non-Road	2265004026	0.000	0.002
Lake	Non-Road	2265004030	0.000	0.003
Lake	Non-Road	2265004031	0.015	0.032
Lake	Non-Road	2265004035	0.004	0.031
Lake	Non-Road	2265004036	0.005	0.019
Lake	Non-Road	2265004040	0.008	0.030
Lake	Non-Road	2265004041	0.001	0.003
Lake	Non-Road	2265004046	0.002	0.005
Lake	Non-Road	2265004051	0.001	0.005
Lake	Non-Road	2265004055	0.107	0.326
Lake	Non-Road	2265004056	0.019	0.041
Lake	Non-Road	2265004066	0.004	0.005
Lake	Non-Road	2265004071	0.058	0.143
Lake	Non-Road	2265004075	0.004	0.020
Lake	Non-Road	2265004076	0.002	0.011
Lake	Non-Road	2265005010	0.000	0.000
Lake	Non-Road	2265005015	0.000	0.000
Lake	Non-Road	2265005020	0.000	0.000
Lake	Non-Road	2265005025	0.001	0.000
Lake	Non-Road	2265005030	0.000	0.000
Lake	Non-Road	2265005035	0.001	0.002
Lake	Non-Road	2265005040	0.001	0.005
Lake	Non-Road	2265005045	0.001	0.001
Lake	Non-Road	2265005055	0.001	0.001
Lake	Non-Road	2265005060	0.000	0.000
Lake	Non-Road	2265006005	0.079	0.217
Lake	Non-Road	2265006010	0.021	0.062
Lake	Non-Road	2265006015	0.012	0.025
Lake	Non-Road	2265006025	0.023	0.043
Lake	Non-Road	2265006030	0.033	0.111
Lake	Non-Road	2265006035	0.001	0.003
Lake	Non-Road	2265007010	0.000	0.000
Lake	Non-Road	2265007015	0.000	0.000
Lake	Non-Road	2267002003	0.000	0.000
Lake	Non-Road	2267002015	0.000	0.000
Lake	Non-Road	2267002021	0.000	0.000
Lake	Non-Road	2267002024	0.000	0.000
Lake	Non-Road	2267002030	0.001	0.000
Lake	Non-Road	2267002033	0.000	0.000

County	Data Category	SCC	NOX	VOC
Lake	Non-Road	2267002039	0.002	0.000
Lake	Non-Road	2267002045	0.000	0.000
Lake	Non-Road	2267002054	0.000	0.000
Lake	Non-Road	2267002057	0.001	0.000
Lake	Non-Road	2267002060	0.001	0.000
Lake	Non-Road	2267002066	0.000	0.000
Lake	Non-Road	2267002072	0.000	0.000
Lake	Non-Road	2267002081	0.001	0.000
Lake	Non-Road	2267003010	0.009	0.003
Lake	Non-Road	2267003020	0.464	0.128
Lake	Non-Road	2267003030	0.002	0.001
Lake	Non-Road	2267003040	0.001	0.000
Lake	Non-Road	2267003050	0.000	0.000
Lake	Non-Road	2267003070	0.001	0.000
Lake	Non-Road	2267004066	0.002	0.000
Lake	Non-Road	2267005055	0.000	0.000
Lake	Non-Road	2267005060	0.000	0.000
Lake	Non-Road	2267006005	0.023	0.005
Lake	Non-Road	2267006010	0.004	0.001
Lake	Non-Road	2267006015	0.004	0.001
Lake	Non-Road	2267006025	0.005	0.001
Lake	Non-Road	2267006030	0.000	0.000
Lake	Non-Road	2267006035	0.000	0.000
Lake	Non-Road	2268002081	0.000	0.000
Lake	Non-Road	2268003020	0.033	0.001
Lake	Non-Road	2268003030	0.000	0.000
Lake	Non-Road	2268003040	0.000	0.000
Lake	Non-Road	2268003060	0.000	0.000
Lake	Non-Road	2268003070	0.000	0.000
Lake	Non-Road	2268005055	0.000	0.000
Lake	Non-Road	2268005060	0.000	0.000
Lake	Non-Road	2268006005	0.007	0.000
Lake	Non-Road	2268006010	0.000	0.000
Lake	Non-Road	2268006015	0.000	0.000
Lake	Non-Road	2268006020	0.002	0.000
Lake	Non-Road	2270002003	0.013	0.001
Lake	Non-Road	2270002006	0.000	0.000
Lake	Non-Road	2270002009	0.001	0.000
Lake	Non-Road	2270002015	0.060	0.005
Lake	Non-Road	2270002018	0.226	0.014
Lake	Non-Road	2270002021	0.007	0.001
Lake	Non-Road	2270002024	0.009	0.001
Lake	Non-Road	2270002027	0.004	0.000
Lake	Non-Road	2270002030	0.039	0.003
Lake	Non-Road	2270002033	0.078	0.006
Lake	Non-Road	2270002036	0.451	0.034
Lake	Non-Road	2270002039	0.007	0.001

County	Data Category	SCC	NOX	VOC
Lake	Non-Road	2270002042	0.000	0.000
Lake	Non-Road	2270002045	0.063	0.004
Lake	Non-Road	2270002048	0.116	0.009
Lake	Non-Road	2270002051	0.408	0.025
Lake	Non-Road	2270002054	0.061	0.004
Lake	Non-Road	2270002057	0.053	0.005
Lake	Non-Road	2270002060	0.526	0.037
Lake	Non-Road	2270002066	0.184	0.035
Lake	Non-Road	2270002069	0.531	0.036
Lake	Non-Road	2270002072	0.070	0.017
Lake	Non-Road	2270002075	0.061	0.004
Lake	Non-Road	2270002078	0.005	0.001
Lake	Non-Road	2270002081	0.057	0.004
Lake	Non-Road	2270003010	0.016	0.004
Lake	Non-Road	2270003020	0.140	0.011
Lake	Non-Road	2270003030	0.074	0.006
Lake	Non-Road	2270003040	0.085	0.007
Lake	Non-Road	2270003050	0.004	0.001
Lake	Non-Road	2270003060	0.170	0.014
Lake	Non-Road	2270003070	0.070	0.006
Lake	Non-Road	2270004031	0.000	0.000
Lake	Non-Road	2270004036	0.001	0.000
Lake	Non-Road	2270004046	0.029	0.003
Lake	Non-Road	2270004056	0.006	0.001
Lake	Non-Road	2270004066	0.043	0.004
Lake	Non-Road	2270004071	0.004	0.000
Lake	Non-Road	2270004076	0.000	0.000
Lake	Non-Road	2270005010	0.000	0.000
Lake	Non-Road	2270005015	0.459	0.042
Lake	Non-Road	2270005020	0.048	0.004
Lake	Non-Road	2270005025	0.000	0.000
Lake	Non-Road	2270005030	0.000	0.000
Lake	Non-Road	2270005035	0.004	0.000
Lake	Non-Road	2270005040	0.000	0.000
Lake	Non-Road	2270005045	0.004	0.000
Lake	Non-Road	2270005055	0.010	0.001
Lake	Non-Road	2270005060	0.005	0.000
Lake	Non-Road	2270006005	0.139	0.017
Lake	Non-Road	2270006010	0.033	0.004
Lake	Non-Road	2270006015	0.076	0.007
Lake	Non-Road	2270006025	0.042	0.012
Lake	Non-Road	2270006030	0.005	0.001
Lake	Non-Road	2270006035	0.003	0.000
Lake	Non-Road	2270007015	0.002	0.000
Lake	Non-Road	2282005010	0.241	3.022
Lake	Non-Road	2282005015	0.052	0.429
Lake	Non-Road	2282010005	1.133	1.001

County	Data Category	SCC	NOX	VOC
Lake	Non-Road	2282020005	1.008	0.045
Lake	Non-Road	2282020010	0.001	0.000
Lake	Non-Road	2285002015	0.011	0.002
Lake	Non-Road	2285004015	0.000	0.000
Lake	Non-Road	2285006015	0.000	0.000
Lake	Point	10200206	-	-
Lake	Point	10200401	0.062	0.000
Lake	Point	10200501	0.042	0.000
Lake	Point	10200601	4.211	0.137
Lake	Point	10200602	0.943	0.049
Lake	Point	10200603	0.089	0.005
Lake	Point	10200701	0.554	0.091
Lake	Point	10200704	3.559	0.000
Lake	Point	10200707	1.203	0.021
Lake	Point	10200799	-	-
Lake	Point	10201002	0.000	0.000
Lake	Point	10300602	0.006	0.000
Lake	Point	10300603	0.001	0.000
Lake	Point	10300799	0.063	0.009
Lake	Point	10500106	0.004	0.000
Lake	Point	10500113	-	-
Lake	Point	20200102	0.012	0.001
Lake	Point	20200107	0.000	0.000
Lake	Point	20200202	0.030	0.001
Lake	Point	20200252	1.293	0.065
Lake	Point	20200253	-	-
Lake	Point	20200254	0.019	0.005
Lake	Point	20200401	0.030	0.001
Lake	Point	20300101	0.173	0.016
Lake	Point	2265008005	0.000	0.000
Lake	Point	2267008005	0.000	0.000
Lake	Point	2268008005	0.000	0.000
Lake	Point	2270008005	0.000	0.000
Lake	Point	2275001000	0.000	0.002
Lake	Point	2275020000	0.007	0.002
Lake	Point	2275050011	0.002	0.005
Lake	Point	2275050012	0.004	0.009
Lake	Point	2275060011	0.000	0.000
Lake	Point	2275060012	0.001	0.001
Lake	Point	2275070000	0.000	0.000
Lake	Point	27000320	0.000	0.000
Lake	Point	28500201	0.356	0.026
Lake	Point	30102320		0.011
Lake	Point	30102322		0.000
Lake	Point	30102399	0.074	0.013
Lake	Point	30103202	0.054	0.003
Lake	Point	30107002	0.001	0.024

County	Data Category	SCC	NOX	VOC
Lake	Point	30115380		-
Lake	Point	30180001		0.028
Lake	Point	30187097		0.000
Lake	Point	30188801		0.002
Lake	Point	30190003	0.558	0.020
Lake	Point	30190023	0.000	0.000
Lake	Point	30190099	0.160	1.378
Lake	Point	30199998		0.001
Lake	Point	30200754	0.025	0.015
Lake	Point	30201401		0.001
Lake	Point	30201403		0.104
Lake	Point	30201410		0.104
Lake	Point	30201412		0.076
Lake	Point	30299998		0.044
Lake	Point	30300302	0.007	0.000
Lake	Point	30300303	0.049	0.008
Lake	Point	30300304	0.004	0.009
Lake	Point	30300305	0.003	0.000
Lake	Point	30300308		0.001
Lake	Point	30300313	0.088	1.020
Lake	Point	30300314		0.000
Lake	Point	30300315		0.581
Lake	Point	30300317	2.626	0.783
Lake	Point	30300399	2.315	0.002
Lake	Point	30300802		0.000
Lake	Point	30300808	0.015	0.001
Lake	Point	30300813	0.639	0.780
Lake	Point	30300823	-	0.028
Lake	Point	30300824		0.051
Lake	Point	30300825	0.414	0.085
Lake	Point	30300904	0.016	
Lake	Point	30300907	0.112	0.010
Lake	Point	30300908	0.001	0.002
Lake	Point	30300912	-	-
Lake	Point	30300913	1.994	0.042
Lake	Point	30300914	0.174	0.000
Lake	Point	30300915	0.008	0.011
Lake	Point	30300916	0.092	0.026
Lake	Point	30300917	0.066	0.017
Lake	Point	30300920	0.006	0.002
Lake	Point	30300922	0.780	0.149
Lake	Point	30300931		0.254
Lake	Point	30300933	-	-
Lake	Point	30300934	-	0.046
Lake	Point	30300935		0.251
Lake	Point	30300936	-	0.027
Lake	Point	30300999	0.768	1.628

County	Data Category	SCC	NOX	VOC
Lake	Point	30301581	0.004	0.000
Lake	Point	30390024	0.033	0.028
Lake	Point	30399999	0.045	0.006
Lake	Point	30400103		0.050
Lake	Point	30400112		0.003
Lake	Point	30400131		0.037
Lake	Point	30400150		0.138
Lake	Point	30400199		0.007
Lake	Point	30402201	0.009	0.006
Lake	Point	30490033	0.042	0.002
Lake	Point	30500204		0.045
Lake	Point	30501604	0.462	0.010
Lake	Point	30501620	4.596	0.025
Lake	Point	30501699		0.001
Lake	Point	30590013	-	-
Lake	Point	30599999		0.012
Lake	Point	30600103	-	-
Lake	Point	30600104	5.550	0.156
Lake	Point	30600201	0.511	0.213
Lake	Point	30600503		0.001
Lake	Point	30600602		0.004
Lake	Point	30600701		1.534
Lake	Point	30600801		0.973
Lake	Point	30600802		0.003
Lake	Point	30600803		0.015
Lake	Point	30600804		-
Lake	Point	30600805		0.758
Lake	Point	30600812		0.001
Lake	Point	30600813		0.000
Lake	Point	30600816		0.001
Lake	Point	30600817		0.000
Lake	Point	30600818		0.001
Lake	Point	30700499	-	0.129
Lake	Point	30988801		0.004
Lake	Point	30990003	0.022	0.000
Lake	Point	30990023	0.000	
Lake	Point	31499999		0.002
Lake	Point	38500101		0.006
Lake	Point	39000499	0.037	0.002
Lake	Point	39000605	0.001	0.000
Lake	Point	39000699	4.290	0.144
Lake	Point	39000701	2.171	0.051
Lake	Point	39000797	-	-
Lake	Point	39900601	0.010	0.001
Lake	Point	39990023	0.022	0.001
Lake	Point	39990024	1.548	0.294
Lake	Point	39999989		0.000

County	Data Category	SCC	NOX	VOC
Lake	Point	39999994		0.010
Lake	Point	39999996	0.011	0.001
Lake	Point	39999999		0.000
Lake	Point	40100251		0.004
Lake	Point	40100296		0.004
Lake	Point	40200101		0.043
Lake	Point	40200201		0.024
Lake	Point	40201301		0.003
Lake	Point	40201303		0.008
Lake	Point	40201801		0.081
Lake	Point	40201803		0.031
Lake	Point	40201805		0.000
Lake	Point	40301016		0.006
Lake	Point	40301017		0.005
Lake	Point	40301018		0.001
Lake	Point	40301020		0.002
Lake	Point	40301021		0.107
Lake	Point	40301097		0.007
Lake	Point	40301099	-	0.001
Lake	Point	40301107		0.241
Lake	Point	40301115		0.003
Lake	Point	40301117		0.026
Lake	Point	40301118		0.000
Lake	Point	40301119		0.030
Lake	Point	40301120		0.034
Lake	Point	40301140		-
Lake	Point	40301145		-
Lake	Point	40301197		0.146
Lake	Point	40301198		0.021
Lake	Point	40301299		0.014
Lake	Point	40388801		0.081
Lake	Point	40399999		-
Lake	Point	40400101		0.000
Lake	Point	40400106		0.016
Lake	Point	40400107		0.000
Lake	Point	40400108		0.000
Lake	Point	40400109		0.001
Lake	Point	40400116		0.117
Lake	Point	40400117		0.001
Lake	Point	40400121		0.008
Lake	Point	40400122		0.018
Lake	Point	40400140		0.061
Lake	Point	40400141		0.058
Lake	Point	40400148		0.065
Lake	Point	40400149		0.039
Lake	Point	40400150	0.005	0.010
Lake	Point	40400151		0.025

County	Data Category	SCC	NOX	VOC
Lake	Point	40400152		0.000
Lake	Point	40400154		0.028
Lake	Point	40400160		0.007
Lake	Point	40400161		0.121
Lake	Point	40400170		0.365
Lake	Point	40400172		0.060
Lake	Point	40400178		0.017
Lake	Point	40400179		0.095
Lake	Point	40400199		0.001
Lake	Point	40400204		-
Lake	Point	40400205		0.025
Lake	Point	40400250		0.000
Lake	Point	40400251		-
Lake	Point	40400260		0.015
Lake	Point	40400261		0.111
Lake	Point	40400301		0.000
Lake	Point	40400302		0.002
Lake	Point	40400304		0.005
Lake	Point	40400306		0.004
Lake	Point	40400316		0.000
Lake	Point	40400322		-
Lake	Point	40500511		0.002
Lake	Point	40600131		-
Lake	Point	40600133	0.000	0.000
Lake	Point	40600134		-
Lake	Point	40600135	-	0.004
Lake	Point	40600140		0.000
Lake	Point	40600141	0.001	0.014
Lake	Point	40600166		0.002
Lake	Point	40600240		-
Lake	Point	40600249		-
Lake	Point	40600251		-
Lake	Point	40688801		0.005
Lake	Point	40700809		0.001
Lake	Point	40700810		0.000
Lake	Point	40714697		0.004
Lake	Point	40714698		0.007
Lake	Point	40715810		0.001
Lake	Point	40799997		0.002
Lake	Point	40899995		0.000
Lake	Point	40899999		0.004
Lake	Point	42500202		0.009
Lake	Point	42500301		0.012
Lake	Point	49000206		0.000
Lake	Point	49000299		0.001
Lake	Point	49099998		0.005
Lake	Point	50100402		0.006

County	Data Category	SCC	NOX	VOC
Lake	Point	50100410	0.009	0.000
Lake	Point	50300506		-
Lake	Point	68445012	0.011	0.348
Lake	On-road	220 – 223	17.85	6.92
Porter	EGU	10100203	5.289	0.181
Porter	EGU	10100601	0.091	0.002
Porter	EGU	10100902		
Porter	EGU	20100101	0.005	0.000
Porter	EGU	20100201	0.144	0.010
Porter	Non-Point	2102001000	-	-
Porter	Non-Point	2102002000	-	-
Porter	Non-Point	2102004001	0.000	0.000
Porter	Non-Point	2102004002	0.000	0.000
Porter	Non-Point	2102005000	0.000	0.000
Porter	Non-Point	2102006000	0.101	0.006
Porter	Non-Point	2102007000	0.004	0.000
Porter	Non-Point	2102008000	0.005	0.000
Porter	Non-Point	2102011000	0.001	0.000
Porter	Non-Point	2103001000	-	-
Porter	Non-Point	2103002000	-	-
Porter	Non-Point	2103004001	0.003	0.000
Porter	Non-Point	2103004002	0.074	
Porter	Non-Point	2103005000	-	-
Porter	Non-Point	2103006000	0.146	0.008
Porter	Non-Point	2103007000	0.001	0.000
Porter	Non-Point	2103008000	0.009	0.001
Porter	Non-Point	2103011000	0.001	0.000
Porter	Non-Point	2104004000	0.001	0.000
Porter	Non-Point	2104006000	0.229	0.013
Porter	Non-Point	2104007000	0.021	0.001
Porter	Non-Point	2104008100	0.006	0.045
Porter	Non-Point	2104008210	0.001	0.011
Porter	Non-Point	2104008220	0.000	0.001
Porter	Non-Point	2104008230	0.000	0.000
Porter	Non-Point	2104008310	0.001	0.028
Porter	Non-Point	2104008320	0.000	0.002
Porter	Non-Point	2104008330	0.000	0.001
Porter	Non-Point	2104008400	0.001	0.000
Porter	Non-Point	2104008510	-	-
Porter	Non-Point	2104008610	-	-
Porter	Non-Point	2104008700	0.005	0.038
Porter	Non-Point	2104009000	0.006	0.033
Porter	Non-Point	2104011000	0.001	0.000
Porter	Non-Point	2280002021	0.184	0.007
Porter	Non-Point	2280002100	0.003	0.000
Porter	Non-Point	2280002200	0.024	0.001
Porter	Non-Point	2280003200		

County	Data Category	SCC	NOX	VOC
Porter	Non-Point	2285002006	2.904	0.148
Porter	Non-Point	2285002007	0.087	0.003
Porter	Non-Point	2302002100		0.003
Porter	Non-Point	2302002200		0.010
Porter	Non-Point	2302003000		0.002
Porter	Non-Point	2302003100		0.001
Porter	Non-Point	2302003200		0.000
Porter	Non-Point	2310000220	-	-
Porter	Non-Point	2310000330	-	-
Porter	Non-Point	2310000550		-
Porter	Non-Point	2310000660	-	-
Porter	Non-Point	2310010100	-	-
Porter	Non-Point	2310010200	-	-
Porter	Non-Point	2310010300		-
Porter	Non-Point	2310011000	-	-
Porter	Non-Point	2310011201		-
Porter	Non-Point	2310011501		-
Porter	Non-Point	2310011502		-
Porter	Non-Point	2310011503		-
Porter	Non-Point	2310011505		-
Porter	Non-Point	2310021010	-	-
Porter	Non-Point	2310021030		-
Porter	Non-Point	2310021100	0.000	0.000
Porter	Non-Point	2310021102	-	-
Porter	Non-Point	2310021202	0.001	0.000
Porter	Non-Point	2310021251	0.000	0.000
Porter	Non-Point	2310021300		0.001
Porter	Non-Point	2310021302	0.002	0.000
Porter	Non-Point	2310021351	0.001	0.000
Porter	Non-Point	2310021400	0.001	0.000
Porter	Non-Point	2310021501		0.000
Porter	Non-Point	2310021502		0.000
Porter	Non-Point	2310021503		0.000
Porter	Non-Point	2310021505		0.001
Porter	Non-Point	2310021506		0.000
Porter	Non-Point	2310021603	-	0.000
Porter	Non-Point	2310023010	-	-
Porter	Non-Point	2310023030		-
Porter	Non-Point	2310023100	-	-
Porter	Non-Point	2310023102	-	-
Porter	Non-Point	2310023202	-	-
Porter	Non-Point	2310023251	-	-
Porter	Non-Point	2310023300		-
Porter	Non-Point	2310023302	-	-
Porter	Non-Point	2310023310		-
Porter	Non-Point	2310023351	-	-
Porter	Non-Point	2310023400	-	-

County	Data Category	SCC	NOX	VOC
Porter	Non-Point	2310023511		-
Porter	Non-Point	2310023512		-
Porter	Non-Point	2310023513		-
Porter	Non-Point	2310023515		-
Porter	Non-Point	2310023516		-
Porter	Non-Point	2310023600	-	-
Porter	Non-Point	2310023603	-	-
Porter	Non-Point	2310023606		-
Porter	Non-Point	2310111100		-
Porter	Non-Point	2310111401		-
Porter	Non-Point	2310121100		-
Porter	Non-Point	2310121401		0.001
Porter	Non-Point	2310121700	-	-
Porter	Non-Point	2401001000		0.525
Porter	Non-Point	2401005000		0.088
Porter	Non-Point	2401008000		0.001
Porter	Non-Point	2401015000		0.003
Porter	Non-Point	2401020000		0.017
Porter	Non-Point	2401025000		0.011
Porter	Non-Point	2401040000		0.580
Porter	Non-Point	2401055000		0.026
Porter	Non-Point	2401065000		0.002
Porter	Non-Point	2401070000		0.040
Porter	Non-Point	2401090000		0.021
Porter	Non-Point	2401100000		0.135
Porter	Non-Point	2401200000		0.014
Porter	Non-Point	2420000000		0.001
Porter	Non-Point	2425000000		0.048
Porter	Non-Point	2460100000		0.425
Porter	Non-Point	2460200000		0.403
Porter	Non-Point	2460400000		0.304
Porter	Non-Point	2460500000		0.213
Porter	Non-Point	2460600000		0.128
Porter	Non-Point	2460800000		0.398
Porter	Non-Point	2460900000		0.016
Porter	Non-Point	2461021000		0.005
Porter	Non-Point	2461022000		0.029
Porter	Non-Point	2461850000		0.341
Porter	Non-Point	2501011011		0.111
Porter	Non-Point	2501011012		0.216
Porter	Non-Point	2501011013		0.024
Porter	Non-Point	2501011014		0.009
Porter	Non-Point	2501011015		0.001
Porter	Non-Point	2501012011		0.004
Porter	Non-Point	2501012012		0.007
Porter	Non-Point	2501012013		0.032
Porter	Non-Point	2501012014		0.017

County	Data Category	SCC	NOX	VOC
Porter	Non-Point	2501012015		0.001
Porter	Non-Point	2501050120		0.278
Porter	Non-Point	2501055120		0.115
Porter	Non-Point	2501060051		-
Porter	Non-Point	2501060052		0.093
Porter	Non-Point	2501060053		0.067
Porter	Non-Point	2501060201		0.102
Porter	Non-Point	2501080050		0.037
Porter	Non-Point	2501080100		0.002
Porter	Non-Point	2505030120		0.007
Porter	Non-Point	2505040120		0.126
Porter	Non-Point	2610000100	0.001	0.003
Porter	Non-Point	2610000400	0.001	0.002
Porter	Non-Point	2610000500	0.037	0.086
Porter	Non-Point	2610030000	0.028	0.039
Porter	Non-Point	2630020000		0.008
Porter	Non-Point	2801500000	0.000	0.000
Porter	Non-Point	2810060100	0.002	0.000
Porter	Non-Road	2260001010	0.004	0.543
Porter	Non-Road	2260001030	0.005	0.630
Porter	Non-Road	2260001060	0.002	0.006
Porter	Non-Road	2260002006	0.000	0.004
Porter	Non-Road	2260002009	0.000	0.000
Porter	Non-Road	2260002021	0.000	0.000
Porter	Non-Road	2260002027	0.000	0.000
Porter	Non-Road	2260002039	0.001	0.026
Porter	Non-Road	2260002054	0.000	0.000
Porter	Non-Road	2260003030	0.000	0.000
Porter	Non-Road	2260003040	0.000	0.000
Porter	Non-Road	2260004015	0.000	0.001
Porter	Non-Road	2260004016	0.000	0.004
Porter	Non-Road	2260004020	0.001	0.018
Porter	Non-Road	2260004021	0.002	0.097
Porter	Non-Road	2260004025	0.001	0.022
Porter	Non-Road	2260004026	0.002	0.050
Porter	Non-Road	2260004030	0.000	0.014
Porter	Non-Road	2260004031	0.002	0.049
Porter	Non-Road	2260004035	0.000	0.023
Porter	Non-Road	2260004036	0.000	0.047
Porter	Non-Road	2260004071	0.000	0.000
Porter	Non-Road	2260005035	0.000	0.000
Porter	Non-Road	2260006005	0.000	0.002
Porter	Non-Road	2260006010	0.001	0.015
Porter	Non-Road	2260006015	0.000	0.000
Porter	Non-Road	2260006035	0.000	0.000
Porter	Non-Road	2260007005	0.000	0.001
Porter	Non-Road	2265001010	0.003	0.021

County	Data Category	SCC	NOX	VOC
Porter	Non-Road	2265001030	0.030	0.238
Porter	Non-Road	2265001050	0.003	0.008
Porter	Non-Road	2265001060	0.002	0.006
Porter	Non-Road	2265002003	0.000	0.000
Porter	Non-Road	2265002006	0.000	0.000
Porter	Non-Road	2265002009	0.001	0.002
Porter	Non-Road	2265002015	0.001	0.001
Porter	Non-Road	2265002021	0.000	0.000
Porter	Non-Road	2265002024	0.000	0.001
Porter	Non-Road	2265002027	0.000	0.000
Porter	Non-Road	2265002030	0.003	0.007
Porter	Non-Road	2265002033	0.000	0.000
Porter	Non-Road	2265002039	0.002	0.004
Porter	Non-Road	2265002042	0.000	0.000
Porter	Non-Road	2265002045	0.000	0.000
Porter	Non-Road	2265002054	0.000	0.000
Porter	Non-Road	2265002057	0.000	0.000
Porter	Non-Road	2265002060	0.004	0.002
Porter	Non-Road	2265002066	0.002	0.005
Porter	Non-Road	2265002072	0.001	0.001
Porter	Non-Road	2265002078	0.000	0.000
Porter	Non-Road	2265002081	0.000	0.000
Porter	Non-Road	2265003010	0.003	0.002
Porter	Non-Road	2265003020	0.006	0.003
Porter	Non-Road	2265003030	0.001	0.001
Porter	Non-Road	2265003040	0.001	0.005
Porter	Non-Road	2265003050	0.000	0.000
Porter	Non-Road	2265003060	0.000	0.000
Porter	Non-Road	2265003070	0.000	0.000
Porter	Non-Road	2265004010	0.011	0.102
Porter	Non-Road	2265004011	0.008	0.051
Porter	Non-Road	2265004015	0.001	0.009
Porter	Non-Road	2265004016	0.004	0.031
Porter	Non-Road	2265004025	0.000	0.001
Porter	Non-Road	2265004026	0.000	0.001
Porter	Non-Road	2265004030	0.000	0.001
Porter	Non-Road	2265004031	0.010	0.022
Porter	Non-Road	2265004035	0.001	0.009
Porter	Non-Road	2265004036	0.003	0.013
Porter	Non-Road	2265004040	0.002	0.009
Porter	Non-Road	2265004041	0.001	0.002
Porter	Non-Road	2265004046	0.001	0.003
Porter	Non-Road	2265004051	0.001	0.004
Porter	Non-Road	2265004055	0.033	0.098
Porter	Non-Road	2265004056	0.013	0.028
Porter	Non-Road	2265004066	0.002	0.003
Porter	Non-Road	2265004071	0.040	0.098

County	Data Category	SCC	NOX	VOC
Porter	Non-Road	2265004075	0.001	0.006
Porter	Non-Road	2265004076	0.001	0.007
Porter	Non-Road	2265005010	0.000	0.000
Porter	Non-Road	2265005015	0.000	0.000
Porter	Non-Road	2265005020	0.000	0.000
Porter	Non-Road	2265005025	0.001	0.000
Porter	Non-Road	2265005030	0.000	0.000
Porter	Non-Road	2265005035	0.001	0.002
Porter	Non-Road	2265005040	0.001	0.005
Porter	Non-Road	2265005045	0.001	0.001
Porter	Non-Road	2265005055	0.001	0.001
Porter	Non-Road	2265005060	0.000	0.000
Porter	Non-Road	2265006005	0.030	0.082
Porter	Non-Road	2265006010	0.008	0.024
Porter	Non-Road	2265006015	0.004	0.010
Porter	Non-Road	2265006025	0.009	0.016
Porter	Non-Road	2265006030	0.012	0.042
Porter	Non-Road	2265006035	0.000	0.001
Porter	Non-Road	2265007010	0.000	0.000
Porter	Non-Road	2265007015	0.000	0.000
Porter	Non-Road	2267001060	0.000	0.000
Porter	Non-Road	2267002003	0.000	0.000
Porter	Non-Road	2267002015	0.000	0.000
Porter	Non-Road	2267002021	0.000	0.000
Porter	Non-Road	2267002024	0.000	0.000
Porter	Non-Road	2267002030	0.000	0.000
Porter	Non-Road	2267002033	0.000	0.000
Porter	Non-Road	2267002039	0.001	0.000
Porter	Non-Road	2267002045	0.000	0.000
Porter	Non-Road	2267002054	0.000	0.000
Porter	Non-Road	2267002057	0.000	0.000
Porter	Non-Road	2267002060	0.000	0.000
Porter	Non-Road	2267002066	0.000	0.000
Porter	Non-Road	2267002072	0.000	0.000
Porter	Non-Road	2267002081	0.000	0.000
Porter	Non-Road	2267003010	0.004	0.001
Porter	Non-Road	2267003020	0.192	0.053
Porter	Non-Road	2267003030	0.001	0.000
Porter	Non-Road	2267003040	0.000	0.000
Porter	Non-Road	2267003050	0.000	0.000
Porter	Non-Road	2267003070	0.000	0.000
Porter	Non-Road	2267004066	0.001	0.000
Porter	Non-Road	2267005055	0.000	0.000
Porter	Non-Road	2267005060	0.000	0.000
Porter	Non-Road	2267006005	0.009	0.002
Porter	Non-Road	2267006010	0.002	0.000
Porter	Non-Road	2267006015	0.001	0.000

County	Data Category	SCC	NOX	VOC
Porter	Non-Road	2267006025	0.002	0.001
Porter	Non-Road	2267006030	0.000	0.000
Porter	Non-Road	2267006035	0.000	0.000
Porter	Non-Road	2268002081	0.000	0.000
Porter	Non-Road	2268003020	0.014	0.000
Porter	Non-Road	2268003030	0.000	0.000
Porter	Non-Road	2268003040	0.000	0.000
Porter	Non-Road	2268003060	0.000	0.000
Porter	Non-Road	2268003070	0.000	0.000
Porter	Non-Road	2268005055	0.000	0.000
Porter	Non-Road	2268005060	0.000	0.000
Porter	Non-Road	2268006005	0.003	0.000
Porter	Non-Road	2268006010	0.000	0.000
Porter	Non-Road	2268006015	0.000	0.000
Porter	Non-Road	2268006020	0.001	0.000
Porter	Non-Road	2270001060	0.005	0.001
Porter	Non-Road	2270002003	0.005	0.000
Porter	Non-Road	2270002006	0.000	0.000
Porter	Non-Road	2270002009	0.000	0.000
Porter	Non-Road	2270002015	0.022	0.002
Porter	Non-Road	2270002018	0.083	0.005
Porter	Non-Road	2270002021	0.003	0.000
Porter	Non-Road	2270002024	0.003	0.000
Porter	Non-Road	2270002027	0.002	0.000
Porter	Non-Road	2270002030	0.014	0.001
Porter	Non-Road	2270002033	0.029	0.002
Porter	Non-Road	2270002036	0.166	0.013
Porter	Non-Road	2270002039	0.002	0.000
Porter	Non-Road	2270002042	0.000	0.000
Porter	Non-Road	2270002045	0.023	0.002
Porter	Non-Road	2270002048	0.043	0.003
Porter	Non-Road	2270002051	0.151	0.009
Porter	Non-Road	2270002054	0.022	0.002
Porter	Non-Road	2270002057	0.020	0.002
Porter	Non-Road	2270002060	0.194	0.014
Porter	Non-Road	2270002066	0.068	0.013
Porter	Non-Road	2270002069	0.196	0.013
Porter	Non-Road	2270002072	0.026	0.006
Porter	Non-Road	2270002075	0.022	0.001
Porter	Non-Road	2270002078	0.002	0.000
Porter	Non-Road	2270002081	0.021	0.001
Porter	Non-Road	2270003010	0.007	0.002
Porter	Non-Road	2270003020	0.058	0.004
Porter	Non-Road	2270003030	0.031	0.002
Porter	Non-Road	2270003040	0.035	0.003
Porter	Non-Road	2270003050	0.002	0.000
Porter	Non-Road	2270003060	0.053	0.004

County	Data Category	SCC	NOX	VOC
Porter	Non-Road	2270003070	0.029	0.002
Porter	Non-Road	2270004031	0.000	0.000
Porter	Non-Road	2270004036	0.001	0.000
Porter	Non-Road	2270004046	0.020	0.002
Porter	Non-Road	2270004056	0.004	0.000
Porter	Non-Road	2270004066	0.029	0.003
Porter	Non-Road	2270004071	0.003	0.000
Porter	Non-Road	2270004076	0.000	0.000
Porter	Non-Road	2270005010	0.000	0.000
Porter	Non-Road	2270005015	0.517	0.048
Porter	Non-Road	2270005020	0.054	0.005
Porter	Non-Road	2270005025	0.000	0.000
Porter	Non-Road	2270005030	0.000	0.000
Porter	Non-Road	2270005035	0.004	0.001
Porter	Non-Road	2270005040	0.000	0.000
Porter	Non-Road	2270005045	0.004	0.000
Porter	Non-Road	2270005055	0.011	0.001
Porter	Non-Road	2270005060	0.006	0.001
Porter	Non-Road	2270006005	0.053	0.006
Porter	Non-Road	2270006010	0.013	0.001
Porter	Non-Road	2270006015	0.029	0.003
Porter	Non-Road	2270006025	0.016	0.005
Porter	Non-Road	2270006030	0.002	0.000
Porter	Non-Road	2270006035	0.001	0.000
Porter	Non-Road	2270007015	0.001	0.000
Porter	Non-Road	2282005010	0.211	2.635
Porter	Non-Road	2282005015	0.046	0.375
Porter	Non-Road	2282010005	0.915	0.794
Porter	Non-Road	2282020005	0.809	0.036
Porter	Non-Road	2282020010	0.001	0.000
Porter	Non-Road	2285002015	0.009	0.002
Porter	Non-Road	2285004015	0.000	0.000
Porter	Non-Road	2285006015	0.000	0.000
Porter	Point	10200401	-	-
Porter	Point	10200502	-	-
Porter	Point	10200601	0.721	0.032
Porter	Point	10200602	0.096	0.005
Porter	Point	10200603	0.018	0.036
Porter	Point	10200704	0.675	
Porter	Point	10200707	1.498	0.022
Porter	Point	10300602	0.005	0.000
Porter	Point	10301002	0.000	0.000
Porter	Point	10500106	0.000	0.000
Porter	Point	20200102	0.000	0.000
Porter	Point	20200401	0.000	0.000
Porter	Point	20300101	0.059	0.005
Porter	Point	2265008005	0.000	0.000

County	Data Category	SCC	NOX	VOC
Porter	Point	2267008005	0.000	0.000
Porter	Point	2268008005	0.000	0.000
Porter	Point	2270008005	0.000	0.000
Porter	Point	2275001000	0.000	0.000
Porter	Point	2275050011	0.002	0.004
Porter	Point	2275050012	0.003	0.007
Porter	Point	2275060011	0.000	0.000
Porter	Point	2275060012	0.000	0.000
Porter	Point	2275070000	0.000	0.000
Porter	Point	30300302	0.002	0.153
Porter	Point	30300303	0.061	0.249
Porter	Point	30300308	0.000	0.019
Porter	Point	30300314	0.000	0.034
Porter	Point	30300315		0.002
Porter	Point	30300317	8.366	0.018
Porter	Point	30300318	1.156	
Porter	Point	30300813	2.395	0.241
Porter	Point	30300825	0.184	
Porter	Point	30300904	0.179	-
Porter	Point	30300920	0.006	
Porter	Point	30300922	0.152	0.207
Porter	Point	30300931		0.279
Porter	Point	30300935		0.007
Porter	Point	30301521		0.005
Porter	Point	30301522	0.374	0.003
Porter	Point	30390001	-	-
Porter	Point	30390002	-	-
Porter	Point	30390003	3.248	0.101
Porter	Point	30390004	1.232	0.007
Porter	Point	30390024	2.562	
Porter	Point	30400768	-	0.000
Porter	Point	30500204		-
Porter	Point	30599999	0.005	0.000
Porter	Point	30600602		0.000
Porter	Point	39000699	0.340	0.015
Porter	Point	40200101		-
Porter	Point	40201001	0.014	0.001
Porter	Point	40201726		-
Porter	Point	40201801		0.002
Porter	Point	40201805		0.003
Porter	Point	40201806		0.002
Porter	Point	40201899		0.104
Porter	Point	40290013	0.005	0.000
Porter	Point	40299998		0.113
Porter	Point	40400301		0.000
Porter	Point	40400302		0.000
Porter	Point	40600140		0.000

County	Data Category	SCC	NOX	VOC
Porter	Point	49099998		0.000
Porter	On-road	220 – 223	6.85	2.66

Table 4.4 Point Source Emissions (Tons per Year)

County	State ID	Name	NOX	VOC
Lake		CALUMETTOWER	38.87	2.78
Lake		COMMUNITY HOSPITAL	0.01	0.01
Lake		EASTCHICAGO	35.96	2.57
Lake		ESCC	0.01	0.01
Lake		Gary/Chicago	3.74	3.90
Lake		GIBSON	2.01	0.15
Lake		Griffith-Merrillville	1.20	2.58
Lake		HOBART	18.67	1.42
Lake		HOBART SKY RANCH	0.21	0.46
Lake		HORSESHOE CASINO	0.01	0.01
Lake		IVANHOE	6.72	0.48
Lake		JOHNSONS STRAWBERRY FARM	0.00	0.01
Lake		KIRK	0.01	0.01
Lake		LOWELL	0.14	0.31
Lake		NIPSCO SOUTHLAKE COMPLEX	0.01	0.01
Lake		NORTHWEST FAMILY HOSP	0.01	0.01
Lake		OSBORN	28.51	2.16
Lake		POLICE	0.01	0.01
Lake		ST ANTHONY	0.01	0.01
Lake		ST MARGARET MERCY	0.01	0.01
Lake		ST MARGARET MERCY HOSPITAL	0.01	0.01
Lake		ST MARY MEDICAL CENTER	0.01	0.01
Lake		SUTTON'S FIELD	0.00	0.01
Lake		WIETBROCK	0.00	0.01
Lake	00003	BP PRODUCTS NORTH AMERICA INC, WHITING R	2,547.75	2,117.57
Lake	00013	RIETER AUTOMOTIVE NORTH AMERICA	5.90	1.20
Lake	00062	CCL Label Inc	9.96	4.20
Lake	00069	ANR PIPELINE NAT GAS_CO-ST. JOHN STATION	481.92	25.53
Lake	00072	MARATHON PIPELINE LLC		69.91
Lake	00076	INEOS USA LLC	7.50	33.17
Lake	00112	CARMEUSE LIME INC	1,687.62	12.74
Lake	00117	NIPSCO DEAN H MITCHELL STATION	0.05	0.00

County	State ID	Name	NOX	VOC
		GARY		
Lake	00118	ARCELORMITTAL PLATE LLCGARY PLATE	16.80	2.15
Lake	00121	US STEEL GARY WORKS	3,028.88	1,142.48
Lake	00133	South Shore Slag LLC contractor of USS	4.17	0.34
Lake	00143	GARY SANITARY LANDFILL	3.27	2.29
Lake	00161	INDUSTRIAL STEEL CONSTRUCTION INC	0.17	15.12
Lake	00171	Oil Technology Inc contractor of USS Ga		0.45
Lake	00172	USS CENTRAL TEAMING COMPANY INC	0.30	0.02
Lake	00173	Mid Continent Coal & Coke contractor of	-	-
Lake	00176	USS BRANDENBURG INDUSTRIAL SERVICE CO	0.08	1.83
Lake	00177	PRAXAIR INC	0.19	0.01
Lake	00201	JUPITER ALUMINUM CORPORATION	21.65	88.83
Lake	00202	Silgan Containers Manufacturing Corpora	3.85	39.00
Lake	00203	CARGILL INC	66.02	130.44
Lake	00204	Armsted Rail Company Inc	9.18	9.21
Lake	00205	BP Products North America Inc Hammond		43.10
Lake	00209	PREMCOR PIPELINE COMPANY		23.52
Lake	00210	STATE LINE ENERGY LLC	2.25	0.16
Lake	00214	EXPLORER PIPELINE COMP		27.02
Lake	00220	Niagara LaSalle Corporation	19.51	2.93
Lake	00227	DOVER CHEMICAL HAMMOND WORKS	7.73	9.38
Lake	00228	HUHTAMAKI FOODSERVICE INC	15.30	47.56
Lake	00229	UNILEVER HPC USA	20.07	1.10
Lake	00231	Marathon Petroleum Company LP		56.79
Lake	00233	EXXONMOBIL OIL CORPORATION		52.77
Lake	00239	BUCKEYE TERMINALS LLC		61.46
Lake	00242	Solvay USA Incorporated	28.11	9.35
Lake	00291	BUCKEYE TERMINALS LLC HARTSDALE STATIO		31.99
Lake	00300	U.S. STEEL - EAST CHICAGO TIN OPERATIONS	14.35	0.79
Lake	00301	Safety Kleen Oil Recovery Company Incor	74.92	6.45
Lake	00307	CITGO PETROLEUM CORP E CHICAGO TRMNL		137.21
Lake	00310	W R GRACE & CO CONN	182.17	1.24
Lake	00316	Indiana Harbor East	4,812.73	1,123.06
Lake	00318	ARCELORMITTAL INDIANA HARBOR LLC	1,600.67	84.03
Lake	00320	BUCKEYE TERMINALS LLC		38.56
Lake	00326	Buckeye Terminals LLC	1.87	46.61

County	State ID	Name	NOX	VOC
Lake	00330	PRAXAIR INC	23.21	1.88
Lake	00333	UNITED STATES GYPSUM COMPANY	17.44	4.71
Lake	00345	POLLUTION CONTROL INDUSTRIES, INC	3.56	3.08
Lake	00356	Beemsterboer Slag Corp contractor of Ar	47.71	3.28
Lake	00358	Harsco Metals Americas contractor of Ar	1.82	1.44
Lake	00367	Harsco Metals - IHE	0.35	0.02
Lake	00369	ISPAT INLAND STEEL OIL TECHNOLOGY INC		0.37
Lake	00375	ISG OIL TECHNOLOGY INC		1.59
Lake	00382	INDIANA HARBOR COKE COMPANY	859.44	1.81
Lake	00407	Avery Dennison MFD	4.50	4.37
Lake	00435	PRAXAIR INC	24.03	3.41
Lake	00448	IRONSIDE ENERGY, LLC	7.80	15.04
Lake	00453	BP Products North America Whiting Busin	0.30	6.84
Lake	00458	ISPAT INLAND LAFARGE NORTH AMERICA	5.56	0.54
Lake	00465	ISPAT INLAND STEEL FRITZ ENTERPRISES	19.31	2.44
Lake	00497	ENBRIDGE ENERGY HARTSDALE GRIFFITH TERM		46.38
Lake	00504	Mid Continent Coal & Coke contractor of	-	-
Lake	00505	AKJ Industries Inc contractor of USS Ga		0.79
Lake	00507	MID CONTINENT COAL & COKE	-	-
Lake	00530	RIETH RILEY CONSTRUCTION CO INC #367		16.49
Lake	00537	Beemsterboer Slag Corporation A Contrac	0.30	0.02
Lake	05057	MID CONTINENT COAL & COKE COMPANY	7.55	0.62
Lake	05224	MID-CONTINENT COAL & COKE	-	-
Lake	05256	U.S. AGGREGATES, INC. (PORTABLE SCREEN	0.03	0.00
Porter		BODIN	0.00	0.00
Porter		BURNS INTL HARBOR	0.01	0.01
Porter		CARLSON FARM	0.00	0.01
Porter		CARLSON FARMS	0.01	0.01
Porter		FLYING M	0.00	0.00
Porter		MIDWEST STEEL	0.01	0.01
Porter		PORTAGE COMMUNITY HOSPITAL	0.01	0.01
Porter		Porter County Muni	1.96	4.19
Porter		PORTER MEMORIAL HOSPITAL	0.01	0.01
Porter		WYCKOFF AIRSTRIP	0.00	0.01
Porter	00001	ArcelorMittal Burns Harbor Inc.	8,289.26	496.75
Porter	00002	NIPSCO BAILLY STATION	0.12	0.00

County	State ID	Name	NOX	VOC
Porter	00005	PRECOAT METALS DIVISION SEQUA COATINGS	7.75	41.16
Porter	00009	U S STEEL MIDWEST PLANT	121.90	5.30
Porter	00021	POWDER PROCESSING & TECHNOLOGY L L C	3.10	0.17
Porter	00024	LEVY CO. - FINISHING/CALUMITE PLANT	1.66	0.09
Porter	00030	REXAM BEVERAGE CAN COMPANY		41.56
Porter	00036	NLMK Indiana	70.01	4.69
Porter	00039	MAGNETICS INTERNATIONAL, INC.	11.35	0.62
Porter	00067	PORTSIDE ENERGY LLC	17.17	3.82
Porter	00074	Oil Technology Inc contractor of Arcelo		0.07
Porter	00076	SMS Mill Services LLC contractor of Ace	-	0.05
Porter	00085	American Oxide Company AMROX	23.70	1.30
Porter	00098	ISG Burns Harbor Inc Indiana Flame Serv	2.00	0.11
Porter	00100	MONOSOL LLC	6.87	14.07
Porter	00104	Tube City IMS LLC contractor of NLMK In	0.02	0.00
Porter	00108	Mid Continent Coal & Coke contractor of	19.03	1.55
Porter	00116	Beemsterboer Slag Corporation a Contrac	0.09	0.01
Porter	00117	Mid Continent Coal and Coke a Contracto	-	-
Porter	00123	Fritz Enterprises Incorporated	2.73	0.22
Porter	05241	RIETH-RILEY CONSTRUCTION CO INC #425	-	-

Table 4.5 Point Source Emissions (Tons per Ozone Season Day)

County	State ID	Name	NOX	VOC
Lake		CALUMETTOWER	0.10584341	0.00757642
Lake		COMMUNITY HOSPITAL	1.6202E-05	3.4809E-05
Lake		EASTCHICAGO	0.09791885	0.00700915
Lake		ESCC	1.6202E-05	3.4809E-05
Lake		Gary/Chicago	0.01017999	0.01062862
Lake		GIBSON	0.00548102	0.00041602
Lake		Griffith-Merrillville	0.00326484	0.00702622
Lake		HOBART	0.05085675	0.00386008
Lake		HOBART SKY RANCH	0.00057756	0.00124774
Lake		HORSESHOE CASINO	1.6202E-05	3.4809E-05
Lake		IVANHOE	0.01829837	0.00130982
Lake		JOHNSONS STRAWBERRY FARM	9.1163E-06	2.1104E-05
Lake		KIRK	1.6202E-05	3.4809E-05
Lake		LOWELL	0.00038454	0.00084258
Lake		NIPSCO SOUTHLAKE COMPLEX	1.6202E-05	3.4809E-05
Lake		NORTHWEST FAMILY HOSP	1.6202E-05	3.4809E-05
Lake		OSBORN	0.07763263	0.0058924
Lake		POLICE	1.6202E-05	3.4809E-05
Lake		ST ANTHONY	1.6202E-05	3.4809E-05
Lake		ST MARGARET MERCY	1.6202E-05	3.4809E-05
Lake		ST MARGARET MERCY HOSPITAL	1.6202E-05	3.4809E-05
Lake		ST MARY MEDICAL CENTER	1.6202E-05	3.4809E-05
Lake		SUTTON'S FIELD	1.0887E-05	2.5204E-05
Lake		WIETBROCK	9.1163E-06	2.1104E-05
Lake	00003	BP PRODUCTS NORTH AMERICA INC, WHITING R	6.89191885	5.78398857
Lake	00013	RIETER AUTOMOTIVE NORTH AMERICA	0.01508617	0.00321605
Lake	00062	CCL Label Inc	0.02712963	0.01145774
Lake	00069	ANR PIPELINE NAT GAS_CO-ST. JOHN STATION	1.3124104	0.06951797
Lake	00072	MARATHON PIPELINE LLC		0.19038674
Lake	00076	INEOS USA LLC	0.0204792	0.08972866
Lake	00112	CARMEUSE LIME INC	4.59591503	0.03470734
Lake	00117	NIPSCO DEAN H MITCHELL STATION GARY	0.00012566	6.6576E-06
Lake	00118	ARCELORMITTAL PLATE LLCGARY PLATE	0.04492975	0.00575529
Lake	00121	US STEEL GARY WORKS	8.26802794	3.1129251
Lake	00133	South Shore Slag LLC contractor of USS	0.01136269	0.00092757
Lake	00143	GARY SANITARY LANDFILL	0.00890523	0.00622821

County	State ID	Name	NOX	VOC
Lake	00161	INDUSTRIAL STEEL CONSTRUCTION INC	0.00046296	0.04219597
Lake	00171	Oil Technology Inc contractor of USS Ga		0.00123267
Lake	00172	USS CENTRAL TEAMING COMPANY INC	0.00083775	6.8379E-05
Lake	00173	Mid Continent Coal & Coke contractor of	0	0
Lake	00176	USS BRANDENBURG INDUSTRIAL SERVICE CO	0.00020697	0.00512626
Lake	00177	PRAXAIR INC	0.00050386	2.8844E-05
Lake	00201	JUPITER ALUMINUM CORPORATION	0.05535856	0.24135275
Lake	00202	Silgan Containers Manufacturing Corpora	0.01048067	0.11226226
Lake	00203	CARGILL INC	0.17822786	0.35517753
Lake	00204	Armsted Rail Company Inc	0.02468496	0.02507119
Lake	00205	BP Products North America Inc Hammond		0.11685132
Lake	00209	PREMCOR PIPELINE COMPANY		0.06392196
Lake	00210	STATE LINE ENERGY LLC	0.00583132	0.00042065
Lake	00214	EXPLORER PIPELINE COMP		0.0735282
Lake	00220	Niagara LaSalle Corporation	0.0528168	0.00795119
Lake	00227	DOVER CHEMICAL HAMMOND WORKS	0.0208394	0.02540499
Lake	00228	HUHTAMAKI FOODSERVICE INC	0.04165387	0.12951806
Lake	00229	UNILEVER HPC USA	0.05421058	0.00298158
Lake	00231	Marathon Petroleum Company LP		0.15454871
Lake	00233	EXXONMOBIL OIL CORPORATION		0.14350671
Lake	00239	BUCKEYE TERMINALS LLC		0.16877271
Lake	00242	Solvay USA Incorporated	0.07801676	0.02570668
Lake	00291	BUCKEYE TERMINALS LLC HARTSDALE STATIO		0.08777831
Lake	00300	U.S. STEEL - EAST CHICAGO TIN OPERATIONS	0.03907952	0.00214937
Lake	00301	Safety Kleen Oil Recovery Company Incor	0.19954588	0.01745207
Lake	00307	CITGO PETROLEUM CORP E CHICAGO TRMNL		0.37352789
Lake	00310	W R GRACE & CO CONN	0.49658737	0.00334841
Lake	00316	Indiana Harbor East	13.1238309	3.08009584
Lake	00318	ARCELORMITTAL INDIANA HARBOR LLC	4.3650472	0.22892805
Lake	00320	BUCKEYE TERMINALS LLC		0.10541111
Lake	00326	Buckeye Terminals LLC	0.00509259	0.12640591
Lake	00330	PRAXAIR INC	0.06344345	0.00512296
Lake	00333	UNITED STATES GYPSUM COMPANY	0.0462917	0.01276268
Lake	00345	POLLUTION CONTROL INDUSTRIES, INC	0.00960544	0.00837521
Lake	00356	Beemsterboer Slag Corp contractor of Ar	0.12993192	0.0089213
Lake	00358	Harsco Metals Americas contractor of Ar	0.00454515	0.00390833
Lake	00367	Harsco Metals - IHE	0.00089494	4.9222E-05

County	State ID	Name	NOX	VOC
Lake	00369	ISPAT INLAND STEEL OIL TECHNOLOGY INC		0.00100618
Lake	00375	ISG OIL TECHNOLOGY INC		0.00434621
Lake	00382	INDIANA HARBOR COKE COMPANY	2.34051771	0.00492808
Lake	00407	Avery Dennison MFD	0.01212978	0.01190204
Lake	00435	PRAXAIR INC	0.06518838	0.00926764
Lake	00448	IRONSIDE ENERGY, LLC	0.02136903	0.04119305
Lake	00453	BP Products North America Whiting Busin	0.00081083	0.01852722
Lake	00458	ISPAT INLAND LAFARGE NORTH AMERICA	0.01513088	0.00148303
Lake	00465	ISPAT INLAND STEEL FRITZ ENTERPRISES	0.05258469	0.00664488
Lake	00497	ENBRIDGE ENERGY HARTSDALE GRIFFITH TERM		0.12622754
Lake	00504	Mid Continent Coal & Coke contractor of	0	0
Lake	00505	AKJ Industries Inc contractor of USS Ga		0.00214325
Lake	00507	MID CONTINENT COAL & COKE	0	0
Lake	00530	RIETH RILEY CONSTRUCTION CO INC #367		0.04492075
Lake	00537	Beemsterboer Slag Corporation A Contrac	0.00083382	6.8067E-05
Lake	05057	MID CONTINENT COAL & COKE COMPANY	0.020561	0.00167824
Lake	05224	MID-CONTINENT COAL & COKE	0	0
Lake	05256	U.S. AGGREGATES, INC. (PORTABLE SCREEN	8.2267E-05	8.0773E-06
Porter		BODIN	8.8508E-08	2.0489E-07
Porter		BURNS INTL HARBOR	1.6202E-05	3.4809E-05
Porter		CARLSON FARM	7.6285E-06	1.766E-05
Porter		CARLSON FARMS	1.6202E-05	3.4809E-05
Porter		FLYING M	8.8508E-08	2.0489E-07
Porter		MIDWEST STEEL	1.6202E-05	3.4809E-05
Porter		PORTAGE COMMUNITY HOSPITAL	1.6202E-05	3.4809E-05
Porter		Porter County Muni	0.00533831	0.01140628
Porter		PORTER MEMORIAL HOSPITAL	1.6202E-05	3.4809E-05
Porter		WYCKOFF AIRSTRIP	8.0648E-06	1.867E-05
Porter	00001	ArcelorMittal Burns Harbor Inc.	22.5735479	1.35601213
Porter	00002	NIPSCO BAILLY STATION	0.00034313	9.6358E-06
Porter	00005	PRECOAT METALS DIVISION SEQUA COATINGS	0.02103491	0.11220272
Porter	00009	U S STEEL MIDWEST PLANT	0.33197685	0.01442402
Porter	00021	POWDER PROCESSING & TECHNOLOGY L L C	0.00838014	0.00045554
Porter	00024	LEVY CO. - FINISHING/CALUMITE PLANT	0.0045207	0.00024864

County	State ID	Name	NOX	VOC
Porter	00030	REXAM BEVERAGE CAN COMPANY		0.11318083
Porter	00036	NLMK Indiana	0.19177585	0.01274827
Porter	00039	MAGNETICS INTERNATIONAL, INC.	0.03059399	0.00168267
Porter	00067	PORTSIDE ENERGY LLC	0.04703761	0.01047507
Porter	00074	Oil Technology Inc contractor of Arcelo		0.00020414
Porter	00076	SMS Mill Services LLC contractor of Ace	0	0.00013247
Porter	00085	American Oxide Company AMROX	0.06388349	0.00351359
Porter	00098	ISG Burns Harbor Inc Indiana Flame Serv	0.00494436	0.00027194
Porter	00100	MONOSOL LLC	0.01756004	0.03596389
Porter	00104	Tube City IMS LLC contractor of NLMK In	5.719E-05	2.0425E-06
Porter	00108	Mid Continent Coal & Coke contractor of	0.05181373	0.00422917
Porter	00116	Beemsterboer Slag Corporation a Contrac	0.00025697	2.0977E-05
Porter	00117	Mid Continent Coal and Coke a Contracto	0	0
Porter	00123	Fritz Enterprises Incorporated	0.00743464	0.00059913
Porter	05241	RIETH-RILEY CONSTRUCTION CO INC #425	0	0

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Appendix D1

2011 Base-Year National Emissions Inventory, version 2 Technical Support Document:

https://www.epa.gov/sites/production/files/2015-10/documents/2011v6_2_2017_2025_emismod_tsd_aug2015.pdf

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Appendix D2

MOVES2014 Input Data and Parameters
Northwest Indiana Regional Planning Commission (NIRPC) Lake, Porter, and LaPorte Counties, Indiana

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MOVES2014 Input Data and Parameters

May 27, 2015

Northwest Indiana Regional Planning Commission (NIRPC)
Lake, Porter and LaPorte Counties

Developed for:
Indiana Department of Transportation

Developed by:
THE CORRADINO GROUP
Engineers • Planners • Program Managers • Environmental Scientists

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1.0 Introduction

This report documents the methods used to create input parameters prior to running a set of MOVES2014 runs for Northwest Indiana Regional Planning Commission (NIRPC) covering the following:

- Lake and Porter Counties 8-hour Ozone Maintenance Area
- Lake and Porter Counties PM 2.5 non-attainment area.
- LaPorte County 8-hour Ozone Maintenance Area

This report contains a discussion of the input settings used in MOVES2014 and the development of the input datasets. These MOVES2014 runs are intended to develop a default set of emission rates that can be used for conformity determination and is part of a statewide effort being conducted by the Indiana Department of Transportation (INDOT) for all participating MPOs or other jurisdictions with air quality conformity needs.

What Has Been Updated?

MOVES Input	Updated?	Notes
Source (Vehicle) Type Population	Yes	*New BMV data*
Vehicle Type VMT (by 13 MOVES Vehicle Types)	Yes	*HourVMTFraction updated using INDOT WIM & ATR data*
Age Distribution (Vehicle Population by Age of Vehicle)	Yes	*New BMV data*
Fuel (AVFT, % Fuel Type/Engine Type by Vehicle Type)	Yes	*New BMV data*
Fuel (all other files)	Yes	*Used MOVES2014 defaults for each county*
Average Speed Distribution (% of VHT in each 5 mph speed bin)	No	*Not Needed for Emission Rate Mode (Dummy Inputs)*
Road Type Distribution (VMT by 5 MOVES Road Types)	No	*Retained inputs from 2012 emission rate development*
Ramp Fraction	No	*Retained inputs from 2012 emission rate development*
Meteorology Data	No	*Retained inputs from 2012 emission rate development*
I/M Program	No	*Retained inputs from 2012 emission rate development*

2.0 Source Type Population

The vehicle populations for light duty vehicles, which include motorcycles, passenger cars, passenger trucks, and light commercial trucks (source types 11, 21, 31, and 32 respectively) were developed from a new vehicle registration dataset provided to INDOT by the Indiana Bureau of Motor Vehicles (BMV) in December of 2014. These are discussed in section 2.1 below. The vehicle populations for heavy duty vehicles, which include trucks and buses (source types 41, 42, 43, 51, 52, 53, 54, 61, and 62 respectively) were developed using procedures recommended in EPA's MOVES guidance. This is discussed in section 2.2 below.

2.1 BMV Vehicle Registration and License Data

A statewide vehicle fleet dataset was provided to the Indiana Department of Transportation (INDOT) from the Indiana Bureau of Motor Vehicles (BMV) in December of 2014. The analysis was performed by the Corradino Group under contract to INDOT. The dataset was processed by BMV and combined attributes of both vehicle title/registration (VIN) and license type.

The raw BMV dataset contained the number of vehicles classified by the combination of:

- Vehicle Type, and
- Vehicle Year, and
- Fuel Type, and
- County

There were approximately 6.67 million VINs in the statewide data set. Out of these, approximately 5.85 million were for On-Road vehicles of interest to this analysis.

BMV Vehicle Type Records Excluded from Further Analysis:

- Low Speed
- Off-Road Vehicle
- RV-Travel Trailer
- Snowmobile
- Special Machinery
- Trailer
- Watercraft

Table 2 shows how the BMV Vehicle Type classifications were cross-mapped to MOVES Source Type ID categories. The vehicle populations for light duty vehicles, which including motorcycles, passenger cars, passenger trucks, and light commercial trucks (source types 11, 21, 31, and 32 respectively) were developed from the 2014 BMV vehicle registration. The vehicle populations for heavy duty vehicles, which include trucks and buses (source types 41, 42, 43, 51, 52, 53, 54, 61, and 62 respectively) used the BMV heavy duty vehicle population as a control total for each county.

Table 2: BMV Data to MOVES2014

BMV Type	MOVES Usage			
	Source Type ID	Source Type Population	Vehicle Age Distribution	AVFT File
MOTORCYCLE	11	X	X	MD
Dealer	21	X	X	X
PASSENGER	21	X	X	X
RV-Truck Camper	31	X	X	X
Truck 7,000	31	X	X	X
Truck 9,000	31	X	X	X
Truck Camper	31	X	X	X
Farm Truck	32	X	X	X
Truck 10,000	32	X	X	X
Truck 11,000	32	X	X	X
City Bus	42	T	MD	MD
Commercial Bus	42	T	MD	MD
Church Bus	43	T	MD	MD
School Bus	43	T	MD	MD
Special Bus	43	T	MD	MD
Recovery Vehicle	52	T	MD	MD
Truck 16,000	52	T	MD	MD
Truck 20,000	52	T	MD	MD
Truck 23,000	52	T	MD	MD
Truck 26,000	52	T	MD	MD
Truck 30,000	52	T	MD	MD
Truck 36,000	53	T	MD	MD
Truck 42,000	53	T	MD	MD
Truck 48,000	53	T	MD	MD
Truck 54,000	53	T	MD	MD
Truck 60,000	53	T	MD	MD
RV	54	T	MD	MD
RV-Motorhome	54	T	MD	MD
Farm Semi Tractor	61	T	MD	MD
Truck 66,000	61	T	MD	MD
Truck 66,000+	61	T	MD	MD
Semi Tractor	62	T	MD	MD
Truck	62	T	MD	MD
SEMI	62	T	MD	MD
Semi	62	T	MD	MD
LOW SPEED	N/A	N/A	N/A	N/A
OFF-ROAD VEHICLE	N/A	N/A	N/A	N/A
RV-Travel Trailer	N/A	N/A	N/A	N/A
SNOWMOBILE	N/A	N/A	N/A	N/A
SPECIAL MACHINERY	N/A	N/A	N/A	N/A
TRAILER	N/A	N/A	N/A	N/A
WATERCRAFT	N/A	N/A	N/A	N/A

Legend	
X	BMV values were used
MD	Moves Defaults used in place of BVM data
T	BMV data used for Heavy Duty Veh. control total applied to MAR method
N/A	Discarded

2.2 Heavy Vehicle Source Types

Vehicle populations for all other source types (buses and heavy vehicles) were derived by applying the Mileage Accumulation Rate (MAR) method documented in EPA's Technical Guidance on the Use of MOVES2010 for Emission Inventory Preparation in State Implementation Plans and Transportation Conformity, Section 3.3 Source Type Population.

Mileage Accumulation Rates

Development of the Mileage Accumulation Rates was done during the previous 2011-2012 emission rate development process facilitated by INDOT. The MARs developed at that time have been carried forward into this update, but have been updated to reconcile with current BMV data related to heavy vehicles. The default MARs were extracted from MOVES by running MOVES for a single pollutant and a single year for all vehicles, fuels, months, days, and hours. The activity output was set to report both distance and population. A ratio of population to vehicle-miles-traveled (VMT) was calculated from these outputs. The ratios were calculated for each source type.

The Northwestern Indiana Regional Planning Commission (NIRPC), which is the metropolitan planning organization (MPO) for Lake and Porter Counties, provided VMT by MOVES road types extracted from their travel demand model's base year. Since the default MARs in MOVES vary by year (but not by location), the MOVES run that was executed to extract the MARs was run for a year consistent with the travel demand model's base year. This resulted in MARs that could be applied directly to the validated VMTs reported by the travel demand model. The travel demand model VMTs were converted into annual VMT and distributed by vehicle types using statewide default VMT distribution factors documented in this report in the section on Default VMT Distributions. The MARs were then applied to the annual vehicle type VMTs. The result was an estimated vehicle population for each source type for the travel demand model's base year. Since the vehicle populations for source types 11, 21, 31, and 32 were developed directly from the vehicle registration data, the population estimates derived for those source types using the MAR method were discarded and the observed data were used instead. As a final step, MAR-derived heavy duty vehicle classes were adjusted proportionally to match heavy duty vehicle population totals for each county from BMV data.

2.3 Forecasting Vehicle Populations by Source Types

Future year vehicle populations were developed base on socioeconomic growth rates for the maintenance area. The MPO provided base year and horizon year population and employment data for the area. Annual growth rates were calculated for population growth and employment growth individually. Population growth rates were then used to grow the light vehicle populations (source types 11, 21, 31, and 32). Employment growth rates were used to grow the heavy vehicle populations (source types 41, 42, 43, 51, 52, 53, 54, 61, and 62). Vehicle populations were calculated in 5 year increments from 2015 to 2045. The county level source type values and forecasts are shown in Tables A-1, A-2, and A-3 in Appendix A. When generating MOVES2014 emission rates the vehicle populations for Lake and Porter Counties are

combined into a single input file. LaPorte County emission rates are developed separately, so the county's vehicle population files are not combined with Lake and Porter county files.

2.4 Vehicle Age Distribution

The vehicle age distributions for MOVES source types 11, 21, 31, and 32 (motorcycles, cars, passenger trucks, and light commercial vehicles respectively) were developed through an analysis of Indiana's 2014 vehicle registration data. The BMV dataset allowed the totals for each model year by vehicle type and county to be assembled into the required MOVES 2014 format. Whereby, the vehicles are classified into one year age bins between 0 and 29 years old, and older vehicles into the 30 years old or more bin.

In keeping with previous practice, vehicle age distributions were only derived for light duty vehicles from the BMV data (source types 11, 21, 31, and 32 from the vehicle registration data). Because of the transient nature of the heavy vehicle classes, MOVES2014 default vehicle age distributions specific to each source types were used. Vehicle age distributions for all source types were kept constant for all future years. The vehicle age distributions for Lake and Porter Counties as a combined area are shown in Appendix A of this report.

3.0 Vehicle Type VMT

As part of the previous 2011-2012 emission rate development effort, INDOT developed a default set of VMT distribution factors by Highway Performance Monitoring System (HPMS) vehicle type and by MOVES road type. The original distribution factors were developed by analyzing four consecutive years of continuous traffic count data ending in 2010 for twenty permanent traffic count stations throughout Indiana. During the current update, the Corradino Group evaluated the latest four years of continuous traffic count data; covering the years 2011, 2012, 2013, and 2014.

The stations were selected to provide a spread of locations corresponding to each of the four MOVES road types. Furthermore, these stations were selected from among sites that were concentrated in nonattainment and maintenance areas. An inventory of the sites used to develop the distributions is shown in Figure 1. Of the available sites, 16 unique Weigh in Motion (WIM) sites and 26 ATR sites were utilized.

The vehicle counts reported at each station were provided by vehicle class. These were aggregated into the six basic HPMS vehicle types: motorcycle, passenger car, light truck, bus, single-unit heavy truck, and combination heavy truck. The distribution of VMT by vehicle type was calculated for each road type by taking each vehicle type's percentage of total traffic.

3.1 Road Type, Daily, and Monthly Distributions

Road Type, Daily and Monthly distribution factors were calculated from INDOT's official count adjustment factors which are more commonly used to develop AADT from raw traffic counts. These factors are based on the set of daily traffic counts collected from all permanent count stations throughout the state. The daily distribution factors determine what percentage of VMT is occurring on weekdays and what percentage is occurring on weekends. The monthly distribution factors determine what percentage of annual VMT is occurring in each month of the year. After comparing results for Daily and Monthly distributions developed using the 2007-2010 data versus the newer 2011-2014 data, the differences were trivial and the previously developed MOVES Daily and Monthly VMT fraction files were retained for use in the MOVES2014 analysis.

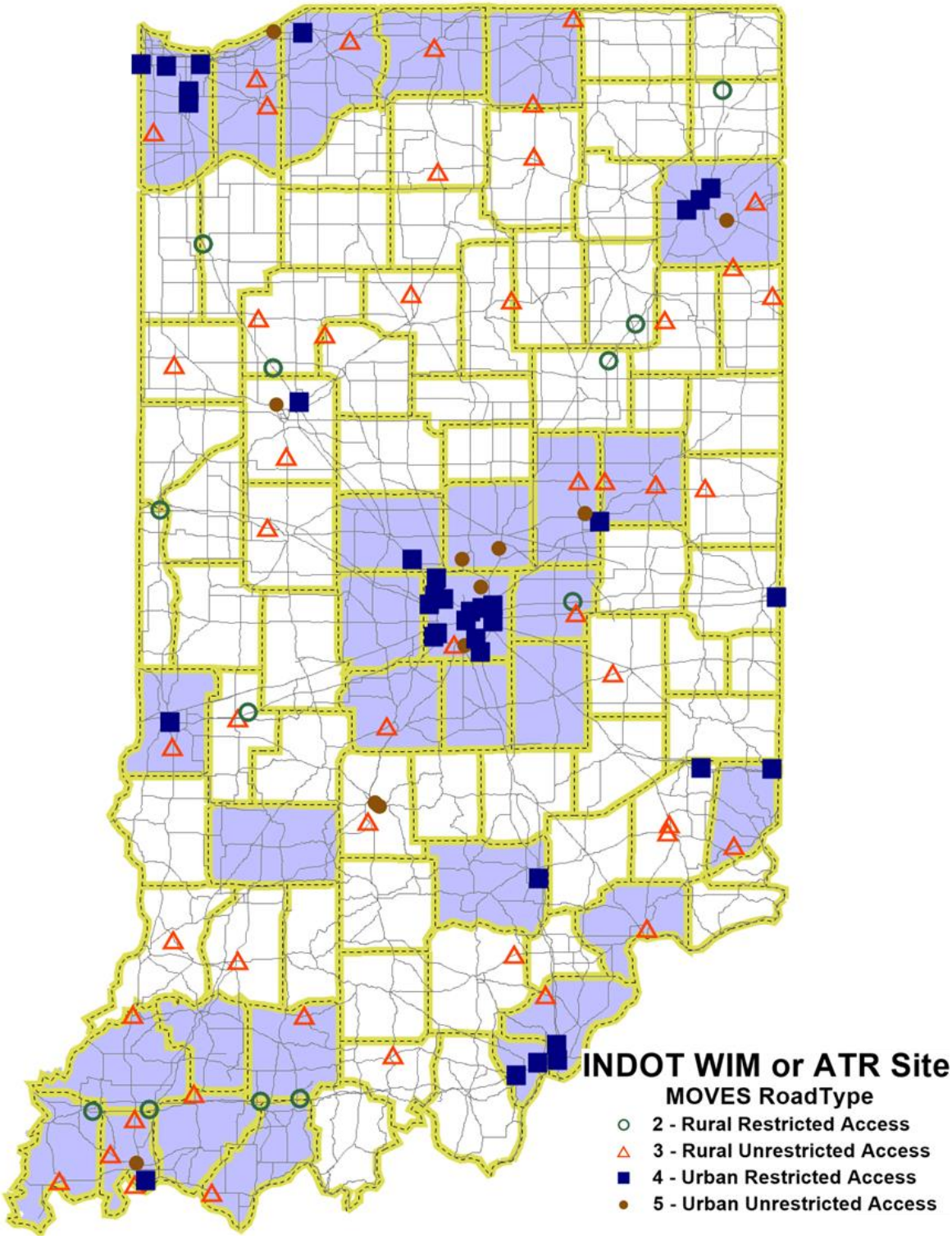
VehTypeVMT - When converting files from MOVES 2010 format to MOVES 2014 format, HPMS Base Year VMT by HPMS Vehicle Type ID was converted so that VMT for HPMS vehicle types 20 and 30 were combined and classified as HPMS vehicle type 25.

The statewide default daily distribution factors are shown in Tables C-1, C-2, and C-4 in Appendix C. The statewide default monthly distribution factors are also shown in Appendix C.

3.2 Hourly Distributions

The same set of forty two permanent traffic count locations discussed in the section on Default VMT Distributions was analyzed to develop a set of hourly distribution factors. These factors were calculated by road type, by HPMS vehicle type. Hourly factors were only calculated for the average weekday. The hourly distribution pattern for each traffic count location was reviewed. Any data that appeared to reflect either an error in the data or an outlier of behavior were removed to prevent bias in the data. The statewide default hourly distribution factors are presented in Appendix B.

Figure 1 - INDOT Continuous Count Locations



4.0 Average Speed Distribution

National MOVES defaults are used for the average speed distribution inputs. Per the *User Guide for MOVES2014*, when running MOVES2014 in emission rate mode, the speed distribution is needed for model setup, but not used in the development of emission rates. The speed distribution for a given scenario is accounted for later in the inventory development process, when the emission rates are applied to detailed travel demand model outputs as part of the INDOT Air Quality Post-Processor.

5.0 Ramp Fraction

The ramp fractions represent the percentage of vehicle-hours-traveled (VHT) for road types 2 (rural restricted access) and 4 (urban restricted access) occurring on the ramps associated with those road types. These fractions were calculated based on the percentage of VHT occurring on ramps reported by the base year travel demand model. These ramp fractions are reported in Appendix C.

6.0 Meteorology Data

The default set of hourly temperatures and hourly relative humidity for use in MOVES 2014 was retained from the MOVES 2010a inputs originally developed using EPA's data converters for changing MOBILE6.2 minimum / maximum temperatures and absolute humidity to the MOVES equivalent formats.

Meteorological data reflect average annual conditions for the PM 2.5 runs. During the previous emission rate update, the MOBILE6.2 meteorological input data for each of the twelve months of the years were averaged together to create average annual temperatures and humidity. These were then passed through the data converters. The data reflect summer conditions for ozone using MOBILE6.2 inputs for July. The MOVES formatted meteorological data for the NIRPC counties of Lake, Porter, and LaPorte as a combined area are presented in Appendix C of this report.

7.0 Fuel

The 2014 version of MOVES has features developed as a result of the EPAct Tier 2 Gasoline Model, impacts of ethanol and other key fuel properties, and incorporates the EPA Sulfur Effects Model. MOVES2014 has a new set of Fuel Supply Regions based on regional fuels, and reduces the number of Fuels in MOVES from approximately 300 to 40. MOVES2014 contains the most current ethanol (E10, E15,E85) and fuel formulation projections based on AEO2014.

Figure 2-Indiana Fuel Supply Regions

Development of the updated NIRPC emission rates uses default MOVES2014 fuel formulation assumptions based on each county's Fuel Supply Region, and defaults to summer conditions.

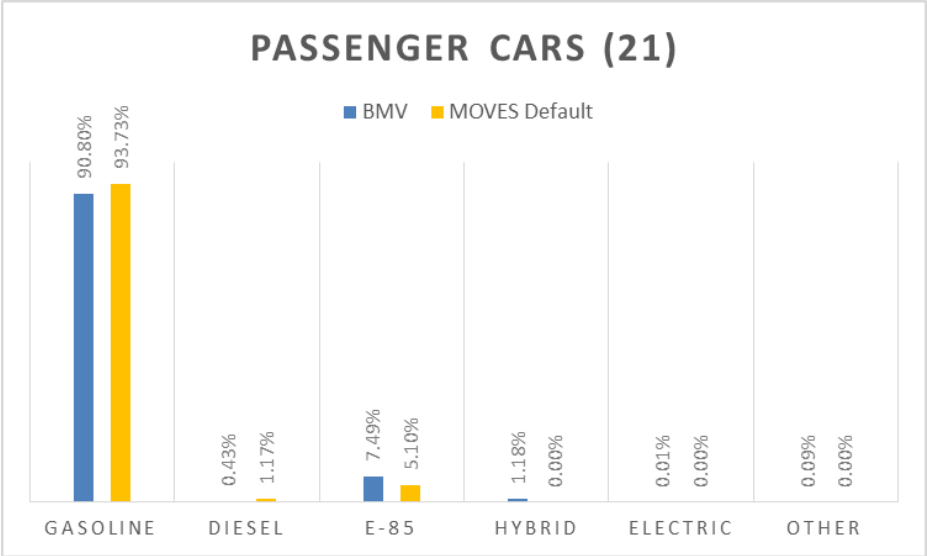
AVFT Assumptions

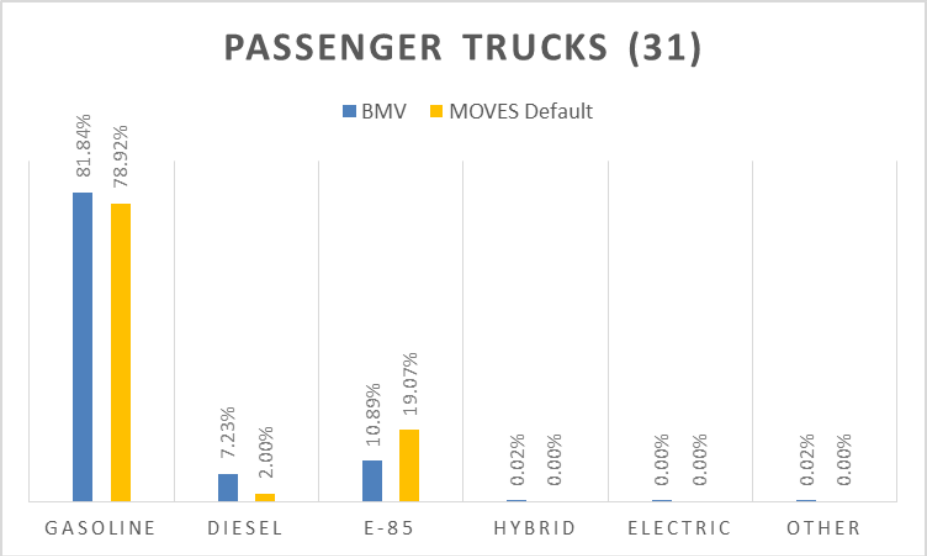
The 2014 BMV fleet mix data allowed the differentiation of vehicle types by fuel types. An evaluation of differences between BMV-derived data and MOVES 2014 defaults was conducted for light duty vehicles. Results showed that in many of the urban counties, the number of hybrid and electric passenger cars is large enough to warrant inclusion in the AVFT input file. The default MOVES file assumes zero hybrid or electric cars statewide. Additionally, BMV data shows a much larger fraction of diesel powered light duty trucks than indicated in the default data. And, the E-85 market share is actually much smaller in Indiana, than assumed in the default data. Statewide results are shown in Table 3, and Figures 3, 4, and 5. Because of these differences, it was decided that the BMV data provides a better set of assumptions for the light duty vehicle classes. Specific AVFT values used for this region are shown in the appendix A.

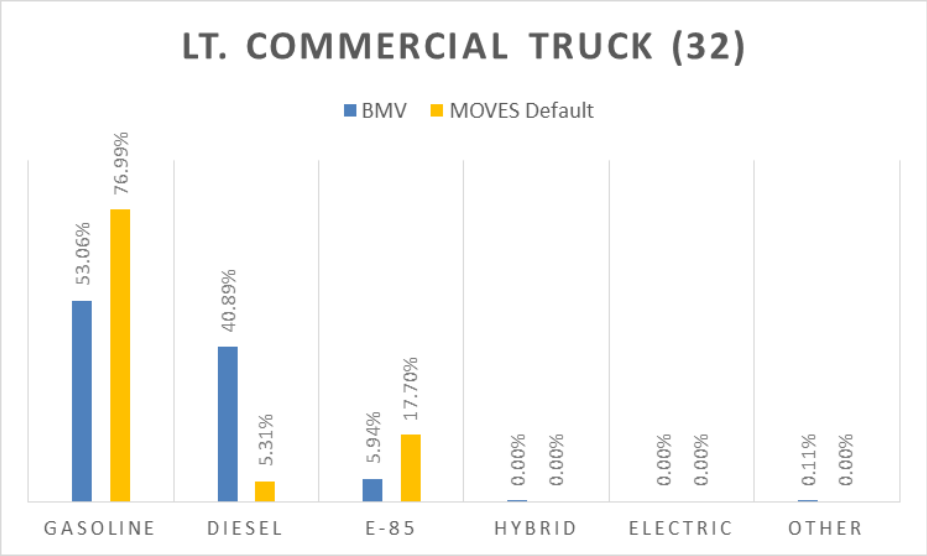
Table 3: Comparison of BMV Data to MOVES2014 AVFT Defaults

Fuel Type and Vehicle Technology									
Statewide			**FuelType -->**	1	2	5	1	9	X
			EngTech -->	1	1	1	12	30	X
Data Source	**Vehicle Type**	**Code**	**Year**	**Gasoline**	**Diesel**	**E-85**	**Hybrid**	**Electric**	**Other**
BMV	Passenger Car	21	2015	90.80%	0.43%	7.49%	1.18%	0.01%	0.09%
BMV	Passenger Truck	31	2015	81.84%	7.23%	10.89%	0.02%	0.00%	0.02%
BMV	Light Commercial Truck	32	2015	53.06%	40.89%	5.94%	0.00%	0.00%	0.11%
MOVES Default	Passenger Car	21	2015	93.73%	1.17%	5.10%	0.00%	0.00%	0.00%
MOVES Default	Passenger Truck	31	2015	78.92%	2.00%	19.07%	0.00%	0.00%	0.00%
MOVES Default	Light Commercial Truck	32	2015	76.99%	5.31%	17.70%	0.00%	0.00%	0.00%

Figures 3, 4, & 5 – BMV vs. MOVES Default for Fuels by Source Type, Statewide







8.0 I/M Program

Vehicles registered in Lake and Porter counties are required to undergo emissions tests and tampering inspections every two years if they were manufactured after 1976 and have a gross vehicle weight rating (GVWR) of 9,000 pounds or less. Vehicles manufactured in odd-numbered years are tested during odd-numbered years and vehicles manufactured in even-numbered years tested during even-numbered years. Exemptions include vehicles manufactured during the four latest model years and antique vehicles. MOVES input coding is consistent with the current local I/M Program in Lake and Porter counties. See Table C-8 in Appendix C.

9.0 Summary of MOVES2014 Runs and Settings

Table 4 –Summary of Lake and Porter Ozone and PM 2.5 Emission Rate Runs

Lake and Porter Runs			
	MOVES Input Item		
	Screen	Ozone	PM 2.5
Description	Description	User Choice	
Scale	Domain/Scale	County	
	Calculation Type	Emission Rate	
Time Spans	Time Aggregation Level	Hour	Hour
	Year	2015, 2020, 2025, 2030, 2035, 2040, 2045	2015, 2020, 2025, 2030, 2035, 2040, 2045
	Months	July	April
	Days	Weekday	Weekday
	Hours	Select All	Select All
Geographic Bounds	Geographic Bounds	Lake County*	Lake County*
Vehicles	Vehicles	All Gas and Diesel Combinations	
Road Type	Road Type	Select All	
Pollutants/ Processes	Pollutants/ Processes	VOC, NOx, and supporting	PM 2.5 with all subspecies; NOx & SO2
General Output	Database Name	LakePorter Ozone	LakePorter PM
	Units	Select "Grams" and "Miles" and "Joules"	
	Activity	Distance, Population	
Output Emissions Detail	On Road	Select "Source Use Type" and "Road Type"	

*Represents both Lake and Porter Counties.

Table 5 –Summary of LaPorte County Ozone Emission Rate Runs

LaPorte Runs MOVES Input Item Screen		Ozone
Description	Description	User Choice
Scale	Domain/Scale	County
	Calculation Type	Emission Rate
Time Spans	Time Aggregation Level	Hour
	Year	2015, 2020, 2025, 2030, 2035, 2040, 2045
	Months	July
	Days	Weekday
	Hours	Select All
Geographic Bounds	Geographic Bounds	LaPorte County
Vehicles	Vehicles	All Gas and Diesel Combinations
Road Type	Road Type	Select All
Pollutants/ Processes	Pollutants/ Processes	VOC, NOx, and supporting
General Output	Database Name	LaPorte Ozone
	Units	Select "Grams" and "Miles" and "Joules"
	Activity	Distance, Population
Output Emissions Detail	On Road	Select "Source Use Type" and "Road Type"

Table 6 –Summary of County Data Manager Inputs

County Data Manager Input	Excel Sheet Tab Name	Ozone	PM 2.5
Source (Vehicle) Type Population	sourceTypeYear	Local Registration for Source Types 11, 21, 31, and 32; Estimated population using default MOVES mileage accumulation rates and local VMT for all other source types. Future year vehicle populations based on population growth rates for source types 11, 21, 31, and 32. Employment growth used for all other source types.	
Vehicle Type VMT (by 13 MOVES Vehicle Types)	HPMSVTypeYear	Statewide default vehicle distributions across road types developed by INDOT using an analysis of permanent count station data from a statewide data set.	
	MonthVMTFraction	Statewide default monthly fractions developed by INDOT using an analysis of permanent count station data from a statewide data set.	
	DayVMTFraction	Statewide default daily fractions developed by INDOT using an analysis of permanent count station data from a statewide data set.	
	HourVMTFraction	Statewide default hourly fractions developed by INDOT using an analysis of permanent count station data from a statewide data set.	
Average Speed Distribution (% of VHT in each 5 mph speed bin)	avgSpeed Distribution	National defaults.	
Road Type Distribution (VMT by 5 MOVES Road Types)	roadType Distribution	Calculated from local VMT data. Use travel demand model base year distributions for all years.	
Age Distribution (Vehicle Population by Age of Vehicle)	sourceTypeAge Distribution	Local age distributions developed from vehicle registration data for source types 11, 21, 31, and 32. Default MOVES age distributions for all other source types.	
Ramp Fraction	RoadType	Based on NIRPC travel demand model.	
Meteorology Data	ZoneMonthHour	MOBILE6 Summer Met Data Converted to MOVES format	MOBILE6 12 month Met Data Converted to MOVES format and averaged to annual meteorology
Fuel (% of Market Share by Fuel Type)	FuelFormulation	MOVES Defaults	
	FuelSupply	County MOVES Defaults for Summer (check if varies among counties)	County MOVES Defaults for annual (check if varies among counties)
I/M Program	IMCoverage	Consistent with current local I/M Program	

MOVES Codes used in the Appendices

Throughout the following appendices, references are made to MOVES2014 codes for two types of data. The values for the source type codes are shown in the Table 7 below. The values for the road type codes are shown in Table 8.

Table 7 - MOVES (vehicle) Source Types

SourceTypeID	Description
11	Motorcycles
21	Passenger Car
31	Passenger Truck
32	Light Commercial Truck
41	Intercity Bus
42	Transit Bus
43	School Bus
51	Refuse Truck
52	Single Unit Short-haul Truck
53	Single Unit Long-haul Truck
54	Motor Home
61	Combination Short-haul Truck
62	Combination Long-haul Truck

Table 8 - MOVES Road Types

RoadTypeID	Description
1	Off Network
2	Rural Restricted Access
3	Rural Unrestricted Access
4	Urban Restricted Access
5	Urban Unrestricted Access

Appendix A – Updated Vehicle Fleet Assumptions Derived from BMV Data

Table A-1: Vehicle Population for Lake County

	Year									
sourceTypeID	2010	2012	2014	2015	2020	2025	2030	2035	2040	2045
11	12,337	12,527	12,718	12,840	13,283	13,742	14,218	14,710	15,218	15,667
21	196,949	199,987	203,025	204,970	212,059	219,394	226,982	234,833	242,954	250,115
31	107,894	109,559	111,223	112,289	116,172	120,190	124,347	128,648	133,098	137,020
32	33,033	33,543	34,052	34,379	35,567	36,797	38,071	39,387	40,750	41,951
41	231	236	240	244	253	264	276	288	299	310
42	123	125	128	130	134	140	146	153	159	164
43	1,584	1,614	1,645	1,666	1,736	1,810	1,886	1,966	2,050	2,121
51	41	42	43	44	45	47	49	51	54	55
52	2,695	2,748	2,800	2,835	2,955	3,079	3,211	3,346	3,488	3,609
53	321	327	334	338	352	367	383	399	416	431
54	616	628	640	648	675	703	734	764	797	824
61	4,978	5,075	5,171	5,236	5,458	5,689	5,930	6,182	6,443	6,668
62	5,680	5,790	5,901	5,975	6,227	6,491	6,767	7,053	7,352	7,608

Table A-2: Vehicle Population for Porter County

	Year									
sourceTypeID	2010	2012	2014	2015	2020	2025	2030	2035	2040	2045
11	6,612	6,714	6,816	6,881	7,119	7,365	7,620	7,882	8,157	8,396
21	69,425	70,496	71,567	72,253	74,752	77,336	80,012	82,779	85,642	88,166
31	45,870	46,578	47,285	47,739	49,389	51,098	52,865	54,694	56,586	58,254
32	14,044	14,260	14,477	14,616	15,121	15,644	16,185	16,745	17,324	17,834
41	58	59	60	61	63	66	68	71	74	76
42	30	31	31	32	33	34	36	37	39	40
43	397	405	413	418	435	454	474	493	514	532
51	13	13	14	14	14	15	15	16	17	17
52	897	915	932	944	983	1,025	1,069	1,114	1,161	1,202
53	106	108	110	112	116	121	126	132	138	142
54	204	208	212	215	223	233	243	254	265	274
61	1,435	1,463	1,490	1,509	1,573	1,639	1,709	1,781	1,856	1,921
62	1,637	1,669	1,700	1,722	1,794	1,870	1,949	2,032	2,118	2,191

Table A-3: Vehicle Population for LaPorte County

	Year									
sourceTypeID	2010	2012	2014	2015	2020	2025	2030	2035	2040	2045
11	2,820	2,846	2,871	2,886	2,947	3,009	3,073	3,138	3,204	3,266
21	50,742	51,200	51,658	51,927	53,025	54,146	55,291	56,461	57,655	58,760
31	33,729	34,034	34,338	34,517	35,247	35,992	36,753	37,530	38,324	39,058
32	10,327	10,420	10,513	10,568	10,791	11,019	11,252	11,490	11,733	11,958
41	48	49	50	50	52	53	55	57	59	61
42	26	26	27	27	28	29	30	31	32	33
43	329	334	339	342	353	365	377	389	402	413
51	13	14	14	14	14	15	15	16	16	17
52	842	854	866	874	902	932	962	993	1,025	1,054
53	100	102	103	104	108	111	115	119	122	126
54	192	195	198	200	206	213	220	227	235	241
61	1,616	1,639	1,662	1,677	1,731	1,788	1,845	1,905	1,967	2,022
62	1,845	1,871	1,897	1,914	1,976	2,040	2,106	2,174	2,244	2,307

Data Sources: SourceTypes 11, 21, 31, and 32 use 2014 Indiana BMV summary statistics for vehicle registration & license plate data by county. All other Source Types use Mileage Accumulation Rate (MAR) method.

Table A-4: Vehicle Age Distribution for Lake County

Vehicle Age Distribution for Lake County

	SourceTypeID												
AgeID	11	21	31	32	41	42	43	51	52	53	54	61	62
0	0.001374	0.008340	0.002494	0.012087	0.064302	0.054574	0.062222	0.049424	0.058853	0.078754	0.061510	0.053563	0.067085
1	0.024433	0.054402	0.040446	0.021072	0.062673	0.053191	0.060645	0.048172	0.057361	0.076759	0.059951	0.053563	0.067085
2	0.035352	0.060541	0.040612	0.031768	0.062485	0.053032	0.060464	0.048028	0.057190	0.076529	0.059772	0.054105	0.067762
3	0.036191	0.058054	0.039864	0.033480	0.062423	0.052979	0.060403	0.047980	0.057133	0.076453	0.059712	0.057558	0.072087
4	0.028403	0.052297	0.046681	0.033907	0.061737	0.052397	0.059740	0.047452	0.056505	0.075612	0.059056	0.056418	0.070660
5	0.026418	0.047029	0.032839	0.016579	0.055917	0.047458	0.054108	0.042979	0.051178	0.068485	0.053488	0.048929	0.061280
6	0.046652	0.041365	0.026146	0.022890	0.046837	0.039751	0.045321	0.035999	0.042867	0.057363	0.044802	0.036603	0.045843
7	0.054974	0.060531	0.048842	0.060327	0.042579	0.036137	0.041201	0.032727	0.038970	0.052148	0.040729	0.034074	0.042676
8	0.065053	0.066109	0.053955	0.042357	0.046827	0.039743	0.045312	0.035992	0.042858	0.057351	0.044793	0.035809	0.044849
9	0.064213	0.059333	0.050796	0.064820	0.053438	0.045353	0.051709	0.041073	0.048909	0.065448	0.051117	0.052629	0.065914
10	0.060854	0.065959	0.058632	0.057867	0.053271	0.045212	0.051548	0.040945	0.048756	0.065244	0.050958	0.062452	0.078217
11	0.048484	0.056773	0.061126	0.060862	0.040795	0.053620	0.041108	0.031356	0.039149	0.052388	0.030273	0.047826	0.059899
12	0.061923	0.058270	0.058715	0.052733	0.033192	0.048994	0.038293	0.025512	0.029448	0.039407	0.046610	0.038913	0.048735
13	0.050928	0.052756	0.058278	0.055942	0.027735	0.045609	0.033375	0.054598	0.031640	0.019477	0.029167	0.032515	0.046299
14	0.044132	0.049197	0.056491	0.055835	0.036429	0.037775	0.043086	0.063266	0.036444	0.019469	0.034780	0.042708	0.046207
15	0.040467	0.042045	0.050110	0.055086	0.028351	0.033295	0.021016	0.039565	0.035789	0.031185	0.033520	0.033237	0.030044
16	0.032832	0.039475	0.050360	0.042037	0.023588	0.027913	0.025367	0.034157	0.025999	0.023020	0.023315	0.027654	0.023052
17	0.025960	0.025040	0.038679	0.033586	0.017564	0.024497	0.020683	0.014635	0.019796	0.005226	0.020675	0.020591	0.013845
18	0.020463	0.025352	0.042566	0.036047	0.020119	0.025048	0.026689	0.040196	0.019374	0.003721	0.015546	0.023587	0.010007
19	0.021303	0.013446	0.023465	0.029522	0.022579	0.036661	0.030145	0.034228	0.022734	0.017578	0.020363	0.026470	0.009860
20	0.015194	0.014957	0.027684	0.025350	0.022641	0.028197	0.017388	0.027008	0.028940	0.018387	0.026594	0.026543	0.009576
21	0.014278	0.008204	0.022758	0.025136	0.021297	0.022441	0.020903	0.036743	0.025509	0.012162	0.023847	0.024967	0.008340
22	0.012827	0.006517	0.015962	0.016793	0.022137	0.020761	0.021174	0.029424	0.021171	0.002921	0.023292	0.025952	0.002197
23	0.007788	0.003712	0.008314	0.011766	0.018775	0.017685	0.018686	0.036737	0.025574	0.000660	0.017364	0.022011	0.002282
24	0.006795	0.003360	0.007732	0.010696	0.016580	0.015344	0.016222	0.019537	0.018134	0.001323	0.018639	0.019438	0.002895
25	0.008017	0.001969	0.004967	0.010375	0.013046	0.011961	0.012527	0.020286	0.010153	0.001326	0.018907	0.015295	0.001496
26	0.006490	0.002357	0.006214	0.012943	0.005207	0.011471	0.004628	0.005879	0.015824	0.000000	0.012386	0.006104	0.000305
27	0.005116	0.001262	0.003679	0.009306	0.004438	0.006255	0.003427	0.006619	0.008243	0.000585	0.007312	0.005202	0.000237
28	0.008628	0.001418	0.002245	0.005883	0.003853	0.002715	0.004023	0.005865	0.007845	0.000422	0.004020	0.004518	0.000754
29	0.010460	0.000880	0.001164	0.007594	0.005020	0.007381	0.003956	0.001470	0.008291	0.000000	0.000530	0.005885	0.000248
30	0.113996	0.019050	0.018186	0.045352	0.004164	0.002547	0.004629	0.002149	0.009364	0.000597	0.006972	0.004882	0.000264

Data Sources: SourceTypes 11, 21, 31, and 32 were obtained directly from Dec. 2014 Indiana BMV summary statistics for vehicle registration & license plate data by county. All other Source Types use MOVES defaults.

Table A-5: Vehicle Age Distribution for Porter County

Vehicle Age Distribution for Porter County

	SourceTypeID												
AgeID	11	21	31	32	41	42	43	51	52	53	54	61	62
0	0.001004	0.009873	0.003318	0.007176	0.064302	0.054574	0.062222	0.049424	0.058853	0.078754	0.061510	0.053563	0.067085
1	0.029682	0.059695	0.043803	0.017096	0.062673	0.053191	0.060645	0.048172	0.057361	0.076759	0.059951	0.053563	0.067085
2	0.034270	0.068999	0.045440	0.026171	0.062485	0.053032	0.060464	0.048028	0.057190	0.076529	0.059772	0.054105	0.067762
3	0.038428	0.070466	0.046016	0.032503	0.062423	0.052979	0.060403	0.047980	0.057133	0.076453	0.059712	0.057558	0.072087
4	0.026670	0.060969	0.047962	0.023217	0.061737	0.052397	0.059740	0.047452	0.056505	0.075612	0.059056	0.056418	0.070660
5	0.029825	0.053993	0.033273	0.017307	0.055917	0.047458	0.054108	0.042979	0.051178	0.068485	0.053488	0.048929	0.061280
6	0.045311	0.045523	0.029335	0.017729	0.046837	0.039751	0.045321	0.035999	0.042867	0.057363	0.044802	0.036603	0.045843
7	0.054058	0.065727	0.052741	0.044322	0.042579	0.036137	0.041201	0.032727	0.038970	0.052148	0.040729	0.034074	0.042676
8	0.062661	0.068834	0.058493	0.047699	0.046827	0.039743	0.045312	0.035992	0.042858	0.057351	0.044793	0.035809	0.044849
9	0.064812	0.058347	0.052830	0.054031	0.053438	0.045353	0.051709	0.041073	0.048909	0.065448	0.051117	0.052629	0.065914
10	0.056352	0.064049	0.063316	0.050232	0.053271	0.045212	0.051548	0.040945	0.048756	0.065244	0.050958	0.062452	0.078217
11	0.047892	0.056037	0.061856	0.059519	0.040795	0.053620	0.041108	0.031356	0.039149	0.052388	0.030273	0.047826	0.059899
12	0.062518	0.053003	0.060484	0.049388	0.033192	0.048994	0.038293	0.025512	0.029448	0.039407	0.046610	0.038913	0.048735
13	0.050473	0.046128	0.055750	0.049599	0.027735	0.045609	0.033375	0.054598	0.031640	0.019477	0.029167	0.032515	0.046299
14	0.040436	0.041416	0.051900	0.054031	0.036429	0.037775	0.043086	0.063266	0.036444	0.019469	0.034780	0.042708	0.046207
15	0.029682	0.035467	0.047255	0.058041	0.028351	0.033295	0.021016	0.039565	0.035789	0.031185	0.033520	0.033237	0.030044
16	0.032836	0.032341	0.047299	0.047066	0.023588	0.027913	0.025367	0.034157	0.025999	0.023020	0.023315	0.027654	0.023052
17	0.024089	0.019966	0.033583	0.033347	0.017564	0.024497	0.020683	0.014635	0.019796	0.005226	0.020675	0.020591	0.013845
18	0.020648	0.019324	0.040175	0.038413	0.020119	0.025048	0.026689	0.040196	0.019374	0.003721	0.015546	0.023587	0.010007
19	0.019644	0.010459	0.020486	0.030393	0.022579	0.036661	0.030145	0.034228	0.022734	0.017578	0.020363	0.026470	0.009860
20	0.018497	0.011541	0.024070	0.037358	0.022641	0.028197	0.017388	0.027008	0.028940	0.018387	0.026594	0.026543	0.009576
21	0.013192	0.006087	0.018052	0.028704	0.021297	0.022441	0.020903	0.036743	0.025509	0.012162	0.023847	0.024967	0.008340
22	0.013479	0.005051	0.012920	0.023639	0.022137	0.020761	0.021174	0.029424	0.021171	0.002921	0.023292	0.025952	0.002197
23	0.008603	0.003163	0.006770	0.012241	0.018775	0.017685	0.018686	0.036737	0.025574	0.000660	0.017364	0.022011	0.002282
24	0.007886	0.002906	0.006991	0.011397	0.016580	0.015344	0.016222	0.019537	0.018134	0.001323	0.018639	0.019438	0.002895
25	0.007456	0.001815	0.004115	0.015407	0.013046	0.011961	0.012527	0.020286	0.010153	0.001326	0.018907	0.015295	0.001496
26	0.006883	0.001971	0.004425	0.013719	0.005207	0.011471	0.004628	0.005879	0.015824	0.000000	0.012386	0.006104	0.000305
27	0.006453	0.001146	0.002832	0.011397	0.004438	0.006255	0.003427	0.006619	0.008243	0.000585	0.007312	0.005202	0.000237
28	0.007169	0.001274	0.001770	0.005910	0.003853	0.002715	0.004023	0.005865	0.007845	0.000422	0.004020	0.004518	0.000754
29	0.011758	0.000843	0.001150	0.008020	0.005020	0.007381	0.003956	0.001470	0.008291	0.000000	0.000530	0.005885	0.000248
30	0.127330	0.023586	0.021592	0.074926	0.004164	0.002547	0.004629	0.002149	0.009364	0.000597	0.006972	0.004882	0.000264

Data Sources: SourceTypes 11, 21, 31, and 32 were obtained directly from Dec. 2014 Indiana BMV summary statistics for vehicle registration & license plate data by county. All other Source Types use MOVES defaults.

Table A-6: Vehicle Age Distribution for LaPorte County

Vehicle Age Distribution for LaPorte County

	SourceTypeID												
AgeID	11	21	31	32	41	42	43	51	52	53	54	61	62
0	0.001111	0.005958	0.002961	0.010617	0.064302	0.054574	0.062222	0.049424	0.058853	0.078754	0.061510	0.053563	0.067085
1	0.020894	0.037845	0.025235	0.022561	0.062673	0.053191	0.060645	0.048172	0.057361	0.076759	0.059951	0.053563	0.067085
2	0.024228	0.047465	0.026829	0.030524	0.062485	0.053032	0.060464	0.048028	0.057190	0.076529	0.059772	0.054105	0.067762
3	0.033785	0.049478	0.030154	0.036496	0.062423	0.052979	0.060403	0.047980	0.057133	0.076453	0.059712	0.057558	0.072087
4	0.026006	0.046586	0.035574	0.041141	0.061737	0.052397	0.059740	0.047452	0.056505	0.075612	0.059056	0.056418	0.070660
5	0.021116	0.041844	0.026419	0.017253	0.055917	0.047458	0.054108	0.042979	0.051178	0.068485	0.053488	0.048929	0.061280
6	0.041565	0.034521	0.019450	0.016589	0.046837	0.039751	0.045321	0.035999	0.042867	0.057363	0.044802	0.036603	0.045843
7	0.052456	0.054490	0.040494	0.059721	0.042579	0.036137	0.041201	0.032727	0.038970	0.052148	0.040729	0.034074	0.042676
8	0.055568	0.057422	0.042999	0.043796	0.046827	0.039743	0.045312	0.035992	0.042858	0.057351	0.044793	0.035809	0.044849
9	0.071127	0.057247	0.045686	0.055740	0.053438	0.045353	0.051709	0.041073	0.048909	0.065448	0.051117	0.052629	0.065914
10	0.058902	0.063908	0.052610	0.036496	0.053271	0.045212	0.051548	0.040945	0.048756	0.065244	0.050958	0.062452	0.078217
11	0.052901	0.059922	0.059215	0.049104	0.040795	0.053620	0.041108	0.031356	0.039149	0.052388	0.030273	0.047826	0.059899
12	0.065570	0.058165	0.054887	0.024552	0.033192	0.048994	0.038293	0.025512	0.029448	0.039407	0.046610	0.038913	0.048735
13	0.054679	0.059354	0.058531	0.040478	0.027735	0.045609	0.033375	0.054598	0.031640	0.019477	0.029167	0.032515	0.046299
14	0.043565	0.050802	0.055434	0.044459	0.036429	0.037775	0.043086	0.063266	0.036444	0.019469	0.034780	0.042708	0.046207
15	0.040009	0.050951	0.059169	0.035833	0.028351	0.033295	0.021016	0.039565	0.035789	0.031185	0.033520	0.033237	0.030044
16	0.029562	0.042128	0.052656	0.045123	0.023588	0.027913	0.025367	0.034157	0.025999	0.023020	0.023315	0.027654	0.023052
17	0.028006	0.032737	0.049148	0.027870	0.017564	0.024497	0.020683	0.014635	0.019796	0.005226	0.020675	0.020591	0.013845
18	0.021338	0.029279	0.045914	0.028534	0.020119	0.025048	0.026689	0.040196	0.019374	0.003721	0.015546	0.023587	0.010007
19	0.023783	0.021375	0.033798	0.018580	0.022579	0.036661	0.030145	0.034228	0.022734	0.017578	0.020363	0.026470	0.009860
20	0.013336	0.018429	0.035984	0.037160	0.022641	0.028197	0.017388	0.027008	0.028940	0.018387	0.026594	0.026543	0.009576
21	0.013114	0.012363	0.032204	0.016589	0.021297	0.022441	0.020903	0.036743	0.025509	0.012162	0.023847	0.024967	0.008340
22	0.014225	0.009242	0.020862	0.021898	0.022137	0.020761	0.021174	0.029424	0.021171	0.002921	0.023292	0.025952	0.002197
23	0.008224	0.006377	0.014394	0.014599	0.018775	0.017685	0.018686	0.036737	0.025574	0.000660	0.017364	0.022011	0.002282
24	0.007557	0.005175	0.009429	0.009290	0.016580	0.015344	0.016222	0.019537	0.018134	0.001323	0.018639	0.019438	0.002895
25	0.006446	0.003932	0.009839	0.015926	0.013046	0.011961	0.012527	0.020286	0.010153	0.001326	0.018907	0.015295	0.001496
26	0.006890	0.003797	0.009930	0.015926	0.005207	0.011471	0.004628	0.005879	0.015824	0.000000	0.012386	0.006104	0.000305
27	0.006446	0.002756	0.007197	0.015926	0.004438	0.006255	0.003427	0.006619	0.008243	0.000585	0.007312	0.005202	0.000237
28	0.010002	0.002351	0.005147	0.007299	0.003853	0.002715	0.004023	0.005865	0.007845	0.000422	0.004020	0.004518	0.000754
29	0.016893	0.002283	0.004054	0.007963	0.005020	0.007381	0.003956	0.001470	0.008291	0.000000	0.000530	0.005885	0.000248
30	0.130696	0.031819	0.033798	0.151958	0.004164	0.002547	0.004629	0.002149	0.009364	0.000597	0.006972	0.004882	0.000264

Data Sources: SourceTypes 11, 21, 31, and 32 were obtained directly from Dec. 2014 Indiana BMV summary statistics for vehicle registration & license plate data by county. All other Source Types use MOVES defaults.

Table A-7: AVFT percentages for Light Duty Vehicles

Fuel Type and Vehicle Technology									
Lake, Porter, and LaPorte Counties			FuelType -->	1	2	5	1	9	X
			engTech -->	1	1	1	12	30	X
Data Source	Vehicle Type	Code	Year	Gasoline	Diesel	E-85	Hybrid	Electric	Other
BMV	Passenger Car	21	2015	90.55%	0.38%	7.93%	1.02%	0.02%	0.11%
BMV	Passenger Truck	31	2015	81.89%	4.19%	13.87%	0.01%	0.00%	0.04%
BMV	Light Commercial Truck	32	2015	68.26%	24.96%	6.73%	0.01%	0.00%	0.04%

Appendix B – Updated Hourly VMT Fractions Derived from INDOT Data

Table B-1: Hourly VMT Fraction: RoadType 1, Off Network

	SourceTypeID												
Hr	11	21	31	32	41	42	43	51	52	53	54	61	62
1	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
2	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
3	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
4	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
5	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
6	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
7	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046
8	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
9	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061
10	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
11	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
12	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054
13	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058
14	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058
15	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062
16	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071
17	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077
18	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077	0.077
19	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060
20	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044
21	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
22	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
23	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
24	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018

- RoadType1 uses default values

Table B-2: Hourly VMT Fraction: RoadType 2, Rural Restricted Access

	SourceTypeID												
Hr	11	21	31	32	41	42	43	51	52	53	54	61	62
1	0.017	0.010	0.008	0.008	0.017	0.017	0.017	0.010	0.010	0.007	0.007	0.038	0.027
2	0.012	0.006	0.005	0.005	0.019	0.019	0.019	0.008	0.008	0.010	0.010	0.019	0.024
3	0.010	0.004	0.004	0.004	0.026	0.026	0.026	0.008	0.008	0.006	0.006	0.023	0.025
4	0.010	0.004	0.004	0.004	0.019	0.019	0.019	0.009	0.009	0.008	0.008	0.036	0.023
5	0.010	0.006	0.007	0.007	0.033	0.033	0.033	0.012	0.012	0.013	0.013	0.025	0.026
6	0.012	0.016	0.021	0.021	0.036	0.036	0.036	0.032	0.032	0.025	0.025	0.028	0.031
7	0.028	0.035	0.042	0.042	0.064	0.064	0.064	0.065	0.065	0.046	0.046	0.039	0.036
8	0.052	0.050	0.049	0.049	0.044	0.044	0.044	0.073	0.073	0.056	0.056	0.047	0.037
9	0.055	0.046	0.048	0.048	0.060	0.060	0.060	0.056	0.056	0.057	0.057	0.048	0.041
10	0.055	0.046	0.049	0.049	0.052	0.052	0.052	0.050	0.050	0.058	0.058	0.043	0.050
11	0.055	0.053	0.057	0.057	0.067	0.067	0.067	0.051	0.051	0.060	0.060	0.061	0.056
12	0.051	0.058	0.061	0.061	0.057	0.057	0.057	0.049	0.049	0.060	0.060	0.065	0.061
13	0.059	0.059	0.063	0.063	0.074	0.074	0.074	0.053	0.053	0.069	0.069	0.063	0.062
14	0.060	0.061	0.062	0.062	0.050	0.050	0.050	0.052	0.052	0.063	0.063	0.057	0.059
15	0.064	0.064	0.066	0.066	0.052	0.052	0.052	0.055	0.055	0.065	0.065	0.048	0.057
16	0.064	0.074	0.074	0.074	0.075	0.075	0.075	0.063	0.063	0.073	0.073	0.051	0.057
17	0.069	0.084	0.083	0.083	0.071	0.071	0.071	0.075	0.075	0.073	0.073	0.051	0.055
18	0.069	0.090	0.083	0.083	0.036	0.036	0.036	0.076	0.076	0.066	0.066	0.041	0.049
19	0.066	0.073	0.066	0.066	0.026	0.026	0.026	0.065	0.065	0.053	0.053	0.032	0.043
20	0.059	0.052	0.049	0.049	0.034	0.034	0.034	0.046	0.046	0.043	0.043	0.033	0.038
21	0.038	0.041	0.037	0.037	0.030	0.030	0.030	0.034	0.034	0.036	0.036	0.034	0.035
22	0.036	0.031	0.028	0.028	0.024	0.024	0.024	0.024	0.024	0.023	0.023	0.033	0.040
23	0.025	0.023	0.021	0.021	0.020	0.020	0.020	0.020	0.020	0.016	0.016	0.047	0.036
24	0.023	0.015	0.013	0.013	0.014	0.014	0.014	0.014	0.014	0.013	0.013	0.038	0.033

Source: INDOT Selected Weigh in Motion and ATR site data

Table B-3: Hourly VMT Fraction: RoadType 3, Rural Unrestricted Access

	SourceTypeID												
Hr	11	21	31	32	41	42	43	51	52	53	54	61	62
1	0.009	0.005	0.005	0.005	0.002	0.002	0.002	0.003	0.003	0.005	0.005	0.010	0.006
2	0.005	0.003	0.002	0.002	0.002	0.002	0.002	0.020	0.020	0.007	0.007	0.007	0.004
3	0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.014	0.014	0.007	0.007	0.005	0.003
4	0.004	0.004	0.003	0.003	0.002	0.002	0.002	0.008	0.008	0.008	0.008	0.005	0.004
5	0.018	0.010	0.008	0.008	0.004	0.004	0.004	0.003	0.003	0.011	0.011	0.009	0.009
6	0.016	0.017	0.023	0.023	0.015	0.015	0.015	0.034	0.034	0.030	0.030	0.021	0.021
7	0.009	0.023	0.032	0.032	0.025	0.025	0.025	0.062	0.062	0.063	0.063	0.033	0.033
8	0.009	0.040	0.044	0.044	0.088	0.088	0.088	0.096	0.096	0.051	0.051	0.038	0.046
9	0.036	0.044	0.050	0.050	0.077	0.077	0.077	0.073	0.073	0.047	0.047	0.047	0.044
10	0.018	0.055	0.066	0.066	0.053	0.053	0.053	0.084	0.084	0.072	0.072	0.058	0.054
11	0.027	0.065	0.074	0.074	0.134	0.134	0.134	0.073	0.073	0.072	0.072	0.067	0.067
12	0.091	0.075	0.088	0.088	0.108	0.108	0.108	0.107	0.107	0.083	0.083	0.069	0.077
13	0.118	0.077	0.084	0.084	0.050	0.050	0.050	0.067	0.067	0.076	0.076	0.071	0.079
14	0.132	0.075	0.071	0.071	0.093	0.093	0.093	0.062	0.062	0.065	0.065	0.072	0.079
15	0.146	0.076	0.072	0.072	0.105	0.105	0.105	0.076	0.076	0.049	0.049	0.072	0.083
16	0.036	0.086	0.085	0.085	0.015	0.015	0.015	0.059	0.059	0.050	0.050	0.065	0.088
17	0.064	0.089	0.081	0.081	0.066	0.066	0.066	0.076	0.076	0.042	0.042	0.065	0.085
18	0.046	0.083	0.071	0.071	0.034	0.034	0.034	0.037	0.037	0.055	0.055	0.074	0.072
19	0.073	0.056	0.053	0.053	0.056	0.056	0.056	0.011	0.011	0.063	0.063	0.068	0.049
20	0.046	0.041	0.034	0.034	0.031	0.031	0.031	0.008	0.008	0.055	0.055	0.052	0.034
21	0.027	0.028	0.023	0.023	0.005	0.005	0.005	0.008	0.008	0.037	0.037	0.037	0.025
22	0.028	0.022	0.014	0.014	0.028	0.028	0.028	0.003	0.003	0.025	0.025	0.027	0.017
23	0.018	0.014	0.011	0.011	0.002	0.002	0.002	0.011	0.011	0.017	0.017	0.016	0.012
24	0.018	0.008	0.005	0.005	0.002	0.002	0.002	0.006	0.006	0.010	0.010	0.013	0.008

Source: INDOT Selected Weigh in Motion and ATR site data

Table B-5: Hourly VMT Fraction: RoadType 4, Urban Restricted Access

	SourceTypeID												
Hr	11	21	31	32	41	42	43	51	52	53	54	61	62
1	0.003	0.014	0.012	0.012	0.018	0.018	0.018	0.010	0.010	0.018	0.018	0.017	0.026
2	0.004	0.008	0.007	0.007	0.017	0.017	0.017	0.007	0.007	0.012	0.012	0.013	0.024
3	0.004	0.005	0.005	0.005	0.013	0.013	0.013	0.005	0.005	0.009	0.009	0.011	0.024
4	0.007	0.005	0.005	0.005	0.013	0.013	0.013	0.006	0.006	0.008	0.008	0.012	0.024
5	0.012	0.006	0.009	0.009	0.015	0.015	0.015	0.009	0.009	0.011	0.011	0.015	0.027
6	0.007	0.014	0.023	0.023	0.027	0.027	0.027	0.020	0.020	0.017	0.017	0.018	0.033
7	0.009	0.029	0.049	0.049	0.038	0.038	0.038	0.040	0.040	0.027	0.027	0.032	0.040
8	0.016	0.046	0.058	0.058	0.042	0.042	0.042	0.053	0.053	0.051	0.051	0.062	0.045
9	0.112	0.061	0.058	0.058	0.058	0.058	0.058	0.057	0.057	0.080	0.080	0.079	0.049
10	0.214	0.056	0.054	0.054	0.076	0.076	0.076	0.059	0.059	0.058	0.058	0.055	0.048
11	0.109	0.049	0.052	0.052	0.071	0.071	0.071	0.057	0.057	0.059	0.059	0.058	0.053
12	0.029	0.050	0.051	0.051	0.061	0.061	0.061	0.058	0.058	0.055	0.055	0.055	0.056
13	0.030	0.052	0.053	0.053	0.061	0.061	0.061	0.059	0.059	0.058	0.058	0.054	0.057
14	0.033	0.056	0.056	0.056	0.065	0.065	0.065	0.060	0.060	0.058	0.058	0.053	0.056
15	0.040	0.060	0.060	0.060	0.067	0.067	0.067	0.065	0.065	0.058	0.058	0.051	0.058
16	0.040	0.066	0.067	0.067	0.068	0.068	0.068	0.072	0.072	0.062	0.062	0.055	0.056
17	0.029	0.076	0.079	0.079	0.058	0.058	0.058	0.080	0.080	0.064	0.064	0.068	0.055
18	0.147	0.081	0.078	0.078	0.052	0.052	0.052	0.075	0.075	0.055	0.055	0.066	0.049
19	0.085	0.076	0.067	0.067	0.048	0.048	0.048	0.063	0.063	0.068	0.068	0.065	0.045
20	0.022	0.058	0.049	0.049	0.039	0.039	0.039	0.047	0.047	0.057	0.057	0.051	0.042
21	0.016	0.043	0.036	0.036	0.028	0.028	0.028	0.035	0.035	0.039	0.039	0.036	0.039
22	0.012	0.035	0.029	0.029	0.023	0.023	0.023	0.026	0.026	0.028	0.028	0.029	0.035
23	0.007	0.030	0.025	0.025	0.021	0.021	0.021	0.020	0.020	0.024	0.024	0.025	0.031
24	0.012	0.022	0.018	0.018	0.019	0.019	0.019	0.015	0.015	0.023	0.023	0.022	0.029

Source: INDOT Selected Weigh in Motion and ATR site data

Table B-6: Hourly VMT Fraction: RoadType 5, Urban Unrestricted Access

	SourceTypeID												
Hr	11	21	31	32	41	42	43	51	52	53	54	61	62
1	0.009	0.009	0.006	0.006	0.013	0.013	0.013	0.004	0.004	0.004	0.004	0.011	0.011
2	0.006	0.005	0.004	0.004	0.010	0.010	0.010	0.004	0.004	0.004	0.004	0.012	0.012
3	0.005	0.004	0.003	0.003	0.007	0.007	0.007	0.004	0.004	0.004	0.004	0.012	0.012
4	0.005	0.004	0.004	0.004	0.011	0.011	0.011	0.006	0.006	0.006	0.006	0.014	0.014
5	0.008	0.008	0.009	0.009	0.015	0.015	0.015	0.009	0.009	0.009	0.009	0.021	0.021
6	0.023	0.020	0.024	0.024	0.026	0.026	0.026	0.019	0.019	0.019	0.019	0.030	0.030
7	0.044	0.048	0.054	0.054	0.045	0.045	0.045	0.042	0.042	0.042	0.042	0.044	0.044
8	0.060	0.072	0.068	0.068	0.069	0.069	0.069	0.073	0.073	0.073	0.073	0.059	0.059
9	0.056	0.057	0.064	0.064	0.075	0.075	0.075	0.088	0.088	0.088	0.088	0.064	0.064
10	0.049	0.047	0.060	0.060	0.080	0.080	0.080	0.092	0.092	0.092	0.092	0.068	0.068
11	0.050	0.047	0.059	0.059	0.077	0.077	0.077	0.094	0.094	0.094	0.094	0.070	0.070
12	0.057	0.052	0.062	0.062	0.075	0.075	0.075	0.091	0.091	0.091	0.091	0.070	0.070
13	0.061	0.056	0.063	0.063	0.074	0.074	0.074	0.090	0.090	0.090	0.090	0.069	0.069
14	0.061	0.056	0.063	0.063	0.078	0.078	0.078	0.091	0.091	0.091	0.091	0.067	0.067
15	0.065	0.061	0.067	0.067	0.076	0.076	0.076	0.091	0.091	0.091	0.091	0.065	0.065
16	0.072	0.072	0.075	0.075	0.073	0.073	0.073	0.078	0.078	0.078	0.078	0.061	0.061
17	0.077	0.080	0.076	0.076	0.053	0.053	0.053	0.046	0.046	0.046	0.046	0.056	0.056
18	0.077	0.083	0.068	0.068	0.035	0.035	0.035	0.026	0.026	0.026	0.026	0.051	0.051
19	0.064	0.064	0.053	0.053	0.029	0.029	0.029	0.017	0.017	0.017	0.017	0.040	0.040
20	0.048	0.046	0.037	0.037	0.022	0.022	0.022	0.011	0.011	0.011	0.011	0.031	0.031
21	0.038	0.039	0.029	0.029	0.017	0.017	0.017	0.008	0.008	0.008	0.008	0.027	0.027
22	0.031	0.033	0.024	0.024	0.014	0.014	0.014	0.006	0.006	0.006	0.006	0.023	0.023
23	0.021	0.024	0.017	0.017	0.014	0.014	0.014	0.005	0.005	0.005	0.005	0.019	0.019
24	0.015	0.016	0.011	0.011	0.012	0.012	0.012	0.005	0.005	0.005	0.005	0.016	0.016

Source: INDOT Selected Weigh in Motion and ATR site data

Appendix C – Inputs Carried Over from MOVES2010a Rate Development

Table C-1: Indiana Default VMT Distributions by Vehicle Type and Road Type

Road Type	Motorcycle	Passenger Car	Light Duty Truck	Bus	Single Unit Truck	Combination Truck
2	0.00703	0.50641	0.16379	0.00417	0.00777	0.31082
3	0.00173	0.65975	0.22577	0.00079	0.01096	0.10099
4	0.00397	0.56995	0.25420	0.00283	0.00908	0.15996
5	0.00279	0.70275	0.24524	0.00140	0.00976	0.03805

Source: Statewide averages developed from Indiana Department of Transportation traffic count data.

Table C-2: Indiana Default Daily Distribution Factors

	dayID	
monthID	2	5
1	0.232541	0.767459
2	0.238055	0.761945
3	0.239340	0.760660
4	0.239605	0.760395
5	0.248476	0.751524
6	0.248974	0.751026
7	0.248115	0.751885
8	0.252703	0.747297
9	0.249608	0.750392
10	0.246281	0.753719
11	0.243974	0.756026
12	0.225878	0.774122

Source: Statewide averages developed from Indiana Department of Transportation traffic count data

Table C-3: Lake, Porter, and LaPorte Counties Ramp Fractions

Road Type	Ramp Fraction
2	0.79%
4	6.66%

Source: Analysis of VHT from the CMAP travel demand model.

Table C-4: Indiana Default Monthly Distribution Factors

monthID	monthVMTFraction
1	0.07334
2	0.06937
3	0.08270
4	0.08318
5	0.08913
6	0.08882
7	0.09080
8	0.09185
9	0.08542
10	0.08752
11	0.08124
12	0.07664

Source: Statewide averages developed from Indiana Department of Transportation traffic count data.

Table C-5: Meteorology Assumptions, Lake, Porter, and LaPorte Counties

Ozone					PM 2.5				
monthID	zoneID	HourID	temperature	relHumidity	**monthID**	zoneID	HourID	temperature	relHumidity
7	180890	1	67.0	88.0	4	180890	1	43.7	100.0
7	180890	2	65.8	91.8	4	180890	2	42.5	100.0
7	180890	3	64.9	94.9	4	180890	3	41.6	100.0
7	180890	4	64.2	97.2	4	180890	4	41.0	100.0
7	180890	5	63.6	99.0	4	180890	5	40.5	100.0
7	180890	6	63.0	100.0	4	180890	6	39.9	100.0
7	180890	7	62.5	100.0	4	180890	7	39.4	100.0
7	180890	8	62.9	100.0	4	180890	8	39.8	100.0
7	180890	9	65.5	92.6	4	180890	9	42.3	100.0
7	180890	10	69.7	80.2	4	180890	10	46.2	97.2
7	180890	11	74.0	69.4	4	180890	11	50.3	83.5
7	180890	12	77.7	61.4	4	180890	12	53.8	73.5
7	180890	13	80.9	55.3	4	180890	13	56.8	65.8
7	180890	14	82.6	52.2	4	180890	14	58.5	62.0
7	180890	15	83.2	51.2	4	180890	15	59.0	60.7
7	180890	16	83.4	50.9	4	180890	16	59.2	60.3
7	180890	17	83.0	51.6	4	180890	17	58.8	61.2
7	180890	18	81.7	53.7	4	180890	18	57.6	63.8
7	180890	19	79.7	57.5	4	180890	19	55.7	68.6
7	180890	20	77.0	62.9	4	180890	20	53.1	75.3
7	180890	21	74.3	68.8	4	180890	21	50.5	82.7
7	180890	22	71.9	74.5	4	180890	22	48.3	89.9
7	180890	23	70.3	78.8	4	180890	23	46.7	95.4
7	180890	24	68.6	83.4	4	180890	24	45.2	100.0

Source: Mobile 6.2 reported meteorological data from Air Quality Conformity Determination Between the 2040 Regional Transportation Plan, the Fiscal Year 2012 to 2015 Transportation Improvement Program, and the Indiana State Implementation Plan for Air Quality, Appendix E, developed by NIRPC in June, 2011 converted using EPA data converter.

Table C-6: Fuel

countyID	fuelYearID	monthGroupID	fuelFormulationID	marketShare	marketShareCV
18089	2010	7	20011	1	0.5
18089	2010	7	3160	1	0.5

Source: MOVES defaults for this region.

Table C-7: Fuel Formulation

Fuel Formulation ID	Fuel Sub type ID	RVP	Sulfur Level	ETOH Volume	MTBE Volume	ETBE Volume	TAME Volume	Aromatic Content
20011	20	0	11	0	0	0	0	0
3160	12	6.983	30	10	0	0	0	19.443
Fuel Formulation ID	**Fuel Sub type ID**	**Olefin Content**	**Benzene Content**	**e200**	**e300**	**BioDiesel EsterVol**	**Cetane Index**	**PAH Content**
20011	20	0	0	0	0	0	0	0
3160	12	7.262	0.633	50.756	83.915	0	0	0

Source: MOVES defaults for this region.

Table C-8: Lake and Porter County Inspection and Maintenance Program

polProcessID	stateID	countyID	yearID	sourceTypeID	fuelTypeID	IMProgramID	inspectFreq	testStandardsID	begModelYearID	endModelYearID	useIMyn	complianceFactor
101	18	18089	2010	21	1	1	2	11	1976	1980	N	93.12
101	18	18089	2010	31	1	1	2	11	1976	1980	N	93.12
101	18	18089	2010	32	1	1	2	11	1976	1980	N	93.12
102	18	18089	2010	21	1	1	2	11	1976	1980	N	93.12
102	18	18089	2010	31	1	1	2	11	1976	1980	N	93.12
102	18	18089	2010	32	1	1	2	11	1976	1980	N	93.12
101	18	18089	2010	21	1	6	2	33	1981	1995	N	93.12
101	18	18089	2010	31	1	6	2	33	1981	1995	N	93.12
101	18	18089	2010	32	1	6	2	33	1981	1995	N	93.12
102	18	18089	2010	21	1	6	2	33	1981	1995	N	93.12
102	18	18089	2010	31	1	6	2	33	1981	1995	N	93.12
102	18	18089	2010	32	1	6	2	33	1981	1995	N	93.12
301	18	18089	2010	21	1	6	2	33	1981	1995	N	93.12
301	18	18089	2010	31	1	6	2	33	1981	1995	N	93.12
301	18	18089	2010	32	1	6	2	33	1981	1995	N	93.12
302	18	18089	2010	21	1	6	2	33	1981	1995	N	93.12
302	18	18089	2010	31	1	6	2	33	1981	1995	N	93.12
302	18	18089	2010	32	1	6	2	33	1981	1995	N	93.12
101	18	18089	2010	21	1	10	2	51	1996	2008	N	93.12
101	18	18089	2010	31	1	10	2	51	1996	2008	N	93.12
101	18	18089	2010	32	1	10	2	51	1996	2008	N	93.12
102	18	18089	2010	21	1	10	2	51	1996	2008	N	93.12
102	18	18089	2010	31	1	10	2	51	1996	2008	N	93.12
102	18	18089	2010	32	1	10	2	51	1996	2008	N	93.12
301	18	18089	2010	21	1	10	2	51	1996	2008	N	93.12
301	18	18089	2010	31	1	10	2	51	1996	2008	N	93.12
301	18	18089	2010	32	1	10	2	51	1996	2008	N	93.12
302	18	18089	2010	21	1	10	2	51	1996	2008	N	93.12
302	18	18089	2010	31	1	10	2	51	1996	2008	N	93.12
302	18	18089	2010	32	1	10	2	51	1996	2008	N	93.12
112	18	18089	2010	21	1	7	2	41	1976	1995	N	93.12
112	18	18089	2010	21	1	8	2	43	1996	2008	N	93.12
112	18	18089	2010	31	1	7	2	41	1976	1995	N	93.12
112	18	18089	2010	31	1	8	2	43	1996	2008	N	93.12
112	18	18089	2010	32	1	7	2	41	1976	1995	N	93.12
112	18	18089	2010	32	1	8	2	43	1996	2008	N	93.12
113	18	18089	2010	21	1	7	2	41	1976	1995	N	93.12
113	18	18089	2010	21	1	8	2	43	1996	2008	N	93.12
113	18	18089	2010	31	1	7	2	41	1976	1995	N	93.12
113	18	18089	2010	31	1	8	2	43	1996	2008	N	93.12
113	18	18089	2010	32	1	7	2	41	1976	1995	N	93.12
113	18	18089	2010	32	1	8	2	43	1996	2008	N	93.12
101	18	18089	2010	21	1	11	2	11	1976	1980	Y	95
101	18	18089	2010	31	1	11	2	11	1976	1980	Y	95
101	18	18089	2010	32	1	11	2	11	1976	1980	Y	95
102	18	18089	2010	21	1	11	2	11	1976	1980	Y	95
102	18	18089	2010	31	1	11	2	11	1976	1980	Y	95
102	18	18089	2010	32	1	11	2	11	1976	1980	Y	95
301	18	18089	2010	21	1	11	2	11	1976	1980	Y	95
301	18	18089	2010	31	1	11	2	11	1976	1980	Y	95
301	18	18089	2010	32	1	11	2	11	1976	1980	Y	95
302	18	18089	2010	21	1	11	2	11	1976	1980	Y	95
302	18	18089	2010	31	1	11	2	11	1976	1980	Y	95
302	18	18089	2010	32	1	11	2	11	1976	1980	Y	95
101	18	18089	2010	21	1	12	2	33	1981	1995	Y	95
101	18	18089	2010	31	1	12	2	33	1981	1995	Y	95
101	18	18089	2010	32	1	12	2	33	1981	1995	Y	95
102	18	18089	2010	21	1	12	2	33	1981	1995	Y	95
102	18	18089	2010	31	1	12	2	33	1981	1995	Y	95
102	18	18089	2010	32	1	12	2	33	1981	1995	Y	95
301	18	18089	2010	21	1	12	2	33	1981	1995	Y	95
301	18	18089	2010	31	1	12	2	33	1981	1995	Y	95
301	18	18089	2010	32	1	12	2	33	1981	1995	Y	95
302	18	18089	2010	21	1	12	2	33	1981	1995	Y	95
302	18	18089	2010	31	1	12	2	33	1981	1995	Y	95
302	18	18089	2010	32	1	12	2	33	1981	1995	Y	95
112	18	18089	2010	21	1	13	2	41	1976	1995	Y	95
112	18	18089	2010	31	1	13	2	41	1976	1995	Y	95
112	18	18089	2010	32	1	13	2	41	1976	1995	Y	95
113	18	18089	2010	21	1	13	2	41	1976	1995	Y	95
113	18	18089	2010	31	1	13	2	41	1976	1995	Y	95
113	18	18089	2010	32	1	13	2	41	1976	1995	Y	95
101	18	18089	2010	21	1	14	2	51	1996	2006	Y	95
101	18	18089	2010	31	1	14	2	51	1996	2006	Y	95
101	18	18089	2010	32	1	14	2	51	1996	2006	Y	95
102	18	18089	2010	21	1	14	2	51	1996	2006	Y	95
102	18	18089	2010	31	1	14	2	51	1996	2006	Y	95
102	18	18089	2010	32	1	14	2	51	1996	2006	Y	95
301	18	18089	2010	21	1	14	2	51	1996	2006	Y	95
301	18	18089	2010	31	1	14	2	51	1996	2006	Y	95
301	18	18089	2010	32	1	14	2	51	1996	2006	Y	95
302	18	18089	2010	21	1	14	2	51	1996	2006	Y	95
302	18	18089	2010	31	1	14	2	51	1996	2006	Y	95
302	18	18089	2010	32	1	14	2	51	1996	2006	Y	95
112	18	18089	2010	21	1	15	2	45	1996	2006	Y	95
112	18	18089	2010	31	1	15	2	45	1996	2006	Y	95
112	18	18089	2010	32	1	15	2	45	1996	2006	Y	95
113	18	18089	2010	21	1	15	2	45	1996	2006	Y	95
113	18	18089	2010	31	1	15	2	45	1996	2006	Y	95
113	18	18089	2010	32	1	15	2	45	1996	2006	Y	95

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Attachment E

Nonattainment New Source Review (NNSR) Plan for Ozone

Appendix E1

326 Indiana Administrative Code (IAC) 2-3

Appendix E2

1997 8-Hour Ozone Nonattainment Area Redesignations

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Indiana's Nonattainment New Source Review (NNSR) Plan for the 2008 8-Hour Ozone National Ambient Air Quality Standards (NAAQS)

Pursuant to the requirements of 40 (Code of Federal Regulations) 51.165 for the 2008 8-hour National Ambient Air Quality Standards (NAAQS), and Section 172(c)(5) of the Clean Air Act (CAA), Indiana certifies that existing nonattainment rules, found at 326 Indiana Administrative Code (IAC) 2-3 and as cited in the table below, are at least as stringent as the NNSR state implementation (SIP) requirements of 40 CFR 51.165 as amended by the final ruled titled *Implementation of the 2008 National Ambient Air Quality Standard for Ozone: State Implementation Plan Requirements* (80 FR 12264, March 6, 2015).

Indiana has a long standing and fully implemented NNSR permitting program that is outlined in 326 IAC 2-3 (Appendix E1). U.S. EPA approved these regulations on August 25, 1994 (94 FR 24837)[1] and were subsequently amended to comply with U.S. EPA's 2002 New Source Review (NSR) Reform Rules (67 FR 80186). These rule revisions applied to 326 IAC 2-3-1, 326 IAC 2-3-2, and 326 IAC 2-3-3, were approved on June 28, 2011 [76 FR 40242][2], and have not been subsequently amended. Indiana's entire Article 2 regulations can be found at http://www.in.gov/legislative/iac/iac_title?iact=326&iaca=2&submit=+Go.

Upon review of 326 IAC 2-3, Indiana has determined and certifies that existing NNSR rules satisfy the NNSR SIP plan requirements at 40 CFR 51.165, as amended by the final ruled titled *Implementation of the 2008 National Ambient Air Quality Standard for Ozone: State Implementation Plan Requirements* (80 FR 12264, March 6, 2015), for the 2008 8-Hour Ozone NAAQS. Indiana is seeking U.S. EPA's approval of this certification request. All of the NNSR rules that Indiana is certifying have been approved into Indiana's SIP via the public notice process and were effective December 6, 1994, (94 FR 24837) and September 6, 2011 (76 FR 40242).

[1] https://www.gpo.gov/fdsys/pkg/FR-1994-10-07/html/94-24837.htm
[2] https://www.gpo.gov/fdsys/pkg/FR-2011-07-08/pdf/2011-17036.pdf

Applicable Indiana NNSR Rules at 326 IAC 2-3 for 40 CFR 51.165

40 CFR 51.165	Applicable Indiana Regulation: 326 IAC 2-3	FR Approval of Indiana Regulation
1. (a)(1)(iv)(A)(*1*)(i)-(iv) and (*2*): Major source thresholds for ozone – VOC and NOx. *Note: Indiana has never had a nonattainment area classified as Extreme for ground-level ozone. Therefore, (a)(l)(iv)(A)(1)(iv) and 2(vi) do not apply in Indiana.*	326 IAC 2-3-1(z)(1) and (2) p.71	**94 FR 24838** Published: 10/07/1994 Effective: 12/06/1994 *And* **76 FR 40242** Published: 07/08/2011 Effective: 09/06/2011
2. (a)(1)(iv)(A)(*3*): Change constitutes a major source by itself.	326 IAC 2-3-1(z)(5) p.71	
3. (a)(1)(v)(E): Significant net emissions increase of NOx is significant for ozone.	326 IAC 2-3-1(y)(1) p.70	
4. (a)(1)(v)(F): Any emissions change of VOC in Extreme area triggers NNSR.	*Indiana has never had a nonattainment area classified as Extreme for ground-level ozone.*	N/A
5. (a)(1)(x)(A)-(C) and (E): Significant emissions rates for VOC and NOx as ozone precursors. *Note: Indiana has never had a nonattainment area classified as Extreme for ground-level ozone. Therefore, (a)(1)(x)(E) does not apply in Indiana.*	326 IAC 2-3-1(pp) p.74	**94 FR 24838** Published: 10/07/1994 Effective 12/06/1994 *And* **76 FR 40242** Published: 07/08/2011 Effective: 09/06/2011

6. (a)(3)(ii)(C)(*1*)-(*2*): Provisions for emissions reduction credits.	326 IAC 2-3-3(b)(5) p.79	**94 FR 24838** Published: 10/07/1994 Effective 12/06/1994
7. (a)(*8*): Requirements for VOC apply to NOx as ozone precursors.	326 IAC 2-3-1(y) p.70 326 IAC 2-3-2(a) and (b) p.75	**94 FR 24838** Published: 10/07/1994 Effective 12/06/1994 *And* **76 FR 40242** Published: 07/08/2011 Effective: 09/06/2011
8. (a)(*9*)(i)-(iii): Offset ratios for VOC and NOx for ozone nonattainment areas. [***Please note that subparagraphs (a)(9)(i)-(iii) were changed to (a)(9)(ii)-(iv) when the EPA added new subparagraph (a)(9)(i) under the 2008 PM2.5 Implementation Rule).]***	326 IAC 2-3-3(a)(5)(B) p.78-79	
9. a(12): Anti-backsliding provision(s), where applicable. On April 6, 2015, U.S. EPA revoked the 1997 8-hour ozone standard (80 FR 12264). There were no remaining areas in Indiana designated nonattainment for the 1997 8-hour ozone standard on April 6, 2015. Therefore, this requirement does not apply to Indiana. For a list of areas in Indiana that were previously reclassified to attainment under the 1997 8-hour ozone NAAQS and the dates associated with these classifications, please see Appendix E2 or visit IDEM's website: http://www.in.gov/idem/airquality/files/nonattainment_o3_1997_8hour.pdf.		

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Appendix E1

326 Indiana Administrative Code (IAC) 2-3

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326 IAC 2-7-5(3)(C)(ii). The reports shall contain the following information:

(1) The identification of owner and operator and the permit number.

(2) The PAL requirement that experienced the deviation or that was exceeded.

(3) Emissions resulting from the deviation or the exceedance.

(4) A signed statement by the responsible official, as defined in 326 IAC 2-7-1, certifying the truth, accuracy, and completeness of the information provided in the report.

(d) The owner or operator shall submit to the department the results of any revalidation test or method within three (3) months after completion of the test or method. *(Air Pollution Control Division; 326 IAC 2-2.4-14; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3917; errata filed Jan 2, 2013, 2:19 p.m.: 20130123-IR-326130002ACA)*

326 IAC 2-2.4-15 Termination and revocation of a PAL

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 15. (a) This section applies to any PAL that is terminated or revoked prior to the PAL expiration date.

(b) A major stationary source owner or operator may at any time submit a written request to the department to terminate or revoke a PAL prior to the expiration or renewal of the PAL.

(c) Each emissions unit or each group of emissions units that existed under the PAL shall be in compliance with an allowable emission limitation under a revised permit established according to the following procedures:

(1) The major stationary source owner or operator may submit a proposed allowable emission limitation for each emissions unit or each group of emissions units by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under section 10(e) of this rule, such distribution shall be made as if the PAL had been adjusted.

(2) The department shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the department determines is appropriate. The determination of distribution of the PAL allowable emissions may be based on the emissions limitations that were eliminated by the PAL in accordance with section 1(c)(3) of this rule.

(d) Each emissions unit shall be in compliance with the allowable emission limitation on a twelve (12) month rolling basis. The department may approve the use of monitoring systems other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

(e) Until the department issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subsection (c)(2), the source shall continue to comply with a source-wide, multiunit emissions cap equivalent to the level of the PAL emission limitation.

(f) The department shall follow the procedures specified in section 5 of this rule in terminating or revoking a PAL for a major stationary source and shall provide the proposed distributed allowable emission limitations to the public for review and comment. During such public review, any person may propose a PAL distribution of allowable emissions for the source for consideration by the department. *(Air Pollution Control Division; 326 IAC 2-2.4-15; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3918)*

Rule 2.5. Pollution Control Projects (Repealed)

(Repealed by Air Pollution Control Division; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3954)

Rule 2.6. Federal NSR Requirements for Sources Subject to P.L.231-2003, SECTION 6, Endangered Industries (Repealed)

(Repealed by Air Pollution Control Division; filed Oct 1, 2010, 3:48 p.m.: 20101027-IR-326070372FRA)

Rule 3. Emission Offset

326 IAC 2-3-1 Definitions

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 1. (a) The definitions in this section apply throughout this rule.

(b) "Actual emissions" means the actual rate of emissions of a regulated NSR pollutant from an emissions unit as determined in accordance with the following:

(1) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive twenty-four (24) month period that:

(A) precedes the particular date; and

(B) is representative of normal source operation.

The commissioner shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(2) The commissioner may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(3) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(4) The term shall not apply for calculating a significant emissions increase under section 2(c) of this rule or for establishing a PAL under 326 IAC 2-3.4. Instead, subsections (d) and (kk) shall apply for those purposes.

(c) "Allowable emissions" means the emissions rate of a source calculated using the maximum rated capacity of the source unless a source is subject to enforceable permit limits that restrict the operating rate or hours of operation, or both, and the most stringent of the following:

(1) The applicable standards as set forth in 40 CFR Part 60, New Source Performance Standards (NSPS)*, and 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAPS)*.

(2) The emissions limitation imposed by any rule in this title, including those with a future compliance date.

(3) The emissions rate specified as an enforceable permit condition, including those with a future compliance date.

(d) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined as follows:

(1) For any existing electric utility steam generating unit, the term means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive twenty-four (24) month period selected by the owner or operator within the five (5) year period immediately preceding when the owner or operator begins actual construction of the project. The commissioner may allow the use of a different time period upon a determination that it is more representative of normal source operation. The baseline actual emissions shall be determined in accordance with the following:

(A) The average rate shall include fugitive emissions to the extent quantifiable and emissions associated with start-ups, shutdowns, and malfunctions to the extent they are affected by the project.

(B) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive twenty-four (24) month period.

(C) For a regulated NSR pollutant, when a project involves multiple emissions units, only one (1) consecutive twenty-four (24) month period may be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive twenty-four (24) month period can be used for each regulated NSR pollutant.

(D) The average rate shall not be based on any consecutive twenty-four (24) month period for which there is inadequate information available for determining annual emissions, in tons per year, and for adjusting this amount if required by clause (B).

(2) For an existing emissions unit, other than an electric utility steam generating unit, the term means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive twenty-four (24) month period selected by the owner or operator within the ten (10) year period immediately preceding either the date the owner or operator begins actual construction of the project or the date a complete permit application is received by the department for

a permit required under 326 IAC 2-3, except that the ten (10) year period shall not include any period earlier than November 15, 1990. The baseline actual emissions shall be determined in accordance with the following:

(A) The average rate shall include fugitive emissions to the extent quantifiable and emissions associated with start-ups, shutdowns, and malfunctions and to the extent they are affected by the project.

(B) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive twenty-four (24) month period.

(C) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply had the major stationary source been required to comply with the limitations during the consecutive twenty-four (24) month period. However, if an emission limitation is part of a maximum achievable control technology standard that the U.S. EPA proposed or promulgated under 40 CFR Part 63*, the baseline actual emissions need only be adjusted if the state has applied the emissions reduction to an attainment demonstration or maintenance plan consistent with the requirements of section 3(b)(12) of this rule.

(D) For a regulated NSR pollutant, when a project involves multiple emissions units, only one (1) consecutive twenty-four (24) month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive twenty-four (24) month period can be used for each regulated NSR pollutant.

(E) The average rate shall not be based on any consecutive twenty-four (24) month period for which there is inadequate information available for determining annual emissions, in tons per year, and for adjusting this amount if required by clauses (B) and (C).

(3) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of the unit shall equal zero (0) and thereafter, for all other purposes, shall equal the unit's potential to emit.

(4) For a PAL for a major stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in subdivision (1), for other existing emissions units in accordance with the procedures contained in subdivision (2), and for a new emissions unit in accordance with the procedures contained in subdivision (3).

(e) "Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit that are of a permanent nature. These activities include, but are not limited to, the following:

(1) Installation of building supports and foundations.

(2) Laying underground pipework.

(3) Construction of permanent storage structures.

With respect to a change in method of operations, the term refers to those on-site activities, other than preparatory activities, that mark the initiation of the change.

(f) "Best available control technology" or "BACT" means an emissions limitation, including a visible emission standard, based on the maximum degree of reduction for each regulated NSR pollutant that would be emitted from any proposed major stationary source or major modification that the commissioner, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for the source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of the pollutant. In no event shall application of BACT result in emissions of any pollutant that would exceed the emissions allowed by any applicable standard under 40 CFR Part 60* or 40 CFR Part 61*. If the commissioner determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof may be prescribed instead to satisfy the requirement for the application of BACT. The standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of the design, equipment, work practice, or operation and shall provide for compliance by means that achieve equivalent results.

(g) "Building, structure, facility, or installation" means all of the pollutant-emitting activities that belong to the same industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person or persons under common control. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they

belong to the same major group, that is, those that have the same first two (2) digit code, as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 supplement, U.S. Government Printing Office*.

(h) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or postcombustion stage, at a new or existing facility that will achieve significant reductions in air emissions of sulfur dioxide or nitrogen oxides associated with the utilization of coal in the generation of electricity or process steam that was not in widespread use as of November 15, 1990.

(i) "Clean coal technology demonstration project" means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology", up to a total amount of two billion five hundred million dollars ($2,500,000,000) for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. EPA. The federal contribution for a qualifying project shall be at least twenty percent (20%) of the total cost of the demonstration project.

(j) "Commence", as applied to construction of a major stationary source or major modification, means that the owner or operator has all necessary preconstruction approvals or permits and either has:

(1) begun, or caused to begin, a continuous program of actual on-site construction of the source to be completed within a reasonable time; or

(2) entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(k) "Complete", in reference to an application for a permit, means that the application contains all of the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the commissioner from requesting or accepting additional information.

(l) "Construction" means any physical change or change in the method of operation, including:

(1) fabrication;

(2) erection;

(3) installation;

(4) demolition; or

(5) modification;

of an emissions unit, that would result in a change in actual emissions.

(m) "Continuous emissions monitoring system" or "CEMS" means all of the equipment that may be required to meet the data acquisition and availability requirements of this rule to complete the following:

(1) Sample emissions on a continuous basis.

(2) If applicable, condition emissions.

(3) Analyze emissions on a continuous basis.

(4) Provide a record of emissions on a continuous basis.

(n) "Continuous emissions rate monitoring system" or "CERMS" means the total equipment required for the determination and recording of the pollutant mass emissions rate in terms of mass per unit of time.

(o) "Continuous parameter monitoring system" or "CPMS" means all of the equipment necessary to meet the data acquisition and availability requirements of this rule to:

(1) monitor:

(A) process and control device operational parameters; and

(B) other information, such as gas flow rate, O_2 or CO_2 concentrations; and

(2) record average operational parameter values on a continuous basis.

(p) "De minimis", in reference to an emissions increase of VOC or nitrogen oxides (unless a NO_X waiver is in effect) from a modification in a serious or severe ozone nonattainment area, means an increase that does not exceed twenty-five (25) tons per year when the net emissions increases from the proposed modification are aggregated on a pollutant specific basis with all other net emissions increases from the source over a five (5) consecutive calendar year period prior to, and including, the year of the modification.

(q) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third (1/3) of its potential electric output capacity and more than twenty-five (25) megawatts electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of

providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(r) "Emissions unit" means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant. For purposes of this rule, there are the following two (2) types of emissions units:

(1) A new emissions unit is any emissions unit that is, or will be, newly constructed and that has existed for less than two (2) years from the date the emissions unit first operated.

(2) An existing emissions unit is any emissions unit that does not meet the requirements in subdivision (1). A replacement unit is an existing emissions unit.

(s) "Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over the lands.

(t) "Federally enforceable" means all limitations and conditions that are enforceable by the U.S. EPA, including:

(1) those requirements developed pursuant to 40 CFR Part 60* and 40 CFR Part 61*;

(2) requirements within the SIP; and

(3) any permit requirements established pursuant to 40 CFR Part 52.21* or under regulations approved pursuant to 40 CFR Part 51, Subpart I*, including operating permits issued under an EPA-approved program that is incorporated into the SIP and expressly requires adherence to any permit issued under the program.

(u) "Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(v) "Incidental emissions reductions" means the reductions in emissions of a pollutant achieved as an indirect result of complying with another rule for another pollutant.

(w) "Internal offset" means to use net emissions decreases from within the source to compensate for an increase in emissions.

(x) "Lowest achievable emission rate" or "LAER" means, for any source, the more stringent rate of emissions based on the most stringent emissions limitation of the following:

(1) Contained in the implementation plan of any state for the class or category of stationary source unless the owner or operator of the proposed stationary source demonstrates that the limitations are not achievable.

(2) Achieved in practice by the class or category of stationary source. This limitation, when applied to a modification, means the LAER for the new or modified emissions unit within the stationary source. In no event shall the application of the LAER allow a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance.

(y) "Major modification" means any physical change in, or change in the method of operation of, a major stationary source that would result in a significant emissions increase and a significant net emissions increase of a regulated NSR pollutant from the major stationary source or, in an area that is classified as either a serious or severe ozone nonattainment area, an increase in VOC or nitrogen oxides (unless a NO_X waiver is in effect) emissions that is not de minimis. The following provisions apply:

(1) Any significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for VOC or nitrogen oxides (unless a NO_X waiver is in effect) shall be considered significant for ozone.

(2) A physical change or change in the method of operation shall not include the following:

(A) Routine maintenance, repair, and replacement.

(B) Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and 2(b) of the Energy Supply and Environmental Coordination Act of 1974 or by reason of a natural gas curtailment plan under the Federal Power Act.

(C) Use of an alternative fuel by reason of an order or rule under Section 125 of the CAA.

(D) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.

(E) Use of an alternative fuel or raw material by a source that the source:

(i) was capable of accommodating before December 21, 1976, unless the change would be prohibited under any enforceable permit condition that was established after December 21, 1976, under 40 CFR Part 52.21* or regulations approved under 40 CFR Part 51.160 through 40 CFR Part 51.165* or 40 CFR Part 51.166*; or

(ii) is approved to use under any permit issued under this rule.

(F) An increase in the hours of operation or in the production rate unless the change would be prohibited under any

enforceable permit condition that was established after December 21, 1976, under 40 CFR Part 52.21* or regulations approved under 40 CFR Part 51.160 through 40 CFR Part 51.165* or 40 CFR Part 51.166*.

(G) Any change in ownership at a stationary source.

(H) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project provided that the project complies with:

(i) the SIP; and

(ii) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(3) The term shall not apply to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under 326 IAC 2-2.4 for a PAL for that pollutant. Instead, the definition at 326 IAC 2-2.4-2(g) shall apply.

(z) "Major stationary source" means the following:

(1) Any stationary source of air pollutants, except for those subject to subdivision (2), that emits or has the potential to emit one hundred (100) tons per year or more of any regulated NSR pollutant.

(2) For ozone nonattainment areas, the term includes any stationary source or group of sources located within a contiguous area and under common control that emits or has the potential to emit VOC or nitrogen oxides (unless a NO_X waiver is in effect) that would equal or exceed any of the following rates:

Ozone Classification	Rate
Marginal	100 tons per year
Moderate	100 tons per year
Serious	50 tons per year
Severe	25 tons per year

(3) Any of the following stationary sources with potential emissions of five (5) tons per year or more of lead or lead compounds measured as elemental lead:

(A) Primary lead smelters.

(B) Secondary lead smelters.

(C) Primary copper smelters.

(D) Lead gasoline additive plants.

(E) Lead-acid storage battery manufacturing plants that produce two thousand (2,000) or more batteries per day.

(4) Any other stationary source with potential emissions of twenty-five (25) or more tons per year of lead or lead compounds measured as elemental lead.

(5) Any physical change occurring at a stationary source not qualifying under subdivision (1) if the change would by itself qualify as a major stationary source under subdivision (1).

(aa) "Necessary preconstruction approvals or permits" means those permits or approvals required under 326 IAC 2-2, 326 IAC 2-5.1, and 326 IAC 2-7.

(bb) "Net emissions decrease" means the amount by which the sum of the creditable emissions increases and decreases from any source modification project is less than zero (0).

(cc) "Net emissions increase", with respect to any regulated NSR pollutant emitted by a major stationary source, means the following:

(1) The amount by which the sum of the following exceeds zero (0):

(A) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated under section 2(c) and 2(d) of this rule.

(B) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this clause shall be determined as provided in subsection (d), except that subsection (d)(1)(C) and (d)(2)(D) shall not apply.

(2) For the purpose of determining de minimis in an area classified as serious or severe for ozone, the amount by which the sum of the emission increases and decreases from any source modification project exceeds zero (0).

(3) The following emissions increases and decreases are to be considered when determining net emissions increase:

(A) Any increase in actual emissions from a particular physical change or change in the method of operation.

(B) Any of the following increases and decreases in actual emissions that are contemporaneous with the particular change and are otherwise creditable:

(i) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs after January 16, 1979, and between the following:

(AA) The date five (5) years before construction of the particular change commences.

(BB) The date that the increase from the particular change occurs.

(ii) An increase or decrease in actual emissions is creditable only if the commissioner has not relied on the increase or decrease in issuing a permit for the source under this rule, which permit is in effect when the increase in actual emissions from the particular change occurs.

(iii) An increase in actual emissions is creditable only to the extent that a new level of actual emissions exceeds the old level.

(iv) A decrease in actual emissions is creditable only to the extent that:

(AA) the old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(BB) it is enforceable as a practical matter at and after the time that actual construction on the particular change begins;

(CC) the commissioner has not relied on it in issuing any permit under regulations approved under 40 CFR Part 51, Subpart I* or the state has not relied on it in demonstrating attainment or reasonable further progress; and

(DD) it has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(v) An increase that results from the physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period not to exceed one hundred eighty (180) days.

(vi) Subsection (b)(1) shall not apply for determining creditable increases and decreases or after a particular change or change in method of operation.

(dd) "New", in reference to a:

(1) major stationary source;

(2) modified major stationary source; or

(3) major modification;

means one that commences construction after the effective date of this rule.

(ee) "Nonattainment major new source review program" means a major source preconstruction permit program that has been approved by the U.S. EPA and incorporated into the SIP to implement the federal requirements of 40 CFR Part 51.165*, or a program that implements 40 CFR Part 51, Appendix S, Sections I through VI*. Any permit issued under the program is a major NSR permit.

(ff) "Pollution prevention" means the following:

(1) Any activity that eliminates or reduces the release of air pollutants, including fugitive emissions, and other pollutants to the environment prior to recycling, treatment, or disposal through:

(A) process changes;

(B) product reformulation or redesign; or

(C) substitution of less polluting raw materials.

(2) The term does not include:

(A) recycling, except certain in-process recycling practices;

(B) energy recovery;

(C) treatment; or

(D) disposal.

(gg) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution

control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is enforceable as a practical matter. Secondary emissions do not count in determining the potential to emit of a stationary source.

(hh) "Predictive emissions monitoring system" or "PEMS" means all of the equipment necessary to:

(1) monitor:

(A) process and control device operational parameters; and

(B) other information, such as gas flow rate, O_2 or CO_2 concentrations; and

(2) calculate and record the mass emissions rate on a continuous basis.

(ii) "Prevention of significant deterioration permit" or "PSD permit" means any permit that is issued under 326 IAC 2-2 or under the program in 40 CFR Part 52.21*.

(jj) "Project" means a physical change in, or change in the method of operation of, an existing major stationary source.

(kk) "Projected actual emissions" means the following:

(1) The maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any consecutive twelve (12) month period of the five (5) years following the date the unit resumes regular operation after the project, or in any consecutive twelve (12) month period of the ten (10) years following the date the unit resumes regular operation, if the project involves increasing the emissions unit's design capacity or its potential to emit of that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.

(2) In determining the projected actual emissions before beginning actual construction, the owner or operator of the major stationary source:

(A) shall:

(i) consider all relevant information, including, but not limited to:

(AA) historical operational data;

(BB) the company's own representations;

(CC) the company's expected business activity and the company's highest projections of business activity;

(DD) the company's filings with the state or federal regulatory authorities; and

(EE) compliance plans under the approved plan;

(ii) include fugitive emissions to the extent quantifiable and emissions associated with start-ups, shutdowns, and malfunctions to the extent they are affected by the project; and

(iii) exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive twenty-four (24) month period used to establish the baseline actual emissions under subsection (d) and that is also unrelated to the particular project, including any increased utilization due to product demand growth; or

(B) in lieu of using the method set out in clause (A), may elect to use the emissions unit's potential to emit, in tons per year, as defined under subsection (gg).

(ll) "Reasonable further progress" or "RFP" means the annual incremental reductions in emissions of a pollutant that are sufficient in the judgment of the board to provide reasonable progress towards attainment of the applicable ambient air quality standards established by 326 IAC 1-3 by the dates set forth in the CAA.

(mm) "Regulated NSR pollutant" means the following:

(1) Nitrogen oxides or any VOC.

(2) Any pollutant for which a national ambient air quality standard has been promulgated.

(3) Any pollutant that is a constituent or precursor of a general pollutant listed under subdivision (1) or (2) provided that a constituent or precursor pollutant may only be regulated under NSR as part of regulation of the general pollutant. For purposes of NSR:

(A) VOC and nitrogen oxides are precursors to ozone in all ozone nonattainment areas;

(B) sulfur dioxide and nitrogen oxides are precursors to $PM_{2.5}$ in all $PM_{2.5}$ nonattainment areas; and

(C) VOC and ammonia are not precursors to $PM_{2.5}$ in any $PM_{2.5}$ nonattainment area.

(nn) "Replacement unit" means an emissions unit for which all the criteria listed in subdivisions (1) through (4) are met. No creditable emission reductions shall be generated from shutting down the existing emission unit that is replaced. The following

applies:

(1) The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1)*, or the emissions unit completely takes the place of an existing emissions unit.

(2) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.

(3) The replacement does not alter the basic design parameters, as discussed in 40 CFR 51.165(h)(2), of the process unit.

(4) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

(oo) "Secondary emission" means emissions that would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this rule, secondary emissions must be specific, well-defined, quantifiable, and impact the same general area as the stationary source or modification that causes the secondary emissions. Secondary emissions may include, but are not limited to, emissions from:

(1) ships or trains coming to or from the new or modified stationary source; and

(2) an off-site support facility that would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

(pp) "Significant", in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, means a rate of emissions that would equal or exceed any of the following rates:

Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
PM	25 tpy
PM_{10}	15 tpy
$PM_{2.5}$	10 tpy direct $PM_{2.5}$; 40 tpy of sulfur dioxide; 40 tpy nitrogen oxides
Ozone (marginal and moderate areas)	40 tpy of VOC or nitrogen oxides (unless a NO_X waiver is in effect)
Lead	0.6 tpy

(qq) "Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant as defined in subsection (pp) for that pollutant.

(rr) "Source modification project" means all those physical changes or changes in the methods of operation at a source that are necessary to achieve a specific operational change.

(ss) "Stationary source" means any building, structure, facility, or installation, including a stationary internal combustion engine, that emits or may emit a regulated NSR pollutant.

(tt) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five (5) years or less and that complies with the SIP and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 2-3-1; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2401; filed Jan 6, 1989, 3:30 p.m.: 12 IR 1106; filed Nov 12, 1993, 4:00 p.m.: 17 IR 725; filed Nov 25, 1998, 12:13 p.m.: 22 IR 1002; errata filed May 12, 1999, 11:23 a.m.: 22 IR 3105; filed Aug 17, 2001, 3:45 p.m.: 25 IR 6; errata filed Nov 29, 2001, 12:20 p.m.: 25 IR 1183; errata filed Dec 12, 2002, 3:30 p.m.: 26 IR 1565; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3920; filed Oct 1, 2010, 3:48 p.m.: 20101027-IR-326070372FRA; filed Jun 11, 2012, 3:15 p.m.: 20120711-IR-326110251FRA)*

326 IAC 2-3-2 Applicability

Authority: IC 13-14-8; IC 13-17-3

Affected: IC 13-15; IC 13-17

Sec. 2. (a) This rule applies to new major stationary sources or major modifications constructed in an area designated, as of the date of submittal of a complete application, as nonattainment in 326 IAC 1-4, for a pollutant for which the stationary source or modification is major.

(b) This rule applies to modifications of major stationary sources of VOC or nitrogen oxides (unless a NO_X waiver is in effect) in serious and severe ozone nonattainment areas as follows:

(1) A modification of a major stationary source with a de minimis increase in emissions shall be exempt from section 3 of this rule.

(2) A modification having an increase in emissions that is not de minimis to an existing major stationary source that does not have the potential to emit one hundred (100) tons or more of VOC or nitrogen oxides (unless a NO_X waiver is in effect) per year will not be subject to section 3(a) of this rule if the owner or operator of the source elects to internal offset the increase by a ratio of one and three-tenths (1.3) to one (1). If the owner or operator does not make the election or is unable to, section 3(a) of this rule applies, except that BACT shall be substituted for LAER required by section 3(a)(2) of this rule.

(3) A modification having an increase in emissions that is not de minimis to an existing major stationary source emitting or having the potential to emit one hundred (100) tons of VOC or nitrogen oxides (unless a NO_X waiver is in effect) or more per year will be subject to the requirements of section 3(a) of this rule, except that the owner or operator may elect to internal offset the increase at a ratio of one and three-tenths (1.3) to one (1) as a substitute for LAER required by section 3(a)(2) of this rule.

(c) The requirements of this rule will be applied in accordance with the following:

(1) Except as otherwise provided in subsection (k) and consistent with the definition of major modification in section 1(y) of this rule, a project is a major modification for a regulated NSR pollutant if it causes a significant emissions increase and a significant net emissions increase except for VOC emissions in a severe or serious nonattainment area for ozone. The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(2) Prior to beginning actual construction, the procedure for calculating whether a significant emissions increase will occur depends upon the type of emissions units being modified, in accordance with this subsection, except for VOC emissions in a severe or serious nonattainment area for ozone. The procedure for calculating, before beginning actual construction, whether a significant net emissions increase will occur at the major stationary source is contained in section 1(cc) of this rule. Regardless of any preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

(3) For an actual-to-projected-actual applicability test for projects that only involve existing emissions units, a significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions for each existing emissions unit equals or exceeds the significant amount for that pollutant.

(4) For an actual-to-potential applicability test for projects that only involve construction of new emissions units, a significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit from each new emissions unit following completion of the project and the baseline actual emissions of these units before the project equals or exceeds the significant amount for that pollutant.

(5) For projects that involve a combination of emission units using the tests in subdivisions (3) and (4), a significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in subdivisions (3) and (4), as applicable, with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant.

(d) At the time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation that was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then this rule applies to the source or modification as though construction had not yet commenced on the source or modification.

(e) In the case of an area that has been redesignated nonattainment, any source that would not have been required to submit a permit application under 326 IAC 2-2 concerning the prevention of significant deterioration will not be subject to this rule if construction commences within eighteen (18) months of the area's redesignation.

(f) Major stationary sources or major modifications that would locate in any area designated as attainment or unclassifiable

in the state and would exceed the following significant impact levels at any locality, for any pollutant that is designated as nonattainment, must meet the requirements specified in section 3(a)(1) through 3(a)(3) of this rule. All values are expressed in micrograms per cubic meter ($\mu g/m^3$):

Pollutant	Annual	24-hour	8-hour	3-hour	1-hour
Sulfur dioxide	1	5	X	25	X
PM_{10}	1	5	X	X	X
$PM_{2.5}$	0.3	1.2	X	X	X
Nitrous oxides	1	X	X	X	X
Carbon monoxide	X	X	500	X	2,000

(g) This rule does not apply to a source or modification, other than a source of VOC or nitrogen oxides (unless a NO_X waiver is in effect) in a serious or severe ozone nonattainment area or a source of PM_{10} in a serious PM_{10} area, that would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

(1) Coal cleaning plants (with thermal driers).
(2) Kraft pulp mills.
(3) Portland cement plants.
(4) Primary zinc smelters.
(5) Iron and steel mill plants.
(6) Primary aluminum ore reduction plants.
(7) Primary copper smelters.
(8) Municipal incinerators capable of charging more than two hundred fifty (250) tons of refuse per day.
(9) Hydrofluoric, sulfuric, and nitric acid plants.
(10) Petroleum refineries.
(11) Lime plants.
(12) Phosphate rock processing plants.
(13) Coke oven batteries.
(14) Sulfur recovery plants.
(15) Carbon black plants (furnace process).
(16) Primary lead smelters.
(17) Fuel conversion plants.
(18) Sintering plants.
(19) Secondary metal production plants.
(20) Chemical process plants, excluding ethanol production facilities that produce ethanol by natural fermentation included in North American Industry Classification System (NAICS) codes 325193 for Ethyl Alcohol Manufacturing or 312140 for Distilleries, as revised in 2007*.
(21) Fossil-fuel boilers (or combinations thereof) totaling more than two hundred fifty million (250,000,000) British thermal units per hour heat input.
(22) Petroleum storage and transfer unit with a storage capacity exceeding three hundred thousand (300,000) barrels.
(23) Taconite ore processing plants.
(24) Glass fiber processing plants.
(25) Charcoal production plants.
(26) Fossil fuel-fired steam electric plants of more than two hundred fifty million (250,000,000) British thermal units per hour heat input.
(27) Any other stationary source category that, as of August 7, 1980, is being regulated under Section 111 or 112 of the CAA.

(h) For purposes of this rule, secondary emissions from a source need not be considered in determining whether the source would qualify as a major source. If a source is subject to this rule on the basis of the direct emissions from the source, the applicable conditions must also be met for secondary emissions. The secondary emissions may be exempt from the requirements specified in section 3(a)(2) through 3(a)(3) of this rule.

(i) HAPs listed in and regulated by 326 IAC 14-1 are not exempt from this rule.

(j) The installation, operation, cessation, or removal of temporary clean coal technology demonstration projects funded under the Department of Energy-Clean Coal Technology Appropriations may be exempt from the requirements of section 3 of this rule. To qualify for this exemption, the project must:

(1) be at an existing facility;

(2) operate for not more than five (5) years; and

(3) comply with all other applicable rules for the area.

(k) For any major stationary source operating under a PAL for a regulated NSR pollutant, the major stationary source shall comply with requirements under 326 IAC 2-3.4.

(l) The following specific provisions apply with respect to any regulated NSR pollutant emitted from projects at existing emissions units at a major stationary source, other than projects at a source with a PAL, in circumstances where there is a reasonable possibility, within the meaning of this subsection, that a project that is not a part of a major modification may result in a significant emissions increase of a regulated NSR pollutant, and the owner or operator elects to use the method specified in section 1(kk)(2)(A) of this rule for calculating projected actual emissions:

(1) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(A) A description of the project.

(B) Identification of the emissions units whose emissions of a regulated NSR pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the following:

(i) The baseline actual emissions.

(ii) The projected actual emissions.

(iii) The amount of emissions excluded under section 1(kk)(2)(A)(iii) of this rule and an explanation for why the amount was excluded.

(iv) Any netting calculations, if applicable.

(2) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in subdivision (1) to the department. Nothing in this subdivision shall be construed to require the owner or operator of the unit to obtain any determination from the department before beginning actual construction.

(3) The owner or operator shall:

(A) monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions units identified in subdivision (1)(B); and

(B) calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR pollutant at the emissions unit.

(4) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the department within sixty (60) days after the end of each year during which records must be generated under subdivision (3) setting out the unit's annual emissions during the year that preceded submission of the report.

(5) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the department if the annual emissions, in tons per year, from the project identified in subdivision (1), exceed the baseline actual emissions, as documented and maintained under subdivision (1)(C), by a significant amount for that regulated NSR pollutant, and if the emissions differ from the preconstruction projection as documented and maintained under subdivision (1)(C). The report shall be submitted to the department within sixty (60) days after the end of the year. The report shall contain the following:

(A) The name, address, and telephone number of the major stationary source.

(B) The annual emissions as calculated under subdivision (3).

(C) The emissions calculated under the actual to projected actual test stated in subsection (c)(3).

(D) Any other information that the owner or operator wishes to include in the report.

(6) A reasonable possibility under this subsection occurs when the owner or operator calculates the project to result in either:

(A) a projected actual emissions increase of at least fifty percent (50%) of the amount that is a significant emissions increase, as defined in section 1(qq) of this rule, without reference to the amount that is a significant net emissions increase, for the regulated NSR pollutant; or

(B) a projected actual emissions increase that, added to the amount of emissions excluded under section 1(kk)(2)(A)(iii), sums to at least fifty percent (50%) of the amount that is a significant emissions increase, as defined in section 1(qq) of this rule, without reference to the amount that is a significant net emissions increase, for the regulated NSR pollutant. For a project for which a reasonable possibility occurs only within the meaning of this clause, and not also within the meaning of clause (A), then subdivisions (2) through (5) do not apply to the project.

(7) The owner or operator of the source shall make the information required to be documented and maintained under subdivisions (1) through (5) available for review upon a request for inspection by the department. The general public may request this information from the department under 326 IAC 17.1.

*These documents are incorporated by reference. Copies may be obtained through the U.S. Census Bureau website at: www.census.gov/eos/www/naics or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(Air Pollution Control Division; 326 IAC 2-3-2; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2404; filed Nov 12, 1993, 4:00 p.m.: 17 IR 728; filed Aug 17, 2001, 3:45 p.m.: 25 IR 11; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3929; filed Oct 1, 2010, 3:48 p.m.: 20101027-IR-326070372FRA; filed Jul 21, 2011, 10:45 a.m.: 20110817-IR-326110099FRA; filed Jun 11, 2012, 3:15 p.m.: 20120711-IR-326110251FRA)

326 IAC 2-3-3 Applicable requirements

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 3. (a) Prior to the issuance of a construction permit to a source subject to this rule, the applicant shall comply with the following requirements:

(1) The proposed major new source or major modification shall demonstrate that the source will meet all applicable requirements of this title, any applicable new source performance standard in 40 CFR Part 60*, or any national emission standard for HAPs in 40 CFR Part 61*. If the commissioner determines that the proposed major new source cannot meet the applicable emission requirements, the permit to construct will be denied.

(2) The applicant will apply emission limitation devices or techniques to the proposed construction or modification such that the LAER for the applicable pollutant will be achieved.

(3) The applicant shall either demonstrate that:

(A) all existing major sources owned or operated by the applicant in the state are in compliance with all applicable emission limitations and standards contained in the CAA and in this title; or

(B) they are in compliance with a federally enforceable compliance schedule requiring compliance as expeditiously as practicable.

(4) The applicant shall submit an analysis of alternative sites, sizes, production processes, and environmental control techniques for the proposed source that demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

(5) Emissions resulting from the proposed construction or modification shall be offset by a reduction in actual emissions of the same pollutant from an existing source or combination of existing sources. The emission offset shall be such that there will be reasonable further progress toward attainment of the applicable ambient air quality standards as follows:

(A) Greater than one-for-one unless otherwise specified.

(B) For ozone nonattainment areas, the following table shall determine the minimum offset ratio requirements for major stationary sources of VOC or nitrogen oxides (unless a NO_X waiver is in effect):

Ozone Classification	Minimum Offset Requirements
Marginal	1.1 to 1
Moderate	1.15 to 1
Serious	1.2 to 1

Severe	1.3 to 1

(6) The total tonnage of increased emissions, in tons per year, resulting from a major modification that must be offset in accordance with Section 173 of the CAA shall be determined by summing the difference between the allowable emissions after the modification and the actual emissions before the modification for each emissions unit.
(7) The applicant shall obtain the necessary preconstruction approvals and shall meet all the permit requirements specified in 326 IAC 2-5.1 or 326 IAC 2-7, as applicable.
(8) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with an applicable provision of the SIP and any other requirements under local, state, or federal law.
(b) The following provisions shall apply to all emission offset evaluations:
(1) Emission offsets shall be determined on a tons per year and, whenever possible, a pounds per hour basis when all facilities requiring offset involved in the emission offset calculations are operating at their maximum potential or allowed production rate. When offsets are calculated on a tons per year basis, the baseline emissions for existing sources providing the offsets shall be calculated using the allowed or actual annual operating hours, whichever is less.
(2) The baseline for determining credit for emission offsets will be the emission limitations or actual emissions, whichever is lower, in effect at the time the application to construct or modify a source is filed. Credit for emission offset purposes may be allowable for existing control that goes beyond that required by source-specific emission limitations contained in this title.
(3) In cases where the applicable rule under this title does not contain an emission limitation for a source or source category, the emission offset baseline involving the sources shall be the actual emissions determined at their maximum expected or allowable production rate.
(4) In cases where emission limitations for existing sources allow greater emissions than the potential to emit of the source, emission offset credit shall only be allowed for emissions controlled below the potential to emit.
(5) A source may receive offset credit from emission reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels if the reductions are permanent, quantifiable, and federally enforceable, as follows:
(A) If the area has an attainment plan approved by the U.S. EPA, the shutdown or curtailment is creditable only if it occurred on or after the date of the most recent emissions inventory or attainment demonstration. However, in no event may credit be given for shutdowns that occurred prior to August 7, 1977. For purposes of this clause, the department may choose to consider a prior shutdown or curtailment to have occurred after the date of its most recent emissions inventory if the inventory explicitly includes, as current existing emissions, the emissions from the previously shutdown or curtailed sources.
(B) The reductions may be credited in the absence of an approved attainment demonstration only if the:
(i) shutdown or curtailment occurred on or after the date the new source permit application is filed; or
(ii) applicant can establish that the proposed new source is a replacement for the shutdown or curtailed source and the cutoff date provisions in clause (A) are observed.
(6) Emission offset credit involving an existing fuel combustion source will be based on the allowable emissions under other rules of this title for the type of fuel being burned at the time the new source application is filed. If the existing source commits to switch to a cleaner fuel at some future date, emission offset credit based on the allowable emissions for the fuels involved is acceptable, provided the permit is conditioned to require the use of a specific alternative control measure that would achieve the same degree of emission reduction should the source switch back to a dirtier fuel at some later date. The commissioner will grant emission offset credit for fuel switching only after ensuring that adequate supplies of the new fuel are available at least for the next ten (10) years.
(7) In the case of VOC emissions, no emission offset credit may be allowed for replacing one (1) hydrocarbon compound with another of lesser reactivity, except for those compounds defined as nonphotochemically reactive hydrocarbons in 326 IAC 1-2-48.
(8) No emission reduction may be approved to offset emissions that cannot be federally enforced. Offsetting emissions shall be considered federally enforceable if the reduction is included as a condition in the applicable permit as specified in 326 IAC 2-5.1 or 326 IAC 2-7 if issued under a federally-approved air permit program.
(9) Emission reductions required under any other rule adopted by the board shall not be creditable as emission reductions and therefore cannot be used for emission offsets.

(10) Incidental emission reductions that are not otherwise required by any other rule adopted by the board shall be creditable as emission reductions for emission offsets if the emission reductions meet all of the other requirements for offsets.

(11) A source may offset by alternative or innovative means emission increases from rocket engine or motor firing and cleaning related to the firing at an existing or modified major source that tests rocket engines or motors under the following conditions:

(A) Any modification proposed is solely for the purpose of expanding the testing of rocket engines or motors at an existing source that is permitted to test the engines on November 15, 1990.

(B) The source demonstrates to the satisfaction of the department that:

(i) it has used all reasonable means to obtain and utilize offsets, as determined on an annual basis, for the emissions increases beyond allowable levels;

(ii) all available offsets are being used; and

(iii) sufficient offsets are not available to the source.

(C) The source has obtained a written finding from:

(i) the Department of Defense;

(ii) the Department of Transportation;

(iii) the National Aeronautics and Space Administration; or

(iv) another appropriate federal agency;

that the testing of rocket motors or engines at the facility is required for a program essential to the national security.

(D) The source will comply with an alternative measure, imposed by the department, designed to offset any emission increases beyond permitted levels not directly offset by the source.

(12) Credit for an emissions reduction can be claimed to the extent that the department has not relied on the emission reduction credit in:

(A) issuing any permit under regulations approved pursuant to 40 CFR Part 51 Subpart I*; or

(B) a demonstration for attainment or reasonable further progress.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 2-3-3; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2406; filed Nov 12, 1993, 4:00 p.m.: 17 IR 730; filed Nov 25, 1998, 12:13 p.m.: 22 IR 1005; filed Aug 17, 2001, 3:45 p.m.: 25 IR 12; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3931; filed Oct 1, 2010, 3:48 p.m.: 20101027-IR-326070372FRA; filed Jun 11, 2012, 3:15 p.m.: 20120711-IR-326110251FRA)*

326 IAC 2-3-4 Banking of emission offsets

Authority: IC 13-1-1-4; IC 13-7-7
Affected: IC 13-1-1; IC 13-7-10

Sec. 4. (a) For new sources obtaining permits by applying offsets after January 16, 1979, the commissioner may allow offsets that exceed the requirements of reasonable further progress toward attainment to be banked (i.e., saved to provide offsets for a source seeking a permit in the future) for use under this rule (326 IAC 2-3).

(b) An existing source that reduces its own emissions beyond those required by this title (326 IAC) may bank its excess emission reduction with the prior approval of the commissioner. The commissioner may allow these banked offsets to be used under the preconstruction review program as long as these banked emissions are identified and not used for in the control strategy submitted to EPA to demonstrate attainment and maintenance of ambient air quality standards.

(c) Banked emissions shall be the property of the person providing the offset and shall be identified and registered by the commissioner and shall be incorporated into an enforceable permit.

(d) Decrease in emissions may be credited for offset purposes only if it occurs between the date five (5) years before construction commences on a proposed physical or operational change and the date the increase in actual emissions from that change occurs. In other words, emission reductions may be banked for five (5) years, plus time for construction.

(e) The commissioner may not approve the construction of a source using banked offsets if the new source would interfere

with the attainment and maintenance of ambient air quality standards or if such use would violate any other condition set forth in this rule (326 IAC 2-3). *(Air Pollution Control Division; 326 IAC 2-3-4; filed Mar 10, 1988, 1:20 pm: 11 IR 2407)*

326 IAC 2-3-5 Location of offsetting emissions

Authority: IC 13-1-1-4; IC 13-7-7
Affected: IC 13-1-1

Sec. 5. Emission offsets generally must be obtained by the same source or other existing sources in the same nonattainment area. However, the commissioner may allow offsets to be obtained in another nonattainment area under the following conditions:

(1) The other nonattainment area must have an equal or higher nonattainment classification than the nonattainment area in which the source would construct. This nonattainment classification must be for the same pollutant.

(2) The emissions from the other nonattainment area must contribute to a violation of the national ambient air quality standard in the nonattainment area in which the source would construct.

However, it is desirable to obtain offset from sources located as close to the proposed new source site as possible. The applicant shall show that nearby offsets were investigated and reasonable alternatives were not available before offsets from sources at greater distances can be approved. In such cases, the commissioner may increase the ratio of the required offsets. *(Air Pollution Control Division; 326 IAC 2-3-5; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2407; filed Nov 12, 1993, 4:00 p.m.: 17 IR 732)*

Rule 3.2. Clean Unit Designations in Nonattainment Areas (Repealed)

(Repealed by Air Pollution Control Division; filed Oct 1, 2010, 3:48 p.m.: 20101027-IR-326070372FRA)

Rule 3.3. Pollution Control Project Exclusion Procedural Requirements in Nonattainment Areas (Repealed)

(Repealed by Air Pollution Control Division; filed Oct 1, 2010, 3:48 p.m.: 20101027-IR-326070372FRA)

Rule 3.4. Actuals Plantwide Applicability Limitations in Nonattainment Areas

326 IAC 2-3.4-1 Applicability

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 1. (a) The department may approve the use of an actuals plantwide applicability limitation (PAL) for any existing major stationary source, except as provided in subsection (b), if the PAL meets the requirements in this rule. A source that is subject to P.L.231-2003, SECTION 6 shall comply with the requirements of 326 IAC 2-2.6.

(b) The department shall not allow an actuals PAL for VOC or NO_x for any major stationary source located in an extreme ozone nonattainment area.

(c) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL, that level meets the requirements in this rule, and that complies with the PAL permit:

(1) is not a major modification for the PAL pollutant;

(2) does not have to be approved through 326 IAC 2-3; and

(3) is not subject to 326 IAC 2-3-2(d).

(d) Except as provided under subsection (c)(3), a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL. *(Air Pollution Control Division; 326 IAC 2-3.4-1; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3939)*

326 IAC 2-3.4-2 Definitions

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 2. (a) The definitions in this section apply throughout this rule. A term that is not defined in this section shall have the meaning set forth in 326 IAC 2-3-1 or in the CAA.

(b) "Actuals PAL", for a major stationary source, means a PAL based on the baseline actual emissions of all emissions units at the source that emit or have the potential to emit the PAL pollutant.

(c) "Allowable emissions" means the following:

(1) The emissions rate of a stationary source calculated using the maximum rated capacity of the source unless the source is subject to federally enforceable limits that restrict the operating rate or hours of operation, or both, and the most stringent of the:

(A) applicable standards as set forth in 40 CFR Part 60* and 40 CFR Part 61*;

(B) state implementation plan emissions limitation, including those with a future compliance date; or

(C) emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

(2) The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

(3) An emissions unit's potential to emit shall be determined using the definition in 326 IAC 2-3-1.

(d) "Major emissions unit" means any emissions unit that emits or has the potential to emit:

(1) one hundred (100) tons per year or more of the PAL pollutant in an attainment area; or

(2) the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the CAA for nonattainment areas.

(e) "PAL effective date" generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL under section 11 of this rule is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(f) "PAL effective period" means the period beginning with the PAL effective date and ending ten (10) years later.

(g) "PAL major modification" means, notwithstanding the definitions for major modification in 326 IAC 2-3-1(z) and net emissions increase in 326 IAC 2-3-1(dd), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

(h) "PAL permit" means the permit issued by the department that contains PAL provisions for a major stationary source.

(i) "PAL pollutant" means the regulated NSR pollutant for which a PAL is established at a major stationary source.

(j) "Plantwide applicability limitation" or "PAL" means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with this rule. For the purposes of this rule, a PAL is an actuals PAL.

(k) "Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level, as defined in 326 IAC 2-3-1 or in the CAA, whichever is lower, for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in subsection (d).

(l) "Small emissions unit" means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in 326 IAC 2-3-1(qq) or in the CAA, whichever is lower.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 2-3.4-2; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3940)*

326 IAC 2-3.4-3 Permit application requirements

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 3. As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the department for approval:

(1) A list of all emissions units at the source designated as small, significant, or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.

(2) Calculations of the baseline actual emissions with supporting documentation. Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.

(3) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve (12) month rolling total for each month as required by section 13(a) of this rule.

(Air Pollution Control Division; 326 IAC 2-3.4-3; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3941)

326 IAC 2-3.4-4 Establishing PALs; general requirements

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 4. (a) The department may establish a PAL at a major stationary source provided that, at a minimum, the following requirements are met:

(1) The PAL shall impose an annual emission limitation in tons per year, which is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first twelve (12) months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous twelve (12) consecutive months is less than the PAL, on a twelve (12) month average, rolled monthly. For each month during the first eleven (11) months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

(2) The PAL shall be established in a PAL permit that meets the public participation requirements in section 5 of this rule.

(3) The PAL permit shall contain all the requirements of section 7 of this rule.

(4) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

(5) Each PAL shall regulate emissions of only one (1) pollutant.

(6) Each PAL shall have a PAL effective period of ten (10) years.

(7) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, record keeping, and reporting requirements provided in sections 12 through 14 of this rule for each emissions unit under the PAL through the PAL effective period.

(b) At no time during or after the PAL effective period are emissions reductions of a PAL pollutant, which occur during the PAL effective period, creditable as decreases for purposes of offsets under 326 IAC 2-3-3 unless the level of the PAL is reduced by the amount of the emissions reductions and the reductions would be creditable in the absence of the PAL. *(Air Pollution Control Division; 326 IAC 2-3.4-4; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3941)*

326 IAC 2-3.4-5 Public participation requirements for PALs

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 5. PALs for existing major stationary sources shall be:

(1) established;
(2) renewed;
(3) increased;
(4) terminated; or
(5) revoked;

through a procedure that is consistent with 326 IAC 2-7-17. This includes the requirement that the department provide the public with notice of the proposed approval of a PAL permit and at least a thirty (30) day period for submittal of public comment. The department must address all material comments before taking final action on the permit. *(Air Pollution Control Division; 326 IAC 2-3.4-5; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3941)*

326 IAC 2-3.4-6 Establishing a 10 year actuals PAL level

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 6. (a) The actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source plus an amount equal to the least of the following levels:

(1) The applicable significant level in 326 IAC 2-3-1(qq) for the PAL pollutant.

(2) The de minimis level in 326 IAC 2-3-1(q) in case of the PAL for VOC emissions for sources located in severe or serious nonattainment areas.

(3) The level specified under CAA.

(b) For establishing the actuals PAL level for a PAL pollutant, only one (1) consecutive twenty-four (24) month period shall be used to determine the baseline actual emissions for all existing emissions units. A different consecutive twenty-four (24) month period may be used for each different PAL pollutant.

(c) Emissions associated with units that were permanently shutdown after this twenty-four (24) month period must be subtracted from the PAL level.

(d) Emissions from units, except modifications to existing units, on which actual construction began after the twenty-four (24) month period must be added to the PAL level in an amount equal to the potential to emit of the units.

(e) The department shall specify a reduced PAL level, in tons per year, in the PAL permit to become effective on the future compliance date of any applicable federal or state regulatory requirement that the department is aware of prior to issuance of the PAL permit. *(Air Pollution Control Division; 326 IAC 2-3.4-6; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3941)*

326 IAC 2-3.4-7 Contents of the PAL permit

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 7. The PAL permit must contain, at a minimum, the following information:

(1) The PAL pollutant and the applicable source-wide emission limitation in tons per year.

(2) The PAL permit effective date and the expiration date of the PAL.

(3) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with section 10 of this rule before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the department.

(4) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns, and malfunctions.

(5) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of section 9 of this rule.

(6) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a twelve (12) month rolling total as required by section 13(a) of this rule.

(7) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with section 12 of this rule.

(8) A requirement to retain the records required under section 13 of this rule on site. The records may be retained in an electronic format.

(9) A requirement to submit the reports required under section 14 of this rule by the required deadlines.

(10) Any other requirements that the department deems necessary to implement and enforce the PAL.

(Air Pollution Control Division; 326 IAC 2-3.4-7; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3942)

326 IAC 2-3.4-8 PAL effective period and reopening of the PAL permit

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 8. (a) The department shall specify a PAL effective period of ten (10) years.

(b) For reopening of the PAL permit, the following requirements must be met:

(1) During the PAL effective period, the department shall reopen the PAL permit to:

(A) correct typographical or calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

(B) reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under 326 IAC 2-3-3; or

(C) revise the PAL to reflect an increase in the PAL as provided under section 11 of this rule.

(2) The department has discretion to reopen the PAL permit to reduce the PAL as follows:

(A) To reflect newly applicable federal requirements with compliance dates after the PAL effective date.

(B) Consistent with any other requirement that is enforceable as a practical matter and that the state may impose on the major stationary source under the state implementation plan.

(C) If the department determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation or to an adverse impact on an air quality related value that has been identified for a federal Class I area by a federal land manager and for which information is available to the general public.

(3) Except for the permit reopening in subdivision (1)(A) for the correction of typographical or calculation errors that do not increase the PAL level, all other reopenings shall be conducted in accordance with the public participation requirements of section 5 of this rule.

(Air Pollution Control Division; 326 IAC 2-3.4-8; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3942)

326 IAC 2-3.4-9 Expiration of a PAL

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 9. (a) Any PAL that is not renewed in accordance with the procedures in section 10 of this rule shall expire at the end of the PAL effective period, and the requirements in this section shall apply.

(b) Each emissions unit or each group of emissions units that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the following procedures:

(1) Within the time frame specified for PAL renewals in section 10(b) of this rule, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit or each group of emissions units, if the distribution is more appropriate as decided by the department by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under section 10(e) of this rule, the distribution shall be made as if the PAL had been adjusted.

(2) The department shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the department determines is appropriate.

(c) Each emissions unit shall comply with the allowable emission limitation on a twelve (12) month rolling basis. The department may approve the use of monitoring systems other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

(d) Until the department issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subsection (b)(1), the source shall continue to comply with a source-wide, multiunit emissions cap equivalent to the level of the PAL emission limitation.

(e) Any physical change or change in the method of operation at the major stationary source will be subject to the nonattainment major NSR requirements if the change meets the definition of major modification in 326 IAC 2-3-1.

(f) The major stationary source owner or operator shall continue to comply with any state or federal applicable requirements that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established under 326 IAC 2-3-2(d) but were eliminated by the PAL under section 1(c)(3) of this rule.

(Air Pollution Control Division; 326 IAC 2-3.4-9; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3943)

326 IAC 2-3.4-10 Renewal of a PAL

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 10. (a) The department shall follow the procedures specified in section 5 of this rule in approving any request to renew a PAL for a major stationary source and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During the public review, any person may propose a PAL level for the source for consideration by the department.

(b) A major stationary source owner or operator shall submit a timely application to the department to request renewal of a PAL. A timely application is one that is submitted at least six (6) months prior to, but not earlier than eighteen (18) months from, the date of PAL expiration. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(c) The application to renew a PAL permit shall contain the following information:

(1) The information required in section 3 of this rule.

(2) A proposed PAL level.

(3) The sum of the potential to emit of all emissions units under the PAL with supporting documentation.

(4) Any other information the owner or operator wishes the department to consider in determining the appropriate level for renewing the PAL.

(d) In determining whether and how to adjust the PAL, the department shall consider the options outlined in this subsection. However, in no case may any adjustment fail to comply with subdivision (3). The following provisions apply:

(1) If the emissions level calculated in accordance with section 6 of this rule is equal to or greater than eighty percent (80%) of the PAL level, the department may renew the PAL at the same level without considering the factors set forth in subdivision (2).

(2) The department may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions or that it determines to be appropriate considering:

(A) air quality needs;

(B) advances in control technology;

(C) anticipated economic growth in the area;

(D) desire to reward or encourage the source's voluntary emissions reductions; or

(E) other factors as specifically identified by the department.

(3) Notwithstanding subdivisions (1) and (2):

(A) if the potential to emit of the major stationary source is less than the PAL, the department shall adjust the PAL to a level no greater than the potential to emit of the source; and

(B) the department shall not approve a renewed PAL level higher than the current PAL unless the major stationary source has complied with section 11 of this rule.

(e) If the compliance date for a state or federal requirement that applies to the PAL source occurs during the PAL effective period and if the department has not already adjusted for the requirement, the PAL shall be adjusted at the time of PAL permit renewal or Part 70 permit renewal, whichever occurs first. *(Air Pollution Control Division; 326 IAC 2-3.4-10; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3943)*

326 IAC 2-3.4-11 Increasing a PAL during the PAL effective period

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 11. (a) The department may increase a PAL emission limitation during the PAL effective period only if the major stationary source complies with the following provisions:

(1) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. The application shall identify the emissions units contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

(2) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls plus the sum of the allowable emissions of the new or modified emissions units exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding ten (10) years. In this case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

(3) The owner or operator shall obtain a major NSR permit for all emissions units identified in subdivision (1) regardless of the magnitude of the emissions increase resulting from them. These emissions units shall comply with any emissions requirements resulting from the nonattainment major NSR process, even though they have also become subject to the PAL or continue to be subject to the PAL.

(4) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

(b) The department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit plus the sum of the baseline actual emissions of the significant and major emissions units, assuming application of BACT equivalent controls as determined in accordance with subsection (a)(2), plus the sum of the baseline actual emissions of the small emissions units.

(c) The PAL permit must be revised to reflect the increased PAL level under the public notice requirements of section 5 of this rule. *(Air Pollution Control Division; 326 IAC 2-3.4-11; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3944)*

326 IAC 2-3.4-12 Monitoring requirements for PALs

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 12. (a) The following general requirements apply:

(1) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by the system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

(2) The PAL monitoring system must employ one (1) or more of the four (4) general monitoring approaches meeting the minimum requirements set forth in subsection (b) and must be approved by the department.

(3) Notwithstanding subdivision (2), an alternative monitoring approach may be employed:

(A) that meets subdivision (1); and

(B) if it is approved by the department.

(4) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.

(b) The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in subsections (c) through (i):

(1) Mass balance calculations for activities using coatings or solvents.

(2) CEMS.

(3) CPMS or PEMS.

(4) Emission factors.

(c) An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

(1) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit.

(2) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process.

(3) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from the material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the department determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(d) An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(1) CEMS must comply with applicable performance specifications found in 40 CFR Part 60, Appendix B*.

(2) CEMS must sample, analyze, and record data at least every fifteen (15) minutes while the emissions unit is operating.

(e) An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

(1) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameters and the PAL pollutant emissions across the range of operation of the emissions unit.

(2) Each CPMS or PEMS must sample, analyze, and record data at least every fifteen (15) minutes, or at another less frequent interval approved by the department, while the emissions unit is operating.

(f) An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(1) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development.

(2) The emissions unit shall operate within the designated range of use for the emission factor, if applicable.

(3) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six (6) months of PAL permit issuance unless the department determines that testing is not required.

(g) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data unless another method for determining emissions during the periods is specified in the PAL permit.

(h) Notwithstanding the requirements in subsections (c) through (g), where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameters and the PAL pollutant emissions rate at all operating points of the emissions unit, the department shall, at the time of permit issuance:

(1) establish default values for determining compliance with the PAL based on the highest potential emissions reasonably estimated at the operating points; or

(2) determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameters and the PAL pollutant emissions is a violation of the PAL.

(i) All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the department. The testing must occur at least once every five (5) years after issuance of the PAL.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 2-3.4-12; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3944)*

326 IAC 2-3.4-13 Record keeping requirements

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 13. (a) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of this rule and of the PAL, including a determination of each emissions unit's twelve (12) month rolling total emissions, for five (5) years from the date of the record.

(b) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five (5) years:

(1) A copy of the PAL permit application and any applications for revisions to the PAL.

(2) Each annual certification of compliance pursuant to 40 CFR Part 70* and the data relied on in certifying the compliance.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental

Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 2-3.4-13; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3945)*

326 IAC 2-3.4-14 Reporting and notification requirements

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 14. (a) The owner or operator shall submit semiannual monitoring reports and deviation reports to the department in accordance with 326 IAC 2-7. The reports shall meet the requirements of this section.

(b) A semiannual report shall be submitted to the department within thirty (30) days of the end of each reporting period. This report shall contain the following information:

(1) The identification of owner and operator and the permit number.

(2) Total annual emissions in tons per year based on a twelve (12) month rolling total for each month in the reporting period recorded under section 13(a) of this rule.

(3) All data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions.

(4) A list of any emissions units modified or added to the major stationary source during the preceding six (6) month period.

(5) The number, duration, and cause of any deviations or monitoring malfunctions, other than the time associated with zero (0) and span calibration checks, and any corrective action taken.

(6) Information about monitoring system shutdowns including the following:

(A) Notification to the department of the shutdown of any monitoring system.

(B) Whether the shutdown was permanent or temporary.

(C) The reason for the shutdown.

(D) The anticipated date that the monitoring system will be fully operational or replaced with another monitoring system.

(E) Whether the emissions unit monitored by the monitoring system continued to operate.

(F) If the emissions unit monitored by the monitoring system continued to operate, the calculation of the:

(i) emissions of the pollutant; or

(ii) number determined by method included in the permit, as provided by section 12(g) of this rule.

(7) A signed statement by the responsible official, as defined in 326 IAC 2-7-1, certifying the truth, accuracy, and completeness of the information provided in the report.

(c) The major stationary source owner or operator shall promptly submit reports to the department of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted under 326 IAC 2-7-5(3)(C)(ii) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by 326 IAC 2-7-5(3)(C)(ii). The reports shall contain the following information:

(1) The identification of owner and operator and the permit number.

(2) The PAL requirement that experienced the deviation or that was exceeded.

(3) Emissions resulting from the deviation or the exceedance.

(4) A signed statement by the responsible official, as defined in 326 IAC 2-7-1, certifying the truth, accuracy, and completeness of the information provided in the report.

(d) The owner or operator shall submit to the department the results of any revalidation test or method within three (3) months after completion of the test or method. *(Air Pollution Control Division; 326 IAC 2-3.4-14; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3946; errata filed Jan 2, 2013, 2:19 p.m.: 20130123-IR-326130002ACA)*

326 IAC 2-3.4-15 Termination and revocation of a PAL

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 15. (a) This section applies to any PAL that is terminated or revoked prior to the PAL expiration date.

(b) A major stationary source owner or operator may at any time submit a written request to the department to terminate or revoke a PAL prior to the expiration or renewal of the PAL.

(c) Each emissions unit or each group of emissions units that existed under the PAL shall be in compliance with an allowable emission limitation under a revised permit established according to the following procedures:

(1) The major stationary source owner or operator may submit a proposed allowable emission limitation for each emissions unit or each group of emissions units by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under section 10(e) of this rule, such distribution shall be made as if the PAL had been adjusted.

(2) The department shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the department determines is appropriate. The determination of distribution of the PAL allowable emissions may be based on the emissions limitations that were eliminated by the PAL in accordance with section 1(c)(3) of this rule.

(d) Each emissions unit shall be in compliance with the allowable emission limitation on a twelve (12) month rolling basis. The department may approve the use of monitoring systems other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.

(e) Until the department issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subsection (c)(2), the source shall continue to comply with a source-wide, multiunit emissions cap equivalent to the level of the PAL emission limitation.

(f) The department shall follow the procedures specified in section 5 of this rule in terminating or revoking a PAL for a major stationary source and shall provide the proposed distributed allowable emission limitations to the public for review and comment. During such public review, any person may propose a PAL distribution of allowable emissions for the source for consideration by the department. *(Air Pollution Control Division; 326 IAC 2-3.4-15; filed Aug 10, 2004, 3:35 p.m.: 27 IR 3946)*

Rule 4. Compliance Using the Bubble Approach (Repealed)

(Repealed by Air Pollution Control Division; filed Nov 25, 1998, 12:13 p.m.: 22 IR 1072)

Rule 4.1. Major Sources of Hazardous Air Pollutants

326 IAC 2-4.1-1 New source toxics control

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) Any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41*, after July 27, 1997, including owners or operators with permit applications pending with the department on the effective date of this section, shall comply with the requirements of this section, except as specifically specified in this rule. This section does not apply to an owner or operator that has received all necessary permits for the construction or reconstruction before July 27, 1997. On and after June 29, 1998, this section is intended to implement Section 112(g)(2)(B) of the Clean Air Act (CAA). Subsection (c)(3)(E) and (c)(3)(I) shall not apply to an owner or operator that has received all necessary permits for the construction or reconstruction before June 29, 1998.

(b) This section does not apply to the following exclusions set forth in 40 CFR 63.40*:

(1) Electric utility steam generating units until such time as these units are added to the source category list under Section 112(c)(5) of the CAA.

(2) A major source specifically regulated, or exempted from regulation, by a standard issued pursuant to Section 112(d), 112(h), or 112(j) of the CAA.

(3) Stationary sources that are within a source category that has been deleted from the source category list under Section 112(c)(9) of the CAA.

(4) Research and development activities, as defined in 40 CFR 63.41*.

(c) The air pollution control board incorporates by reference the following provisions of 40 CFR 63, Subpart B, Hazardous

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Appendix E2

1997 8-Hour Ozone Nonattainment Area Redesignations

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1997 8-Hour Ozone									
County Name	**Area**	**Date Designated Nonattainment**	**Effective Date of Nonattainment Designation**	**Nonattainment Classification Type**	**State Implementation Plan Due (3 yrs from Effective Date of Designation)**	**Attainment Date**	**Date Reclassified to Attainment w/ Maintenance Plan**	***Date Maintenance Plan is to be Revised (8 years after being Redesignated)**	**Notes**
Allen	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	2/12/2007		*The 1997 8-hour ozone standard was revoked in the March 6, 2015 Federal Register (FR) published at 80 FR 12264 with an effective date of April 6, 2015. Therefore, updated maintenance plans are no longer required.
Boone	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	10/19/2007		
Clark	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	7/19/2007		
Dearborn	Lawrenceburg Township Only	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	5/11/2010		
Delaware	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	1/3/2006		
Elkhart	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	7/19/2007		
Floyd	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	7/19/2007		
Greene	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	12/29/2005		
Hamilton	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	10/19/2007		
Hancock	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	10/19/2007		
Hendricks	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	10/19/2007		
Jackson	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	12/29/2005		
Johnson	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	10/19/2007		
Lake	Entire County	4/15/2004	6/15/2004	Moderate	6/15/2007	6/15/2010	5/11/2010		
LaPorte	Entire County	4/15/2004	6/15/2004	Moderate Changed to Marginal on 11-22-04	6/15/2007	6/15/2010	7/19/2007		
Madison	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	10/19/2007		
Marion	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	10/19/2007		
Morgan	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	10/19/2007		

Porter	Entire County	4/15/2004	6/15/2004	Moderate	6/15/2007	6/15/2010	5/11/2010		
St. Joseph	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	7/19/2007		
Shelby	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	10/19/2007		
Vanderburgh	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	1/30/2006		
Vigo	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	2/6/2006		
Warrick	Entire County	4/15/2004	6/15/2004	Basic	6/15/2007	6/15/2009	1/30/2006		

Primary and secondary 8-hour ozone standards were established in 1997 and set at a level of 0.08 parts per million (ppm). The standards were finalized by U.S. EPA on July 18, 1997 and became effective on September 16, 1997 (62 FR 38856). All other Indiana counties not listed above were designated unclassifiable/attainment under the 8-hour ozone standard.

On March 12, 2008, U.S. EPA lowered the 8-hour ozone standard to a level of 0.075 ppm. The standards were finalized by U.S. EPA on March 27, 2008 and became effective on May 27, 2008 (73 FR 16436).

Attainment of the 2008 8-hour ozone standard is determined by evaluating the three-year average of the fourth highest daily maximum 8-hour average ozone concentration measured at each monitor within a nonattainment area over each year, which must not exceed 0.075 ppm.

On October 1, 2015, U.S. EPA further strengthened the 8-hour ozone standard to a level of 0.070 ppm. The standards were finalized by U.S. EPA on October 26, 2015 and became effective on December 28, 2015 (80 FR 65292).

Attainment of the 2015 8-hour ozone standard is determined by evaluating the three-year average of the fourth highest daily maximum 8-hour average ozone concentration measured at each monitor within a nonattainment area over each year, which must not exceed 0.070 ppm.

Last Updated 1/31//2017

Attachment F

Enhanced Vehicle Emissions Inspection and Maintenance (I/M) Testing Program

Appendix F1
Indiana Code (IC) 13-17-5

Appendix F2
326 Indiana Administrative Code (IAC) 13

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Enhanced Vehicle Emissions Inspection and Maintenance (I/M) Testing Program in Lake and Porter Counties, Indiana

This submittal is intended to fulfill the motor vehicle inspection and maintenance requirement of Clean Air Act (CAA) Section 182(b)(4) for the 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS).

Pursuant to the 1977 Clean Air Act Amendments (CAAA), United States Environmental Protection Agency (U.S. EPA) designated Lake and Porter counties as nonattainment for 1–hour ozone NAAQS and as a portion of the Chicago-Gary-Lake County, Illinois-Indiana (IL-IN) nonattainment area (40 Code of Federal Regulation 81.315). Lake and Porter counties were later classified as a Severe-17 nonattainment area pursuant to Section 182(c)(3) of the 1990 CAAA. The CAAA required areas failing to meet the NAAQS for ozone to develop state implementation plans (SIPs) to expeditiously attain and maintain the standard. Section 182(c)(3) of the CAAA required nonattainment areas to adopt certain mandatory control measures as part of their SIPs. Mandated controls for Lake and Porter counties included an enhanced vehicle inspection and maintenance (I/M) testing program.

The I/M testing program was first initiated in Lake and Porter counties in 1984 and was augmented in 1997 to a fully enhanced I/M program. The program received final approval from U.S. EPA and became effective on May 20, 1996, (61 FR 11142) as part of Indiana's 1-hour ozone SIP.[1] The program is authorized by state statute Indiana Code (IC) 13-17-5 (Appendix F1), paid through the general funds, and implemented through rules promulgated by the Indiana Environmental Rules Board at 326 Indiana Administrative Code (IAC) 13 (Appendix F2).

Although the 1-hour ozone standard was revoked on June 15, 2005, Indiana has not requested U.S. EPA to approve a revision to its SIP to discontinue the I/M program. The requirements for the I/M program in Lake and Porter counties remain in place in Indiana's ozone SIP. As such, the current I/M program in Lake and Porter counties satisfies Indiana's obligation under Section 182(b)(4) of the CAAA for the 2008 8-hour ozone Chicago-Naperville, IL-IN-Wisconsin (WI), nonattainment area classified as moderate.

[1] https://www.gpo.gov/fdsys/pkg/FR-1996-03-19/pdf/96-6466.pdf

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Appendix F1

Indiana Code (IC) 13-17-5

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IC 13-17-5
Chapter 5. Motor Vehicle Emission Control

IC 13-17-5-1
Rules

Sec. 1. The board may adopt rules for the control of emissions from vehicles. However, the board must, before adopting the rules, forward to each member of the general assembly a copy of the proposed rules. The rules may prescribe requirements for the following:

(1) The installation and use of equipment designed to reduce or eliminate emissions.

(2) The proper maintenance of that equipment and of vehicles.

As added by P.L.1-1996, SEC.7. Amended by P.L.133-2012, SEC.121.

IC 13-17-5-2
Consistency of rules with federal emission control laws

Sec. 2. Any rules proposed for adoption under section 1 of this chapter must be consistent with provisions of federal law relating to control of emissions from vehicles. The board may not require, as a condition precedent to the initial sale of a vehicle or vehicular equipment, the inspection, certification, or other approval of any feature or equipment designed for the control of emissions from vehicles if the feature or equipment has been certified, approved, or otherwise authorized under federal law.

As added by P.L.1-1996, SEC.7.

IC 13-17-5-3
Removal or failure to maintain emission control device

Sec. 3. Except as permitted or authorized by law, a person may not:

(1) fail to maintain in good working order; or

(2) remove, dismantle, or otherwise cause to be inoperative;

any air pollution control system or mechanism that is used to control air pollution of a vehicle and that is required by rules of the board to be maintained in or on the vehicle.

As added by P.L.1-1996, SEC.7.

IC 13-17-5-4
Penalty

Sec. 4. The commissioner of the bureau of motor vehicles shall suspend the registration of any vehicle that is not in compliance with section 3 of this chapter and may not reinstate the registration until:

(1) the emission control equipment of the vehicle has been restored, replaced, or repaired and is in good working order; and

(2) if the vehicle is subject to a rule of the board requiring

testing of the emission characteristics of certain vehicles in certain counties, all requirements of that rule applying to the vehicle have been satisfied.

As added by P.L.1-1996, SEC.7.

IC 13-17-5-5

Repealed

(As added by P.L.1-1996, SEC.7. Repealed by P.L.229-1999, SEC.5.)

IC 13-17-5-5.1

Applicability of rules regarding tests; inspection station powers; contracts to conduct tests

Sec. 5.1. (a) A rule adopted by the board under air pollution control laws that requires:

(1) certain motor vehicles registered in certain counties to undergo a periodic test of emission characteristics; and

(2) vehicles failing the emissions test to be repaired and retested;

applies to the vehicles registered in those counties subject to the rules. An exemption in the rules applies to motor vehicles registered in those counties subject to the rule.

(b) An inspection station authorized by a rule adopted by the board may:

(1) inspect any vehicle; and

(2) certify that the inspected vehicle meets air emission control standards established in the applicable rules.

(c) The department may contract with a person to conduct inspections to test the emissions or emission control devices of motor vehicles. If inspections are conducted by a contractor under this subsection, the inspections and testing shall be conducted under the direction of the department. The department may not enter into a contract with a foreign corporation under this section unless the foreign corporation is registered with the secretary of state to do business in Indiana.

(d) The duration of a contract entered into under this section may not exceed ten (10) years.

(e) This section does not prohibit the board or the department from adopting fleet inspection procedures.

(f) IC 5-22-17-3 does not apply to a procurement under this section.

As added by P.L.229-1999, SEC.2.

IC 13-17-5-5.2

Legalization of certain rules, inspections, certifications, and contracts

Sec. 5.2. The following are legalized:

(1) A rule adopted by the air pollution control board and

described in IC 13-17-5-5(a) before its repeal.

(2) An inspection or certification conducted under IC 13-17-5-5(b) before its repeal.

(3) Contracts entered into and inspections made under IC 13-17-5-5(c) before its repeal.

As added by P.L.220-2011, SEC.281.

IC 13-17-5-5.4

Number of inspection stations in certain counties

Sec. 5.4. (a) This section applies to the following counties:

(1) A county having a population of more than seventy-one thousand (71,000) but less than seventy-five thousand (75,000).

(2) A county having a population of more than one hundred ten thousand (110,000) but less than one hundred eleven thousand (111,000).

(b) For the purpose of determining the number of inspection stations operating in a county under this subsection, a temporary or portable inspection station counts as an inspection station. After July 1, 1997, the department must maintain in a county under subsection (a) an equal or greater number of inspection stations as were operating in the county on July 1, 1996.

As added by P.L.79-1997, SEC.2. Amended by P.L.170-2002, SEC.86; P.L.119-2012, SEC.109.

IC 13-17-5-6

Vehicle emissions tests certificate of compliance; new and recently manufactured vehicles

Sec. 6. (a) A rule adopted by the board under air pollution control laws that:

(1) requires periodic motor vehicle emissions tests; and

(2) makes new vehicles exempt from the emissions tests for a time;

may not require that new vehicles be presented at an official vehicle inspection station for the purpose of obtaining a certificate of compliance.

(b) A rule adopted by the board under air pollution control laws that:

(1) requires periodic motor vehicle emissions tests; and

(2) makes certain vehicles exempt from the emissions test due to the length of time since the vehicles were manufactured;

may not require that those vehicles be presented at an official vehicle inspection station for the purpose of obtaining a certificate of compliance.

As added by P.L.1-1996, SEC.7.

IC 13-17-5-6.7

Repealed

(As added by P.L.282-2003, SEC.36. Repealed by P.L.1-2007,

SEC.248.)

IC 13-17-5-7
Motor vehicle emissions testing program; funding

Sec. 7. (a) The department shall annually advise the budget committee on whether:

(1) money appropriated by the general assembly; and
(2) money available through federal grants;

is adequate to implement a motor vehicle emissions testing program described in section 5.1 of this chapter.

(b) If the money described under subsection (a) becomes insufficient to implement a motor vehicle emissions testing program, the department shall immediately notify:

(1) the governor; and
(2) the budget committee;

of the insufficiency.

As added by P.L.1-1996, SEC.7. Amended by P.L.229-1999, SEC.3.

IC 13-17-5-8
Motor vehicle emissions inspection station; duty to report violations; notification of compliance

Sec. 8. (a) Whenever:

(1) an officer or employee of the department; or
(2) a person the department has contracted with under section 5 (before its repeal) or 5.1 of this chapter or IC 13-1-1-11 (before its repeal);

learns of a violation of section 1, 2, 3, or 4 of this chapter or IC 13-1-1-6 (before its repeal), the officer or employee shall notify the bureau of motor vehicles in writing of the violation or failure for purposes of the suspension of the registration of the vehicle in question under IC 9-18-2-39.

(b) After a vehicle's registration is suspended under IC 9-18-2-39:

(1) an officer or employee of the department; or
(2) a person the department has contracted with under section 5 (before its repeal) or 5.1 of this chapter or IC 13-1-1-11 (before its repeal);

who recognizes that the violation of section 1, 2, 3, or 4 of this chapter or IC 13-1-1-6 (before its repeal) has been corrected shall notify the bureau of motor vehicles in writing of the correction or achievement of compliance for purposes of the reinstatement of the vehicle's registration under IC 9-18-2-39.

As added by P.L.1-1996, SEC.7. Amended by P.L.229-1999, SEC.4.

IC 13-17-5-9
Rules for vehicle inspection programs in certain counties; approval of programs by budget agency

Sec. 9. (a) After December 31, 2006, the board may not adopt a rule under air pollution control laws that requires motor vehicles to

undergo a periodic test of emission characteristics in the following counties:

(1) A county having a population of more than seventy-one thousand (71,000) but less than seventy-five thousand (75,000).

(2) A county having a population of more than one hundred ten thousand (110,000) but less than one hundred eleven thousand (111,000).

(b) After December 31, 2006, 326 IAC 13-1.1 is void to the extent it applies to a county referred to in subsection (a).

(c) Unless the budget agency approves a periodic vehicle inspection program for a county referred to in subsection (a), the board shall amend 326 IAC 13-1.1 so that it does not apply after December 31, 2006, to a county referred to in subsection (a).

(d) The budget agency, after review by the budget committee, may approve in writing the implementation of a periodic vehicle inspection program for one (1) or more counties described in subsection (a) only if the budget agency determines that the implementation of a periodic vehicle inspection program in the designated counties is necessary to avoid a loss of federal highway funding for the state or a political subdivision. The approval must specify the counties to which the periodic vehicle inspection program applies and the time during which the periodic vehicle inspection program must be conducted in each designated county. The budget agency, after review by the budget committee, shall withdraw an approval given under this subsection for a periodic vehicle inspection program in a county if the budget agency determines that the suspension of the periodic vehicle inspection program will not adversely affect federal highway funding for the state or a political subdivision.

As added by P.L.282-2003, SEC.37. Amended by P.L.119-2012, SEC.110.

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Appendix F2

Indiana Administrative Code (IAC) 13

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ARTICLE 13. MOTOR VEHICLE EMISSION AND FUEL STANDARDS

NOTE: IC 13-1 and IC 13-7 were repealed by P.L.1-1996, SECTION 99, effective July 1, 1996.

Rule 1. Motor Vehicle Inspection and Maintenance Requirements

326 IAC 13-1-1 Applicability and general requirements (Repealed)

Sec. 1. *(Repealed by Air Pollution Control Division; filed Nov 17, 1989, 5:00 p.m.: 13 IR 507)*

326 IAC 13-1-1.1 Applicability and general requirements (Repealed)

Sec. 1.1. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

326 IAC 13-1-2 Definitions (Repealed)

Sec. 2. *(Repealed by Air Pollution Control Division; filed Nov 17, 1989, 5:00 p.m.: 13 IR 507)*

326 IAC 13-1-2.1 Definitions (Repealed)

Sec. 2.1. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

326 IAC 13-1-3 Issuance and display of stickers; testing schedule (Repealed)

Sec. 3. *(Repealed by Air Pollution Control Division; filed Nov 17, 1989, 5:00 p.m.: 13 IR 507)*

326 IAC 13-1-3.1 Issuance of certificates of compliance; testing and inspection schedule (Repealed)

Sec. 3.1. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

326 IAC 13-1-4 Testing and inspection procedures (Repealed)

Sec. 4. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

326 IAC 13-1-5 Pass-fail limits for emissions testing (Repealed)

Sec. 5. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

326 IAC 13-1-6 Test reports; repair forms (Repealed)

Sec. 6. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

326 IAC 13-1-7 Emissions test and tampering inspection failures and waivers (Repealed)

Sec. 7. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

326 IAC 13-1-8 Facility and testing requirements (Repealed)

Sec. 8. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

326 IAC 13-1-9 Motor vehicle emission inspectors; certification (Repealed)

Sec. 9. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

326 IAC 13-1-10 Facility quality assurance program (Repealed)

Sec. 10. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

326 IAC 13-1-11 Fleet inspection procedures (Repealed)

Sec. 11. *(Repealed by Air Pollution Control Division; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2737)*

Rule 1.1. Motor Vehicle Inspection and Maintenance Requirements

326 IAC 13-1.1-1 Definitions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 9-13-2-3; IC 13-15; IC 13-17

Sec. 1. The following definitions apply throughout this rule:

(1) "Antique vehicle" means a vehicle that is at least twenty-five (25) years old and meets either of the following criteria:
- (A) The vehicle is insured under a collectible vehicle or classic automobile insurance policy.
- (B) The vehicle is presented at a clean air car check vehicle emission test site in accordance with the applicable test cycle to verify that the following requirements have been met:
  - (i) The vehicle has been driven a maximum of three thousand (3,000) miles per calendar year.
  - (ii) Federally required pollution control equipment for that make and model year vehicle is in place.

(2) "Basic inspection/maintenance (I/M)" means an I/M program that meets the requirements for a basic I/M program as defined in 40 CFR 51, Subpart S*.

(3) "Bureau" means the bureau of motor vehicles.

(4) "Centralized" means a vehicle emissions testing facility capable of performing enhanced I/M, OBDII, and basic I/M idle testing on motor vehicles.

(5) "Certificate of compliance" means a certificate issued to motor vehicle owners or operators:
- (A) passing the emissions test and tampering inspection; or
- (B) receiving a waiver pursuant to this rule, which must be presented to the bureau in order to receive a certificate of registration.

(6) "Certified configuration" means an engine or engine-chassis design that has been certified by the U.S. EPA under 40 CFR 86* prior to the production of vehicles with that design.

(7) "Certified inspection and maintenance (I/M) emissions repair technician" means a technician that has satisfactorily completed approved department certified I/M emission repair technician training.

(8) "Certified inspector" means a contracted employee that has satisfactorily completed approved department certified inspector training.

(9) "Contractor" means any:
- (A) offeror or organization selected as a result of the state procurement process to operate a vehicle emission testing program; and
- (B) employees of the offeror or organization in clause (A).

(10) "Dedicated alternative fuel vehicle" means a vehicle that is not capable of running on gasoline at any time.

(11) "Department" means the department of environmental management or its contractor.

(12) "Diagnostic trouble code" means a code number generated by a vehicle's on-board computer that corresponds to a specific vehicle component malfunction.

(13) "Dual fuel vehicle" means a vehicle capable of operating on either:
- (A) gasoline; or
- (B) one (1) of the fuels stated in section 4(b) of this rule.

(14) "Enhanced I/M" means an I/M program that meets the requirements for an enhanced I/M program as defined in 40 CFR 51, Subpart S*.
(15) "Facility" means a motor vehicle testing location, either mobile or stationary:
(A) operated by the contractor; and
(B) established in accordance with this rule.
(16) "Fleet" means a group of light-duty motor vehicles, medium-duty motor vehicles, or a combination thereof owned or operated by:
(A) an individual;
(B) a company;
(C) a corporation; or
(D) a federal, state, or local government unit.
(17) "Heavy-duty motor vehicle" means a motor vehicle with a gross vehicle weight rating (GVWR) greater than nine thousand (9,000) pounds.
(18) "Idle test" means a single speed idle test as described in 40 CFR 51, Subpart S, Appendix B*.
(19) "I/M" means inspection/maintenance.
(20) "I/M 240" means a transient emission test as described in 40 CFR 51, Subpart S, Appendix B*.
(21) "I/M 93" means a version of I/M 240 that:
(A) is shorter in duration by utilizing only phase I (ninety-three (93) second drive trace) of the I/M 240 driving cycle; and
(B) allows a second attempt to pass.
(22) "Light-duty motor vehicle" means a motor vehicle with a GVWR less than or equal to six thousand (6,000) pounds.
(23) "Medium-duty motor vehicle" means a motor vehicle with a GVWR of:
(A) six thousand one (6,001) pounds or greater; and
(B) less than or equal to nine thousand (9,000) pounds.
(24) "Motor vehicle" means a self-propelled vehicle used on the public roads.
(25) "Motor vehicle emission inspector" means an individual meeting the requirements of section 15 of this rule.
(26) "Motor vehicle model year" or "model year" means the date of manufacture of the original motor vehicle within the annual production period of the motor vehicle as designated by the manufacturer.
(27) "Motorcycle" means a motor vehicle:
(A) having a seat or saddle for the rider; and
(B) designed to travel on not more than three (3) wheels in contact with the ground.
(28) "OBDII" means second generation on-board diagnostics systems.
(29) "Pressure test" means a test that pressurizes the evaporative system to check for leakage as described in "IM240 & Evap Technical Guidance", EPA420-R-00-007, April 2000** and 40 CFR 51*.
(30) "Purge test" means a test that measures the total purge flow occurring in the vehicle's evaporative system during the transient dynamometer emission test as described in "IM240 & Evap Technical Guidance", EPA420-R-00-007, April 2000** and 40 CFR 51*.
(31) "Recall" means a voluntary emissions recall as described in 40 CFR 85.1902(d)*.
(32) "Show vehicle" means a vehicle that meets the following criteria:
(A) The vehicle must be exhibited at a car show at least twice a calendar year as verified through car show registration or entrance forms.
(B) The vehicle shall be restricted to the addition of three thousand (3,000) miles per calendar year to the vehicle.
(C) The condition of the vehicle must be show quality, indicated by the interior and exterior of the vehicle maintained in good condition.
(D) The vehicle must be presented at a clean air car check vehicle emission test site in accordance with the applicable test cycle to verify that it is still a show vehicle.
(33) "Tampering check" means a visual inspection of the following:
(A) Catalytic converters.
(B) Fuel filler caps.

(C) Positive crankcase ventilation (PCV) systems.

(D) Evaporative systems.

(34) "VIN" means vehicle identification number.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204.

**This document is incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-1.1-1; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2730; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1463; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1570; filed Aug 26, 2004, 11:30 a.m.: 28 IR 76; filed Mar 20, 2008, 11:11 a.m.: 20080416-IR-326060284FRA; filed Mar 17, 2010, 3:58 p.m.: 20100414-IR-326080674FRA)*

326 IAC 13-1.1-2 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. (a) The following motor vehicles in Lake and Porter counties are subject to the requirements of this rule unless the vehicles are exempt or have received a waiver from the requirements as specified in section 10 of this rule:

(1) Vehicle model years 1976 and newer.

(2) Light-duty and medium-duty motor vehicles.

(3) Vehicles registered or reregistered for highway use.

(4) Fleets primarily operated within Lake County or Porter County.

(5) Leased vehicles that have the registration or titling in the name of the equity owner other than the lessee or user.

(6) Vehicles that are operated on federal installations located within Lake County or Porter County, regardless of whether the vehicles are registered with the federal installation or in Lake County or Porter County. This requirement applies to all employee-owned or leased vehicles, including vehicles owned, leased, or operated by civilian and military personnel on federal installations, and agency-owned or operated vehicles operated on the installation. This requirement shall not apply to visiting agency, employee, or military personnel vehicles as long as the visits do not exceed sixty (60) calendar days per year.

(b) Motor vehicles subject to this rule in Lake and Porter counties shall be tested under the parameters specified for I/M 93 found at section 7 of this rule.

(c) Light-duty and medium-duty motor vehicles in Lake and Porter counties of model year 1996 or newer are subject to the provisions of the OBDII check found at section 17.1 of this rule.

(d) The following motor vehicles are exempt from the testing requirements of this rule:

(1) Heavy-duty motor vehicles with a gross vehicle weight rating of nine thousand (9,000) pounds or more.

(2) Motorcycles.

(3) Motor vehicles with engine displacement less than two hundred (200) cubic centimeters.

(4) Farm tractors, farm trucks, and farm equipment used in connection with agricultural pursuits usual and normal to the user's primary operation.

(5) Motor vehicles registered as recreational vehicles (RV).

(6) Motor vehicles using diesel fuel.

(7) All motor vehicles with a chassis year and engine year prior to 1976 as identified by the:

(A) vehicle identification number; and

(B) engine identification number.

(8) Electric vehicles or vehicles that have been certified by the department as being electric.

(9) Off highway construction equipment.

(10) Antique vehicles.

(11) Show vehicles.

(e) Motor vehicles registered in Lake County or Porter County but operated in another I/M area shall be:

(1) tested where they are primarily operated; or

(2) given an extension by the department so that testing can occur when the vehicle is brought into the county of registration. The bureau may accept a certificate of compliance from another U.S. EPA approved I/M program.

(f) Model year vehicles 1996 and newer shall be tested beginning four (4) calendar years after the model year of the vehicle in order to demonstrate initial compliance. After the initial demonstration of compliance, model year vehicles 1996 and newer shall be tested in the calendar year that corresponds to the model year of the vehicle as specified at section 5 of this rule.

(g) Owners or operators of vehicles registered in a state other than Indiana who are subject to their state's I/M regulations may have their vehicles tested in Lake County or Porter County under either of the following conditions:

(1) The owner or operator of the vehicle has resided in Lake County or Porter County for a minimum of three (3) months of the previous twelve (12) month period as of the date the vehicle is presented for emissions testing.

(2) The owner or operator of the vehicle has operated the vehicle in Lake County or Porter County for a minimum of three

(3) months of the previous twelve (12) month period as of the date the vehicle is presented for emissions testing.

(Air Pollution Control Division; 326 IAC 13-1.1-2; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2731; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1464; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Apr 24, 2007, 3:09 p.m.: 20070523-IR-326060285FRA; filed Mar 20, 2008, 11:11 a.m.: 20080416-IR-326060284FRA)

326 IAC 13-1.1-3 General requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 3. (a) All owners and operators of motor vehicles subject to the provisions of this rule shall maintain their motor vehicles and any air pollution control equipment on the motor vehicles in good working order such that they meet the emission standards specified in this rule. Any such motor vehicle that fails to pass the emissions test and tampering inspection required under sections 8 through 9 of this rule or obtain a waiver in accordance with section 10 of this rule in order to obtain a certificate of compliance provided under section 5 of this rule shall not be registered by the commissioner of the bureau.

(b) Vehicles of model year 1981 and newer registered in Lake or Porter County shall be subject to the enhanced I/M test procedures and requirements. Unless stated otherwise, the requirements of this rule shall apply to both enhanced I/M and basic I/M. *(Air Pollution Control Division; 326 IAC 13-1.1-3; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2731; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Apr 24, 2007, 3:09 p.m.: 20070523-IR-326060285FRA)*

326 IAC 13-1.1-4 Alternative fuel vehicles

Authority: IC 13-1; IC 13-7-7-5
Affected: IC 13-1-1; IC 13-7-1-1; IC 13-7-7

Sec. 4. (a) Dual fuel vehicles are subject to the requirements of this rule and shall be tested on gasoline.

(b) Dedicated alternative fuel vehicles which are operated exclusively on the following fuels are not subject to the requirements of this rule:

(1) Compressed natural gas.

(2) Liquified natural gas.

(3) Propane.

(4) Ethanol.

(5) Hydrogen.

(6) Methanol.

(c) The owner or operator of a vehicle meeting the requirements of subsection (b) must present the vehicle at a facility for inspection and verification of the vehicle's status as a dedicated alternative fuel vehicle. *(Air Pollution Control Division; 326 IAC 13-1.1-4; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2732; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 13-1.1-5 Issuance of certificates of compliance; testing and inspection schedule

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 5. (a) Effective January 1, 1990, an owner or operator of a motor vehicle subject to the testing and inspection requirements of this rule shall present the motor vehicle to a facility for an emissions test and tampering inspection during the month and year, or within three (3) months before the year, determined as follows:

(1) The month that corresponds to the registration month for the vehicle as determined by the bureau.

(2) The model year of the vehicle as follows:

(A) If the model year of the vehicle is an even number, the vehicle shall be tested in even-numbered calendar years.

(B) If the model year of the vehicle is an odd-numbered year, the vehicle shall be tested in odd-numbered calendar years.

(b) A certificate of compliance shall be issued to owners or operators of motor vehicles that pass the emissions test and tampering inspection and to motor vehicles that are granted a waiver in accordance with this rule. Upon successful completion of an I/M test, an electronic or paper based certificate of compliance shall be issued to the owner or operator and shall clearly indicate the certificate is for the purposes of registration. The certificate shall indicate the following:

(1) The expiration date of the certificate.

(2) Unambiguous vehicle identification information.

(3) Whether the vehicle passed or received a waiver.

Except as provided in section 2(f) of this rule, the certificate shall be presented to the bureau in order to obtain registration only during the year that testing is required based on the model year of the vehicle. The certificate of compliance shall be valid through the end of the month and year indicated on the certificate.

(c) The department may notify motorists in advance of the required test; however, each owner or operator of a motor vehicle subject to this rule is responsible for ensuring that the vehicle is tested. *(Air Pollution Control Division; 326 IAC 13-1.1-5; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2732; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1465; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Mar 20, 2008, 11:11 a.m.: 20080416-IR-326060284FRA)*

326 IAC 13-1.1-6 Network type

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 6. The basic and enhanced I/M programs shall be conducted at centralized, test-only facilities. Neither the contractor nor any employee of an official I/M test station shall engage either directly or indirectly in motor vehicle repair or service, motor vehicle parts sales, or motor vehicle sales and leasing. *(Air Pollution Control Division; 326 IAC 13-1.1-6; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2732; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1466; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 13-1.1-7 Test parameters

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 7. (a) The parameters for basic I/M are as follows:

Test Type	
Idle	1976 through 1980 model years
Fuel filler cap pressure	1976 and newer model years
Tampering check	1976 and newer model years
Items	Catalyst removals and damaged or missing fuel filler caps

(b) The parameters for I/M 93 are as follows:

Test Type	
I/M 93	1981 through 1995 model years

Hydrocarbon leak inspection	1976 through 1995 model years
Fuel filler cap pressure	1976 and newer model years
Tampering check	1976 and newer model years
Items	Catalyst removals and damaged or missing fuel filler caps
OBDII	1996 and newer model years

(Air Pollution Control Division; 326 IAC 13-1.1-7; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2732; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1466; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Mar 20, 2008, 11:11 a.m.: 20080416-IR-326060284FRA)

326 IAC 13-1.1-8 Testing procedures and standards

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 8. (a) Each motor vehicle shall be presented for testing and inspection at a facility with its certificate of registration or proof of ownership that identifies the motor vehicle by the following:

(1) Make.
(2) Model year.
(3) Vehicle identification number.
(4) License number.

(b) The contractor shall only test vehicles if all of the following conditions are met:

(1) The exhaust system is intact and without leaks.
(2) The vehicle is in safe condition for testing.
(3) For an I/M 93 test only, the motorist and any passengers have exited from the vehicle.

(c) All tests shall be performed by a certified inspector.

(d) Test procedures for I/M emission testing shall comply with "IM240 & Evap Technical Guidance", EPA420-R-00-007, April 2000*.

(e) Emission standards shall comply with "IM240 & Evap Technical Guidance", EPA420-R-00-007, April 2000*.

(f) Vehicles shall be retested after repair for any portion of the inspection that was failed. To the extent that repairs to correct a previous failure could lead to failure of another portion of the test, that portion shall also be retested. Evaporative system repairs shall trigger an exhaust emission retest. Exhaust emission retests shall not be conducted unless the owner or operator of the vehicle demonstrates that the vehicle has had appropriate repairs for the reason of failure. In the case of tampering failures, the owner or operator must demonstrate that the tampered condition or equipment has been repaired or replaced before a retest is performed.

(g) If the U.S. EPA has granted a waiver in accordance with Section 182(f) of the Clean Air Act* for any county or counties subject to this rule, the department may determine that during the period when the NO_x waiver is in effect, failure of the NO_x portion of the I/M test is not grounds for denial of a certificate of compliance for vehicles within that county or counties. Upon making such a determination, the department shall notify the contractor in writing indicating the effective dates of the determination.

*These documents are incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-1.1-8; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2733; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1466; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1570; filed Aug 26, 2004, 11:30 a.m.: 28 IR 77; filed Mar 20, 2008, 11:11 a.m.: 20080416-IR-326060284FRA)*

326 IAC 13-1.1-9 Tampering inspection

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 9. (a) Each motor vehicle subject to the requirements of this rule shall be subjected to a visual tampering inspection at the facility. The motor vehicle shall be inspected for the presence and good operating condition of emission control devices included in the manufacturer's original design. At a minimum, emission control devices subject to inspection shall include the following:

(1) For I/M 93 emission testing:
(A) Catalytic converters.
(B) Fuel filler caps.
(2) For basic I/M emissions testing:
(A) Catalytic converters.
(B) Fuel filler caps.

If any emission control devices are found in a tampered condition, the devices shall be repaired or replaced prior to any initial testing, retesting, or reinspection as provided in section 8(f) of this rule.

(b) Alteration of a vehicle's chassis configuration from a certified to a noncertified configuration is prohibited. In the inspection process, vehicles that have been altered from their original, certified configuration are to be tested in the same manner as other subject vehicles as follows:

(1) Vehicles with engines other than the engine originally installed by the manufacturer or an identical replacement of the engine shall be subject to the inspection standards for the chassis type and model year for all parts that are part of the original or now-applicable certified configuration.

(2) Vehicles in which the engine of one (1) fuel type has been replaced or modified to an engine of a different fuel type that is subject to the I/M program, such as from a diesel engine to a gasoline engine, shall be subject to the following:
(A) The test procedures and standards for the current fuel type.
(B) The requirements in subdivision (1).

(3) Vehicles that are switched to a fuel type for which there is no certified configuration shall be tested according to the most stringent I/M gasoline emission standards established for that vehicle type and model year. Emission control device requirements may be waived if the department determines that the alternatively fueled vehicle configuration would meet the new vehicle standards for the model year without the devices.

(c) Mixing vehicle classes, such as light-duty with heavy-duty, and certification types, such as California with federal, within a single vehicle configuration shall be considered tampering.

(d) All vehicles must comply with 326 IAC 13-2.1. *(Air Pollution Control Division; 326 IAC 13-1.1-9; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2733; errata filed Sep 9, 1995, 9:00 a.m.: 19 IR 42; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1467; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Mar 20, 2008, 11:11 a.m.: 20080416-IR-326060284FRA)*

326 IAC 13-1.1-10 Waivers and compliance through diagnostic inspection

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 10. (a) A waiver of the requirement that a motor vehicle obtain a certificate of compliance may be issued only under the following conditions:

(1) A waiver shall be issued only after a vehicle has failed a retest performed after all emission-related repairs as described in subdivisions (3) through (5) have been completed. Vehicles that are subject to an emissions recall but have not had recall repairs shall not be eligible for a waiver until the repairs have been made.

(2) Waivers shall not be issued to vehicles for tampering-related repairs. The cost of tampering-related repairs shall not be applicable to the minimum expenditure in subdivision (5). The department may issue exemptions for tampering-related repairs if the motorist can verify that the part in question or one similar to it is no longer available for sale.

(3) Repairs shall be appropriate to the cause of the test failure, and a visual check shall be made at the time of retest to determine if repairs were actually made. Receipts shall be submitted for review at the test site to further verify that qualifying repairs were performed.

(4) Repairs shall be performed at a certified I/M emission repair facility. A certified I/M emission repair facility shall meet the following criteria:
(A) Employ at least one (1) certified I/M emission repair technician as defined in this rule.
(B) For all I/M emission testing, possess the following:
(i) Reference material.
(ii) Digital multimeter.

(iii) Vacuum and fuel pressure testing equipment.
(iv) Carbon/fuel injection cleaning equipment.
(v) Ignition scope with distributorless ignition (DIS) capability.
(vi) 2, 3, 4, or 5 gas analyzer.
(vii) Scan tool.
(viii) Digital storage oscilloscope (DSO).
(ix) OBDII scan tool.

The department may suspend, revoke, or deny renewal of a certification of a certified I/M emission repair facility if the facility fails to adhere to program requirements.

(5) In order to qualify for a waiver, repairs shall be performed by a certified I/M emission repair technician who:

(A) is certified and maintains current certification as an ASE L1 (Advanced Engine Performance) technician;
(B) has successfully completed the department approved emission and driveability training program;
(C) is professionally engaged in emission/driveability repair; and
(D) is employed at a certified I/M emission repair facility.

The department may suspend, revoke, or deny renewal of a certification of a certified I/M emission repair technician if the technician fails to adhere to program requirements.

(6) Repairs appropriate to the reason for the failure may be performed by nontechnicians, such as owners, to apply toward the waiver limit for model year vehicles 1976 through 1980.

(7) In order to qualify for a minimum expenditure waiver, motorists in Lake County or Porter County shall expend the following amounts in repairs at a certified emissions repair facility:

(A) For 1981 and newer model year vehicles, the following criteria shall be met:

(i) The vehicle must be at least eight (8) model years of age.
(ii) The vehicle must have been driven at least one hundred fifty thousand (150,000) miles.
(iii) The owner or operator of the vehicle must have spent at least four hundred fifty dollars ($450) for repairs at a certified emissions repair facility.

(B) For 1976 through 1980 model year vehicles, at least seventy-five dollars ($75).

(8) Vehicles subject to an enhanced I/M emission test at the cutpoints established in 40 CFR 51.351* may be issued a certificate of compliance without meeting the prescribed emission cutpoints if, after failing a retest, a complete, documented physical and functional diagnosis and inspection performed by the contractor shows no additional emission-related repairs are needed. Any such exemption policy and procedures shall be subject to EPA approval.

(9) After an initial I/M emission test failure, a vehicle may be retested up to four (4) additional times. A vehicle shall not be retested a fifth time until the type of repairs or modifications necessary has been fully evaluated by department and contractor personnel.

(10) Waivers shall be issued only by the test site manager or other employee specifically designated for this purpose.

(11) A waiver shall be valid for not more than one (1) test cycle.

(b) No vehicle in its lifetime shall receive more than one (1) waiver.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-1.1-10; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2734; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1468; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1570; filed Aug 26, 2004, 11:30 a.m.: 28 IR 78; filed Apr 24, 2007, 3:09 p.m.: 20070523-IR-326060285FRA; filed Mar 20, 2008, 11:11 a.m.: 20080416-IR-326060284FRA)*

326 IAC 13-1.1-11 Compliance with manufacturer's emissions recall notices

Authority: IC 13-1; IC 13-7-7-5
Affected: IC 13-1-1; IC 13-7-1

Sec. 11. A vehicle that is the subject of a manufacturer's emissions recall notice shall not be inspected unless the owner or

operator provides proof that the required repairs have been made. The vehicle inspection or registration record shall be modified (or supplemented with other VIN-linked records) to include the recall campaign numbers and dates repairs were performed. Documentation verifying required repairs shall include the following:

(1) The VIN, make, and model year of the vehicle.

(2) The recall campaign number and the date repairs were completed.

(Air Pollution Control Division; 326 IAC 13-1.1-11; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2735; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 13-1.1-12 On-road testing

Authority: IC 13-1; IC 13-7-7-5
Affected: IC 13-1-1; IC 13-7-1-1; IC 13-7-7

Sec. 12. On-road testing shall be part of the enhanced emissions testing system, but is to be a complement to testing otherwise required as follows:

(1) On-road testing shall measure on-road emissions through the use of remote sensing devices or roadside pullovers, including tailpipe emissions testing. The department may require roadside pullover emissions testing of motor vehicles. Roadside pullover tailpipe emission testing shall consist of either idle or two (2) speed testing.

(2) If a violation is detected through on-road testing, the motorist shall be notified that the vehicle is required to pass an out-of-cycle follow-up inspection at a facility. For remote on-road testing, notification of results may be made to the motorist by mail or immediate notification.

(3) Motorists shall comply with on-road testing and, upon notification that a follow-up inspection is required, shall present the vehicle for inspection within thirty (30) days of the date of the notification. Motorists are required to make the necessary repairs to pass a reinspection. The penalty for noncompliance with this requirement shall be suspension of the motorist's vehicle registration.

(Air Pollution Control Division; 326 IAC 13-1.1-12; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2735; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 13-1.1-13 Test reports; repair forms

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 13. (a) Each owner of a motor vehicle tested at a facility shall be provided a test report which shall include, but is not limited to, the following information:

(1) The owner's name.

(2) The license plate or temporary plate number.

(3) The type of motor vehicle.

(4) The motor vehicle identification number (VIN).

(5) The model year.

(6) The make of motor vehicle.

(7) The emission standards applicable to the motor vehicle.

(8) The emission measurements obtained by the test.

(9) The final result of the emissions test, evaporative system, and tampering inspection.

(10) Date and time of inspection.

(11) The report serial number.

(12) The facility and lane identification number.

(13) The odometer reading.

(14) The identification number of the inspector performing the test.

(15) The type of tests performed, such as emissions test, visual checks for the presence of emission control components, and evaporative system checks.

(16) A statement indicating the availability of warranty coverage as required in Section 207 of the Clean Air Act*.

(17) The certification that the tests were performed in accordance with the regulations.

(18) For vehicles that fail the tailpipe emission test, information on the possible causes of the specific pattern of high emission levels found during the test.

(b) Owners or operators of failing vehicles shall be provided with the results of repair effectiveness data for all repair facilities operating in the area. The vehicle owner also shall receive a blank repair form.

(c) A repair form, completed by the vehicle owner or person responsible for repairs prior to retest of the motor vehicle, shall contain the following information:

(1) The exact repairs or adjustments made to the motor vehicle since the initial test.

(2) The itemized cost of repairs or adjustments made.

(3) The name and location of the repair facility where the repairs or adjustments were made.

(4) The printed name and signature of the person making the repairs or adjustments. If the repairs or adjustments are performed by:

(A) a repair shop, the federal tax identification number shall be provided in the repair form; or

(B) an Indiana certified emission technician, the certification number shall be provided in the repair form.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-1.1-13; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2735; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1469; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1570; filed Aug 26, 2004, 11:30 a.m.: 28 IR 79)*

326 IAC 13-1.1-14 Facility and testing requirements

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 14. (a) The contractor shall collect data and maintain records of tests and facility operations as required by the department. The contractor shall gather test data to link specific test results to a specific vehicle, I/M program registrant, test site, and inspector, and to determine whether or not the correct testing parameters were observed for the specific vehicle in question. At a minimum, the contractor shall collect the following with respect to each test conducted:

(1) Test record number.

(2) Inspection station and inspector numbers.

(3) Test system number.

(4) Date of test.

(5) Emission test start time and time final emission scores are determined.

(6) Vehicle identification number (VIN).

(7) License plate number.

(8) Test certificate number.

(9) Gross vehicle weight rating (GVWR).

(10) Vehicle model year, make, and type.

(11) Number of cylinders or engine displacement.

(12) Transmission type.

(13) Odometer reading.

(14) Category of test performed (such as initial test, first retest, or subsequent retest).

(15) Fuel type of the vehicle (such as gas, compressed natural gas (CNG), or other fuel).

(16) Type of vehicle preconditioning performed, if any.

(17) Emission test sequences used.

(18) Hydrocarbon emission scores and standards for each applicable test mode.

(19) Carbon monoxide emission scores and standards for each applicable test mode.

(20) Carbon dioxide emission scores ($CO + CO_2$) and standards for each applicable test mode.

(21) Nitrogen oxides emission scores and standards for each applicable test mode.

(22) Results (pass/fail/not applicable) of the applicable visual inspections for the catalytic converter, gas cap, evaporative system, and positive crankcase ventilation system.

(23) Results of the evaporative system pressure test expressed as a pass or fail (I/M 240 only).

(24) Results of the evaporative system purge test expressed as a pass or fail along with the total purge flow in liters achieved during the test (I/M 240 only).

(b) At a minimum, the contractor shall gather and report the results of the quality control checks required under 40 CFR 51.359*, identifying each check by station number, system number, date, and start time. The data report shall also contain the concentration values of the calibration gases used to perform the gas characterization portion of the quality control checks.

*This document is incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-1.1-14; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2735; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1470; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1570; filed Aug 26, 2004, 11:30 a.m.: 28 IR 80)*

326 IAC 13-1.1-15 Motor vehicle emission inspectors; certification

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 15. (a) In order to perform official inspections, all inspectors shall be certified through a program of training and testing approved by the department.

(b) Inspector certificates shall be valid for no more than one (1) year. Refresher training and testing shall be required prior to renewal. Alternative approaches based on more comprehensive skill examination and determination of inspector competency may be used with the approval of the department.

(c) The department may suspend, revoke, or deny renewal of an inspector's certificate if the inspector fails to adhere to program requirements. *(Air Pollution Control Division; 326 IAC 13-1.1-15; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2736; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1470; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 13-1.1-16 Facility quality assurance program

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 16. (a) No emission tests shall be conducted with any analyzer that is not operating within all specifications developed or approved by the department. The following practices, in addition to those described in "IM240 & Evap Technical Guidance", EPA420-R-00-007, April 2000*, shall be followed:

(1) Preventive maintenance on all inspection equipment shall be performed to ensure accurate and repeatable operation.

(2) Computerized analyzers shall automatically record:

(A) quality control check information;

(B) lockouts; and

(C) attempted tampering;

which shall be monitored to ensure proper quality control.

(b) The contractor shall maintain the equipment according to demonstrated good engineering practices to assure test accuracy. The calibration and adjustment requirements in "IM240 & Evap Technical Guidance", EPA420-R-00-007, April 2000*, shall apply to all steady-state test equipment. Calibration schedules and other quality control frequencies may be adjusted by using statistical process control to monitor equipment performance on an ongoing basis. Additional requirements shall be as follows:

(1) For analyzers that use ambient air as the starting point for emission readings, the air shall be drawn from the air outside the inspection bay or lane in which the analyzer is situated.

(2) The analyzer housing shall be constructed to protect the analyzer bench and electrical components from ambient temperature and humidity fluctuations that exceed the range of the analyzer's design specifications.

(3) Analyzers shall automatically purge the analytical system after each test.

(c) Measures shall be instituted to maintain the security of all documents by which compliance with the inspection requirement is established, including, but not limited to, inspection certificates and waiver certificates. This section shall in no way require the use of paper documents (except for certificates of compliance and waivers) but shall apply if they are used by the program for these purposes.

(d) Compliance documents are to be counterfeit-resistant through the use of:

(1) special fonts;

(2) watermarks;

(3) ultraviolet inks;

(4) encoded magnetic strips;

(5) unique bar coded identifiers;

(6) difficult to acquire materials; or

(7) other measures;

as approved by the department.

(e) All inspection certificates and waiver certificates shall be printed with:

(1) a unique serial number; and

(2) an official program seal.

*This document is incorporated by reference. Copies are available for review and copying at the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-1.1-16; filed Jun 21, 1995, 4:00 p.m.: 18 IR 2736; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1470; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1570; filed Aug 26, 2004, 11:30 a.m.: 28 IR 81; filed Mar 20, 2008, 11:11 a.m.: 20080416-IR-326060284FRA)*

326 IAC 13-1.1-17 Fleet inspection procedures (Repealed)

Sec. 17. *(Repealed by Air Pollution Control Division; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1471)*

326 IAC 13-1.1-17.1 On-board diagnostic check

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 17.1. (a) A certified inspector shall check OBDII systems to determine if the self-diagnostic system is functioning properly and within the parameters specified at 40 CFR 85.2207*. Failure of the OBDII test shall be a basis for failure of the I/M emission test. For vehicles that are 1996 model year or newer, reasons for failure of the OBDII test include any of the following conditions:

(1) The vehicle's OBDII connector:

(A) is missing;

(B) has been tampered with; or

(C) is otherwise inoperable.

(2) The malfunction indicator light (MIL) does not illuminate upon vehicle startup.

(3) The MIL is:

(A) commanded to be illuminated; and

(B) not illuminated based on visual inspection.

(4) The MIL is commanded to be illuminated by any of the OBDII codes specified at 40 CFR 85.2207(c)*.

(b) The test sequence for the inspection of OBDII systems shall consist of the steps described at 40 CFR 85.2222*.

(c) Motorists whose vehicles fail the OBDII test described in subsection (b) shall be provided with the OBDII test result as specified at 40 CFR 85.2223*, including the following information:

(1) The various OBDII codes retrieved.
(2) The status of the MIL illumination command.
(3) The customer alert statement.

Any retrieved codes listed at 40 CFR 85.2223(b)* shall be listed on the test report as specified in that paragraph.

(d) An OBDII equipped vehicle is eligible for the I/M 93 test procedure under the following circumstances:
(1) The OBDII equipped vehicle has failed three (3) consecutive OBDII test procedures.
(2) The owner or operator of the OBDII equipped vehicle has made a good faith effort to repair the vehicle in accordance with the applicable diagnostic trouble codes.
(3) The OBDII equipped vehicle is tested based on applicable vehicle emission standards under the I/M 93 test procedure.
(e) The air pollution control board incorporates by reference the following:
(1) 40 CFR 51, Subpart S, "Requirements for Preparation, Adoption, and Submittal of Implementation Plans: Inspection/Maintenance Program Requirements"*.
(2) 40 CFR 85, Subpart W, "Control of Air Pollution from Motor Vehicles and Motor Vehicle Engines: Mobile Sources, Emission Control System Performance Warranty Short Tests"*.

*These documents are incorporated by reference. Copies may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or are available for review and copying at the Indiana Department of Environmental Management, Office of Air Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-1.1-17.1; filed Dec 23, 1998, 4:44 p.m.: 22 IR 1471; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed May 21, 2002, 10:20 a.m.: 25 IR 3083; filed Mar 20, 2008, 11:11 a.m.: 20080416-IR-326060284FRA)*

Rule 2. Motor Vehicle Tampering and Fuel Switching (Repealed)

(Repealed by Air Pollution Control Division; filed May 24, 1990, 10:00 a.m.: 13 IR 1853)

Rule 2.1. Motor Vehicle Tampering, Engine Switching, and Fuel Switching

326 IAC 13-2.1-1 Applicability

Authority: IC 13-1-1-4; IC 13-1-1-6; IC 13-7-7
Affected: IC 13-1-1; IC 13-7

Sec. 1. This rule shall apply to the following:
(1) All persons as defined in section 2 of this rule.
(2) All service stations.
(3) All gasoline dispensing facilities.
(4) All gasoline powered motor vehicles with a model year of 1975 and later, including but not limited to passenger cars, trucks, and vans subject to registration by the bureau of motor vehicles.
(5) All gasoline powered motor vehicles with a model year of 1975 and later, owned or operated by governmental agencies.

(Air Pollution Control Division; 326 IAC 13-2.1-1; filed May 24, 1990, 10:00 a.m.: 13 IR 1850; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 13-2.1-2 Definitions

Authority: IC 13-1-1-4; IC 13-1-1-6; IC 13-7-7
Affected: IC 13-1-1; IC 13-7-1-1; IC 13-7-7-5

Sec. 2. The following definitions apply throughout this rule:
(1) "Accepted aftermarket catalytic converter" means a catalytic converter which meets the performance criteria for certification specified in 40 C.F.R. 85, Subpart V*, for sale, installation, and use on a motor vehicle after such vehicle has left the vehicle manufacturer's production line.
(2) "Certified configuration" means an engine or engine-chassis design which has been certified by the U.S. EPA pursuant

to 40 C.F.R. 86*, prior to the production of vehicles with that design.

(3) "Consignment" means a transaction whereby the owner of a motor vehicle (consignor) delivers such vehicle to an individual (consignee) who sells such vehicle to a third party for a fee or commission. A consignment does not include a transfer of title or ownership from a consignor to a consignee for the purposes of this rule.

(4) "Emission control system" means an emission control device installed by the manufacturer to reduce air pollution from a motor vehicle, including but not limited to the following:

(A) Positive crankcase ventilation (PCV) system.

(B) Air pumps.

(C) Catalysts and catalytic converters.

(D) Evaporative canisters.

(E) Exhaust gas recirculation (EGR) systems.

(F) Leaded fuel nozzle restrictors installed on motor vehicles designed to use unleaded gasoline only.

(G) Thermostatic air cleaners (TAC), including stoves, stove pipes, and thermostats.

(H) Fuel filler caps.

(5) "Heavy duty motor vehicle" means a motor vehicle rated at more than eight thousand five hundred (8,500) pounds gross vehicle weight rating or that has a vehicle curb weight of more than six thousand (6,000) pounds or a basic vehicle frontal area in excess of forty-five (45) square feet.

(6) "Leaded gasoline" means gasoline containing greater than five-hundredths (0.05) grams of lead per gallon of gasoline.

(7) "Light duty motor vehicle" means a motor vehicle rated at eight thousand five hundred (8,500) pounds gross vehicle weight rating or less with a vehicle curb weight of six thousand (6,000) pounds or less and a basic vehicle frontal area of forty-five (45) square feet or less.

(8) "Person" means an individual, firm, partnership, association, corporation, fleet operator, or governmental agency. For the purposes of sections 3(a)(1) and 5 of this rule, this definition does not include:

(A) a person transferring ownership of a tampered vehicle to another person if such transfer is in the nature of a wholesale transaction; or

(B) a person receiving a tampered vehicle with the intent to sell such vehicle on a consignment basis.

(9) "Service station" means a garage, muffler shop, or dealership where motor vehicles are repaired or serviced.

(10) "Tampering" means to remove, render inoperative, cause to be removed, or make less operative any emission control device, unless such removal or act to render inoperative or less operative is for the purpose of motor vehicle disposal or salvage operations. In addition, any act which constitutes engine switching as provided under section 3(b) of this rule shall constitute tampering for the purposes of this rule.

(11) "Unleaded gasoline" means gasoline containing not more than five-hundredths (0.05) grams of lead per gallon of gasoline.

(12) "Wholesale" means a transfer of ownership of a motor vehicle between motor vehicle dealers with the ultimate intent of selling such vehicle to the public on a retail basis.

*Copies of the Code of Federal Regulations (C.F.R.) referenced may be obtained from the Government Printing Office, Washington, D.C. 20402. Copies of pertinent sections are also available at the Department of Environmental Management, Office of Air Management, 105 South Meridian Street, Indianapolis, Indiana 46225. *(Air Pollution Control Division; 326 IAC 13-2.1-2; filed May 24, 1990, 10:00 a.m.: 13 IR 1851; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 13-2.1-3 Requirements

Authority: IC 13-1-1-4; IC 13-1-1-6; IC 13-7-7
Affected: IC 13-1-1; IC 13-7-1-1; IC 13-7-7-5

Sec. 3. (a) Violations of the following provisions constitute tampering for the purposes of this rule:

(1) No person shall rent, lease, sell, offer for sale, or in any manner transfer ownership of a motor vehicle with knowledge that the vehicle has been subject to tampering. For the purposes of this subdivision, knowledge of tampering shall be imputed to any person engaged in the business of repairing, servicing, selling, leasing, or trading motor vehicles or motor vehicle engines or any person who operates a fleet of motor vehicles.

(2) No person shall cause, suffer, allow, or permit the removal, dismantling, disconnnection, disabling, or disrepair of any emission control system which has been installed on a motor vehicle by the manufacturer, unless such emission control system is replaced with an accepted aftermarket catalytic converter or other emission control system which meets the performance criteria specified in 40 C.F.R. 85, Subpart V*, and the requirements of section 4 of this rule.
(3) No person shall sell, offer for sale, or advertise for sale any add-on part or modified part which inhibits the effectiveness or bypasses an emission control system or otherwise fails to meet the performance criteria for certification specified in 40 C.F.R. 85, Subpart V.
(4) No person shall operate a motor vehicle with knowledge that the vehicle has been subject to tampering. For the purposes of this subdivision, knowledge of tampering shall be imputed to any person engaged in the business of repairing, servicing, selling, leasing, or trading motor vehicles or motor vehicle engines or any person who operates a fleet of motor vehicles.
(b) Violations of the following provisions constitute engine switching for the purposes of this rule:
(1) No person shall cause, suffer, allow, or permit the installation of an engine into a light duty motor vehicle, unless the resulting vehicle is identical to a certified configuration of the same or newer model year as the vehicle chassis.
(2) No person shall cause, suffer, allow, or permit the installation of an engine into a heavy duty motor vehicle, unless the installed engine is identical to a certified configuration of an engine which is the same or newer model year as the installed engine.
(3) No person shall cause, suffer, allow, or permit the installation of an engine designed for a heavy duty motor vehicle into a light duty motor vehicle.
(c) Violations of the following provisions constitute fuel switching for the purposes of this rule:
(1) No person shall sell, dispense, or offer for sale gasoline represented to be unleaded unless such gasoline meets the requirements for unleaded gasoline specified in section 2 of this rule.
(2) No person shall knowingly introduce or cause or allow the introduction of leaded gasoline into a motor vehicle which was originally designed to use unleaded gasoline only.
(3) No person shall modify the gasoline pump dispensing nozzle in order to dispense leaded gasoline into a motor vehicle which was originally designed to use unleaded gasoline only. Each leaded gasoline pump shall be equipped with a nozzle spout having a terminal end with an outside diameter of not less than ninety-three hundredths (0.93) inches. Each unleaded gasoline pump shall be equipped with a nozzle spout having a terminal end with an outside diameter not greater than eighty-four hundredths (0.84) inches and the spout length from retaining spring to the tip shall be a minimum of two and seventy-five hundredths (2.75) inches.
(4) All gasoline dispensing facilities shall display permanent signs clearly distinguishing unleaded and leaded gasoline dispensing pumps.
(5) Each gasoline dispensing facility shall display permanent signs visible to an individual introducing gasoline into a motor vehicle. The sign shall state that federal and state law prohibits the introduction of leaded gasoline into any motor vehicle designed by the manufacturer for unleaded gasoline only. This notice shall be no smaller than thirty-six (36) point bold type.

*Copies of the Code of Federal Regulations (C.F.R.) referenced may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401. Copies of pertinent sections are also available at the Indiana Department of Environmental Management, Office of Air Quality, 100 North Senate Avenue, Indiana Government Center-North, Tenth Floor, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-2.1-3; filed May 24, 1990, 10:00 a.m.: 13 IR 1851; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1570)*

326 IAC 13-2.1-4 Accepted aftermarket catalytic converters

Authority: IC 13-1-1-4; IC 13-1-1-6; IC 13-7-7
Affected: IC 13-1-1; IC 13-7-1-1; IC 13-7-7-5

Sec. 4. (a) A person shall install an accepted aftermarket catalytic converter on a vehicle under five (5) years and/or fifty thousand (50,000) miles if the converter is missing or the commissioner has determined that the currently installed converter has been damaged or is on a vehicle which has been subject to fuel switching, or on a vehicle over five (5) years and/or fifty thousand (50,000) miles if such replacement has been established and documented to the satisfaction of the commissioner.

(b) A person shall not install any aftermarket catalytic converter if a currently installed original or equivalent converter is

functioning properly. Only an original or equivalent converter and not an aftermarket catalytic converter shall be installed where the replacement is under recall or warranty or the vehicle is returning from overseas use.

(c) A person involved in the installation of an accepted aftermarket catalytic converter shall retain copies of the following invoices and statements for two (2) years:

(1) Invoice, including the following:

(A) Customer's name and complete address.

(B) Vehicle model, year, make, and mileage.

(C) The reason for replacement.

(2) Any statements from the commissioner requiring replacement.

(d) A person involved in the installation of an accepted aftermarket catalytic converter shall:

(1) retain the replaced converter for fifteen (15) days after removal;

(2) mark the replaced converter so it can be matched to the corresponding replacement invoice and statement; and

(3) maintain availability of the replaced converter for inspection during the fifteen (15) day period.

(e) An accepted aftermarket catalytic converter shall be installed in the same location as the original and with other required converters, shall be the same type as the original converter (oxidation, three (3) way, or three (3) way oxidation (dual-bed)), installed only on vehicles as specified by the converter manufacturer, properly connected to existing air injection components, and accompanied by a warranty card filled in by the installer (if a new converter). *(Air Pollution Control Division; 326 IAC 13-2.1-4; filed May 24, 1990, 10:00 a.m.: 13 IR 1852; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 13-2.1-5 Penalties

Authority: IC 13-1-1-4; IC 13-1-1-6; IC 13-7-7
Affected: IC 13-1-1; IC 13-7-1-1; IC 13-7-7-5

Sec. 5. (a) Violation of section 3(a)(1), 3(a)(2), 3(a)(4), or 3(b) of this rule subjects the owner or operator to suspension or revocation of the registration for the tampered vehicle by the bureau of motor vehicles. The tampered vehicle is not thereafter eligible for registration until the tampered device has been restored, replaced, or repaired.

(b) Any person found to be in violation of sections 3(a), 3(b), or 4 of this rule shall be subject to a civil penalty of not more than two thousand five hundred dollars ($2,500) per violation.

(c) Any person found to be in violation of section 3(c) of this rule shall be subject to a civil penalty of not more than ten thousand dollars ($10,000) per violation. *(Air Pollution Control Division; 326 IAC 13-2.1-5; filed May 24, 1990, 10:00 a.m.: 13 IR 1853; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

Rule 3. Control of Gasoline Reid Vapor Pressure

326 IAC 13-3-1 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to:

(1) all refiners, importers, carriers, or terminals who supply gasoline for use in the Clark and Floyd Counties between May 1 and September 15 of each calendar year beginning in 1995; and

(2) all retail stations and other end users who sell or dispense gasoline in Clark or Floyd County between June 1 and September 15 of each calendar year beginning in 1995.

(b) If federal Reformulated Gas (RFG) is required by operation of federal law to be sold in Clark and Floyd Counties or if the governor elects to participate in the RFG program, this rule shall no longer apply after the date that RFG is required to be sold. The department shall make all reasonable efforts to notify the affected parties listed in this section no later than thirty (30) days after federal law requires RFG to be sold or the governor's election to participate in the RFG program. *(Air Pollution Control Division; 326 IAC 13-3-1; filed Jul 6, 1995, 11:30 a.m.: 18 IR 2738; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; filed Nov 15, 2002, 11:17 a.m.: 26 IR 1079)*

326 IAC 13-3-2 Definitions

Authority: IC 13-1-1-4; IC 13-1-1-5; IC 13-7-7-1
Affected: IC 13-1-1-2; IC 13-7-1

Sec. 2. In addition to the definitions contained in IC 13-7-1 *[IC 13-7 was repealed by P.L.1-1996, SECTION 99, effective July 1, 1996.]*, IC 13-1-1-2 *[IC 13-1 was repealed by P.L.1-1996, SECTION 99, effective July 1, 1996.]*, and 326 IAC 1-2, the following definitions apply throughout this rule unless expressly stated otherwise:

(1) "Alternate fuel" means any of the following fuels or power sources:
(A) Methanol.
(B) Ethanol.
(C) Other alcohols containing eighty-five percent (85%) or more by volume of such alcohol with gasoline or other fuels.
(D) Natural gas.
(E) Liquified petroleum gas.
(F) Hydrogen.
(G) Electricity.
(H) Diesel fuel.

(2) "Carrier" means any distributor who transports or stores or causes the transportation or storage of gasoline without taking title to or otherwise having any ownership of the gasoline, and without altering the quality or quantity of the gasoline.

(3) "Compliant fuel" means seven and eight-tenths (7.8) pounds per square inch (psi) low RVP gasoline, federal reformulated gasoline, or ethanol blended low RVP gasoline as described in section 5 of this rule.

(4) "Consumer" means any person who is the ultimate consumer of gasoline or who purchases fuel for use in a fleet of motor vehicles.

(5) "Distributor" means any person who transports, stores, or causes the transportation or storage of gasoline at any point between any gasoline refinery or importer's facility and any retail outlet.

(6) "Ethanol blender" means a person who owns, leases, operates, controls, or supervises an ethanol blending facility.

(7) "Federal reformulated gasoline" or "RFG" means gasoline which meets the requirements for RFG as specified in 40 CFR 80*.

(8) "Gasoline" means any fuel sold for use in motor vehicles and motor vehicle engines, and commonly or commercially known or sold as gasoline.

(9) "Gasoline distributor network" means all persons involved with the distribution of gasoline starting with the refiner and ending with the retailer or wholesale purchaser-consumer.

(10) "Importer" means a person who imports gasoline or gasoline blending stocks or components from a foreign country into the United States.

(11) "Low RVP gasoline" means any gasoline which has a Reid vapor pressure of seven and eight-tenths (7.8) psi or less per gallon as determined in accordance with the appropriate sampling and testing methodologies set forth in 40 CFR 80*.

(12) "Noncompliant gasoline" means any motor fuel that is not an alternate or a compliant fuel.

(13) "Psi" means pounds per square inch absolute.

(14) "Refiner" means any person who owns, leases, operates, controls, or supervises a refinery which produces gasoline for use in an area where low RVP gasoline is required.

(15) "Refinery" means a plant at which gasoline is produced.

(16) "Reid vapor pressure" or "RVP" means the absolute vapor pressure of gasoline or gasoline/ethanol blends as determined by the appropriate sampling and testing methodologies set forth in 40 CFR 80*.

(17) "Reseller" means any person who purchases gasoline and resells or transfers it to a retailer or a wholesale purchaser-consumer.

(18) "Retail outlet" means any establishment at which gasoline is sold or offered for sale to the ultimate consumer for use in motor vehicles.

(19) "Retailer" means any person who owns, leases, operates, or supervises a retail outlet.

(20) "Wholesale purchaser-consumer" means any person who is the ultimate consumer of gasoline and who purchases or obtains gasoline from a distributor for use in motor vehicles.

*Copies of the Code of Federal Regulations (CFR) referenced may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-3-2; filed Jul 6, 1995, 11:30 a.m.: 18 IR 2738; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1570)*

326 IAC 13-3-3 General requirements

Authority: IC 13-14-8; IC 13-17-3-4
Affected: IC 13-12

Sec. 3. Beginning in 1995, and each calendar year thereafter, no refiner, importer, distributor, reseller, carrier, or retailer shall:

(1) sell, offer for sale, dispense, supply, offer for supply, or transport for use in Clark and Floyd Counties gasoline that is not an alternate fuel or a compliant fuel as defined in section 2 of this rule during the applicable compliance period as defined in section 1 of this rule; or

(2) blend, mix, store, or transport or allow blending, mixing, storing, or transporting of compliant fuel with noncompliant fuel during the applicable compliance period as defined in section 1 of this rule.

(Air Pollution Control Division; 326 IAC 13-3-3; filed Jul 6, 1995, 11:30 a.m.: 18 IR 2739; errata filed Sep 9, 1995, 9:00 a.m.: 19 IR 42; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)

326 IAC 13-3-4 Record keeping requirements

Authority: IC 13-1-1-4; IC 13-1-1-5; IC 13-7-7-1
Affected: IC 13-1-1; IC 13-7

Sec. 4. (a) A person may not sell, dispense, or transfer gasoline intended for use in Clark and Floyd Counties during the applicable time period as defined in section 1 of this rule, without a transfer document that contains the information listed in this subsection, unless the gasoline is being dispensed into motor vehicles or purchased by a consumer at a retail or wholesale outlet. This document shall accompany every shipment of gasoline after it has been dispensed by the refinery. The document shall contain, at a minimum, the following information:

(1) The date of all transfers.

(2) The volume of the gasoline that was transferred.

(3) The volume and percentage of ethanol if ethanol blended, with a date and location of blending.

(4) The location and time of transfer.

(5) A statement certifying that the gasoline has an RVP of seven and eight-tenths (7.8) psi or less per gallon or is ethanol blended or is certified as RFG.

(b) Any person who manufactures, refines, transports, stores, or sells compliant fuel that is intended for use in Clark and Floyd Counties during the applicable time period as described in section 1 of this rule, shall ensure that it is segregated from noncompliant fuel and labeled at all times.

(c) Each person in the gasoline distribution network shall maintain records containing the compliance information required by this rule. These records shall be retained by the regulated parties for at least two (2) years from the date of creation or receipt. *(Air Pollution Control Division; 326 IAC 13-3-4; filed Jul 6, 1995, 11:30 a.m.: 18 IR 2739; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

326 IAC 13-3-5 Ethanol blended and reformulated gasoline

Authority: IC 13-1-1-4; IC 13-1-1-5; IC 13-7-7-1
Affected: IC 13-1-1; IC 13-7

Sec. 5. (a) Gasoline containing ethanol may exceed the seven and eight-tenths (7.8) RVP limit by no more than one (1) psi if the gasoline meets all of the following requirements:

(1) The gasoline must contain denatured, anhydrous ethanol.

(2) The concentration of anhydrous ethanol, excluding the required denaturing agent, must be at least nine percent (9%) and no more than ten percent (10%), by volume, of the gasoline.

(3) The ethanol content of the gasoline shall be determined by use of one (1) of the testing methods specified in 40 CFR 80, Appendix F*. The maximum ethanol content of gasoline shall not exceed any applicable waiver conditions under Section 211(F)(4) of the Clean Air Act, as amended.

(4) Each invoice, loading ticket, bill of lading, delivery ticket, and other document that accompanies a shipment of gasoline containing ethanol shall contain a statement that the gasoline being shipped contains ethanol and shall list the type and volume percentages of the concentration of ethanol in that gasoline.

(b) Gasoline may exceed the seven and eight-tenths (7.8) psi RVP limit if it is RFG. Each invoice, loading ticket, bill of lading, delivery ticket, and other document that accompanies a shipment of RFG shall contain a statement from the refiner that certifies this fact.

*Copies of the Code of Federal Regulations (CFR) referenced may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-3-5; filed Jul 6, 1995, 11:30 a.m.: 18 IR 2739; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1570)*

326 IAC 13-3-6 Compliance and test methods

Authority: IC 13-1-1-4; IC 13-1-1-5; IC 13-7-7-1
Affected: IC 13-1-1; IC 13-7

Sec. 6. (a) Compliance with the seven and eight-tenths (7.8) psi standard shall be determined by use of one (1) of the sampling and testing methods specified in this section. Any sampling or testing of gasoline required by this chapter shall be accomplished as follows:

(1) Sampling of gasoline for the purpose of determining compliance with this rule shall be conducted in accordance with 40 CFR 80, Appendix D*.

(2) Testing of gasoline for purposes of determining compliance with this rule shall be conducted in accordance with 40 CFR 80, Appendix E*.

(b) Upon presentation of credentials, the refiner, importer, distributor, reseller, carrier, or retailer to whom this rule applies shall allow the commissioner, or an authorized representative of the commissioner, to sample or test gasoline in accordance with this section.

*Copies of the Code of Federal Regulations (CFR) referenced may be obtained from the Government Printing Office, 732 North Capitol Street NW, Washington, D.C. 20401 or the Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center-North, Tenth Floor, 100 North Senate Avenue, Indianapolis, Indiana 46204. *(Air Pollution Control Division; 326 IAC 13-3-6; filed Jul 6, 1995, 11:30 a.m.: 18 IR 2740; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1570)*

326 IAC 13-3-7 Violations

Authority: IC 13-1-1-4; IC 13-1-1-5; IC 13-7-7-1
Affected: IC 13-1-1; IC 13-7-5-7

Sec. 7. Failure to comply with any provision of this article constitutes a violation of this article and is subject to the provisions of IC 13-7-5-7 *[IC 13-7 was repealed by P.L.1-1996, SECTION 99, effective July 1, 1996.]. (Air Pollution Control Division; 326 IAC 13-3-7; filed Jul 6, 1995, 11:30 a.m.: 18 IR 2740; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477)*

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Attachment G

Periodic Inventory Emissions Statement

Appendix G1

Indiana's Periodic Inventory Emissions Statement SIP for Ozone in Lake and Porter Counties, Indiana – Emissions Reporting Rule 326 IAC 2-6 Letter (June 15, 2016)

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Indiana's Periodic Inventory Emissions Statement for Ozone

This submittal is intended to fulfill the annual emissions statement State Implementation Plan (SIP) requirement under Section 182(a)(3)(B) of the Clean Air Act (CAA) for the 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS).

Under Section 107(d)(1)(B) of the CAA, on May 31, 2012 (77 FR 34221), United States Environmental Protection Agency (U.S. EPA) designated Lake and Porter counties as nonattainment for the 2008 8-hour ozone NAAQS and as a portion of the Chicago-Gary-Lake County, Illinois-Indiana (IL-IN) nonattainment area (40 Code of Federal Regulation 81.315). Under Section 182(a)(3)(B) of the CAA, and as a prerequisite for redesignation of a nonattainment area to attainment, each state with an ozone nonattainment area is required to revise its SIP with an annual emissions statement. This statement is to include a requirement that the owner or operator of each stationary source of oxides of nitrogen (NO_x) or volatile organic compounds (VOCs) provide the state with a statement showing actual emissions of NO_x and VOCs from the source.

On June 15, 2016, the Indiana Department of Environmental Management (IDEM) submitted *Indiana's Periodic Inventory Emissions Statement SIP for Ozone in Lake and Porter Counties, Indiana – Emissions Reporting Rule 326 IAC 2-6* letter to U.S. (Appendix G1). The emissions reporting rule requires sources located in Lake, LaPorte, and Porter counties and Lawrenceburg Township, Dearborn County that emit either NO_x or VOCs into the ambient air equal to or greater than twenty-five (25) tons per year to annually report their actual emission levels to the state.

The requirements for a periodic inventory emissions statement SIP remain in place in Indiana's ozone SIP. As such, Indiana's Emissions Reporting Rule, 326 IAC 2-6 satisfies the state's obligation under Section 182(a)(3)(B) of the CAA for Lake and Porter counties for the 2008 8-hour NAAQS.

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Appendix G1

Indiana's Periodic Inventory Emissions Statement SIP for Ozone in Lake and Porter Counties, Indiana – Emissions Reporting Rule 326 IAC 2-6 Letter (June 15, 2016)

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Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

June 15, 2016

Mr. Robert Kaplan
Acting Regional Administrator
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3950

Re: Indiana's Periodic Inventory Emissions Statement SIP for Ozone in Lake and Porter Counties, Indiana - Emissions Reporting Rule 326 IAC 2-6

Dear Mr. Kaplan:

Under Section 107(d)(1)(B) of the Clean Air Act (CAA), Lake and Porter counties were designated as marginally classified nonattainment areas under the 2008 8-hour ozone National Ambient Air Quality Standards (NAAQS) by United States Environmental Protection Agency (U.S. EPA) on June 11, 2012 (77 FR 34221). Under Section 183(a)(3)(B) of the CAA, and as a prerequisite for redesignation of a nonattainment area to attainment, each state with an ozone nonattainment area is required to revise its State Implementation Plan (SIP) with an annual emissions statement. This statement is to include a requirement that the owner or operator of each stationary source of oxides of nitrogen (NO_x) or volatile organic compounds (VOCs) provide the state with a statement showing actual emissions of NO_x and VOCs from the source.

Indiana's Emissions Reporting Rule, 326 Indiana Administrative Code (IAC) 2-6, was originally adopted by Indiana's Air Pollution Control Board (APCB) on December 3, 2003. The emission reporting rule is part of Indiana's SIP and addresses emission statement requirements found in Section 182(a)(3)(B) of the Clean Air Act. The rule requires sources located in Lake, LaPorte, and Porter counties that emit either NO_x or VOCs into the ambient air equal to or greater than twenty-five (25) tons per year to annually report their actual emission levels to the Indiana Department of Environmental Management (IDEM). Emissions information reported through this program is used for air quality planning, tracking progress, and for billing purposes.

IDEM believes Indiana's Emissions Reporting Rule 326 IAC 2-6 satisfies the CAA 183(a)(3)(B) requirement for a Periodic Inventory Emissions Statement SIP in Lake and Porter counties, Indiana. These counties are part of the Chicago-Naperville Illinois-Indiana-Wisconsin (IL-IN-WI), 2008 8-hour ozone nonattainment area.

This submittal consists of one (1) hard copy of the required documentation. An electronic version of the submittal in PDF format that is identical to the hard copy has been sent to Doug Aburano, Chief of U.S. EPA Region 5's Attainment Planning and Maintenance Section and Chris Panos of U.S. EPA Region 5.

If you have any questions or need additional information, please contact Brian Callahan, Chief, Air Quality Standards and Implementation Section, Office of Air Quality at (317) 232-8244 or bcallaha@idem.IN.gov.

Sincerely,

Keith Baugues

Keith Baugues
Assistant Commissioner
Office of Air Quality

KB/sad/bc/lf
Attachments:

Attachment A: Indiana's Emissions Reporting Rule (326 IAC 2-6)

cc: Doug Aburano U.S. EPA Region 5 (no enclosure)
Chris Panos, U.S. EPA Region 5 (no enclosure)
John Mooney, U.S. EPA Region 5 (no enclosure)
Steve Rosenthal, U.S. EPA Region 5 (no enclosure)
Ed Doty, U.S. EPA Region 5 (no enclosure)
Keith Baugues, IDEM-OAQ (no enclosure)
Scott Deloney, IDEM-OAQ (no enclosure)
Brian Callahan, IDEM-OAQ (w/ enclosure)
Leslie Ferguson, IDEM-OAQ (w/ enclosure)
Gale Ferris, IDEM-OAQ (no enclosure)
File Copy

Attachment A

Indiana's Emissions Reporting Rule
326 Indiana Administrative Code (IAC) 2-6

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require an operating permit under 326 IAC 2-6.1, 326 IAC 2-7, or 326 IAC 2-8.

(C) Deny the modification request.

(2) If, after review of the application, the commissioner determines that the change or modification will increase the potential to emit of the source to a level that would require an operating permit under 326 IAC 2-6.1, 326 IAC 2-7, or 326 IAC 2-8, the commissioner shall:

(A) notify the source of the requirement to obtain an operating permit;

(B) provide the source with the appropriate permit application forms; and

(C) issue or deny the operating permit under 326 IAC 2-6.1, 326 IAC 2-7, or 326 IAC 2-8, whichever is applicable. *(Air Pollution Control Division; 326 IAC 2-5.5-6; filed Nov 25, 1998, 12:13 p.m.: 22 IR 1013; errata filed May 12, 1999, 11:23 a.m.: 22 IR 3106; readopted filed Oct 22, 2004, 10:35 a.m.: 28 IR 794; errata filed Jul 23, 2007, 4:19 p.m.: 20070815-IR-326070466ACA; readopted filed Aug 25, 2010, 2:42 p.m.: 20100922-IR-326100394BFA; filed Feb 6, 2012, 2:54 p.m.: 20120307-IR-326090493FRA)*

Rule 6. Emission Reporting

326 IAC 2-6-1 Applicability

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 1. (a) This rule applies to all of the following:

(1) Sources required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program.

(2) Sources located in the following counties that emit volatile organic compounds (VOC) or oxides of nitrogen (NO_x) into the ambient air at levels equal to or greater than twenty-five (25) tons per year:

(A) Lake.

(B) Porter.

(C) LaPorte.

(3) Sources that emit lead into the ambient air at levels equal to or greater than five (5) tons per year.

(b) All sources permitted by the department are subject to section 5 of this rule, additional information requests.

(c) Sources covered by subsection (a) must comply with the compliance schedule in section 3 of this rule. *(Air Pollution Control Division; 326 IAC 2-6-1; filed Nov 12, 1993, 4:00 p.m.: 17 IR 732; filed Feb 26, 2004, 3:45 p.m.: 27 IR 2210; filed Jul 14, 2006, 1:25 p.m.: 20060809-IR-326050078FRA)*

326 IAC 2-6-2 Definitions

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-11-2; IC 13-15; IC 13-17

Sec. 2. For purposes of this rule, the definition given for a term in this rule shall control in any conflict between 326 IAC 1-2 and this rule. In addition to the definitions provided in IC 13-11-2 and 326 IAC 1-2, the following definitions apply throughout this rule unless expressly stated otherwise:

(1) "Actual emissions" means the emissions in tons per year of any pollutant emitted by an emissions unit for the calendar year.

(2) "Annual process rate" means the actual or estimated annual fuel, process, or solid waste operating rate in a calendar year.

(3) "Ash content" means the inert residual portion of a fuel.

(4) "Capture efficiency" means the percent of the total emissions captured and routed to the air pollution control equipment.

(5) "Control efficiency" means the percent of the total emissions routed to the air pollution control equipment that are destroyed or captured by the air pollution control equipment. The control efficiency includes control equipment downtime and any malfunctions that occurred while the emission unit or units are in operation. If the actual control efficiency during the calendar year is unknown or cannot reasonably be predicted from available data, then the efficiency provided by the manufacturer may be used.

(6) "Control equipment identification code" means the code provided by the department that defines the equipment used to reduce, by destruction or removal, the amount of air pollutants in a gas stream prior to discharge to the ambient air. Examples of destruction or removal are incineration and carbon adsorption.
(7) "Days per week in operation" means the days per week that the emitting process operates averaged over the inventory period.
(8) "Design capacity" means a measure of the size of a point source based on the reported maximum operational capacity of the unit.
(9) "Downtime" means the period of time when the air pollution control equipment is not operational and the process it is controlling is in operation.
(10) "Emission factor" means an estimate of the rate at which a pollutant is released to the atmosphere as the result of some activity, divided by the rate of that activity, such as production rate or throughput.
(11) "Emissions group" means any combination of like emissions units or processes from a single building, adjacent buildings, or areas. Like emissions units or processes will contain emission units with same or similar emission estimating methods or source classification codes.
(12) "Estimated emissions method code" means a code provided by the department that identifies the estimation technique used in the calculation of estimated emissions.
(13) "Fugitive emissions" has the meaning set forth in 326 IAC 2-7-1(18).
(14) "Heat content" means the amount of thermal heat energy in a solid, liquid, or gaseous fuel.
(15) "Hours per day in operation" means hours per day that the emitting process operated averaged over the days in operation in the calendar year.
(16) "Maximum nameplate capacity" means a measure of a unit's size that the manufacturer puts on the unit's nameplate.
(17) "Oxides of nitrogen" or "NO_x" means all oxides of nitrogen, including, but not limited to, nitrogen oxide and nitrogen dioxide, but excluding nitrous oxide, collectively expressed as molecular weight of nitrogen dioxide.
(18) "Percent annual throughput" means the weighted percent of yearly activity for the following quarters:
(A) Winter meaning December, January, and February of the same year. For example, winter 2004 would be equal to the sum of the monthly percent activity for January 2004, February 2004, and December 2004.
(B) Spring meaning March through May of the same calendar year.
(C) Summer meaning June through August of the same calendar year.
(D) Fall meaning September through November of the same calendar year.
(19) "Potential to emit" has the meaning set forth in 326 IAC 2-7-1.
(20) "Process rate" means a quantity per unit time of any raw material or process intermediate consumed, or product generated through the use of any equipment, source operation, or process. For a stationary internal combustion unit or any other fuel burning equipment, this term means the quantity of fuel burned per unit time.
(21) "Responsible official" has the meaning set forth in 326 IAC 2-7-1.
(22) "Sulfur content" means the sulfur content of a fuel, expressed as percent by weight.

(Air Pollution Control Division; 326 IAC 2-6-2; filed Nov 12, 1993, 4:00 p.m.: 17 IR 733; filed Feb 26, 2004, 3:45 p.m.: 27 IR 2210; errata filed Jan 2, 2013, 2:19 p.m.: 20130123-IR-326130002ACA)

326 IAC 2-6-3 Compliance schedule

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 3. (a) The owner or operator of a source subject to section 1(a) of this rule must submit an emission statement covering the previous calendar year to the department according to the following schedule:
(1) Annually, by July 1, for sources subject to section 1(a)(2) of this rule or with the potential to emit annual emissions greater than or equal to any of the following emission thresholds:
(A) Two thousand five hundred (2,500) tons per year of any of the following:
(i) Carbon monoxide.
(ii) Oxides of nitrogen.

(iii) Sulfur dioxide.

(B) Two hundred fifty (250) tons per year of either of the following:

(i) Particulate matter less than or equal to ten (10) micrometers (PM_{10}).

(ii) Volatile organic compounds.

(2) Triennially, by July 1, according to the schedule in subsection (b) for all sources not subject to annual reporting in subdivision (1).

(b) The county schedule for reporting under subsection (a)(2) is as follows:

(1) Starting in 2004, and every three (3) years thereafter, sources located in the following counties must submit an emission statement:

(A) Adams County.
(B) Allen County.
(C) Benton County.
(D) Carroll County.
(E) Cass County.
(F) Dekalb County.
(G) Elkhart County.
(H) Fulton County.
(I) Huntington County.
(J) Jasper County.
(K) Kosciusko County.
(L) LaGrange County.
(M) Lake County.
(N) LaPorte County.
(O) Marshall County.
(P) Miami County.
(Q) Newton County.
(R) Noble County.
(S) Porter County.
(T) Pulaski County.
(U) St. Joseph County.
(V) Starke County.
(W) Steuben County.
(X) Wabash County.
(Y) Wells County.
(Z) White County.
(AA) Whitley County.

(2) Starting in 2005, and every three (3) years thereafter, sources located in the following counties must submit an emission statement:

(A) Blackford County.
(B) Boone County.
(C) Clinton County.
(D) Delaware County.
(E) Fayette County.
(F) Fountain County.
(G) Grant County.
(H) Hamilton County.
(I) Hancock County.
(J) Hendricks County.
(K) Henry County.

(L) Howard County.
(M) Jay County.
(N) Johnson County.
(O) Madison County.
(P) Marion County.
(Q) Montgomery County.
(R) Morgan County.
(S) Parke County.
(T) Putnam County.
(U) Randolph County.
(V) Rush County.
(W) Shelby County.
(X) Tippecanoe County.
(Y) Tipton County.
(Z) Union County.
(AA) Warren County.
(BB) Wayne County.

(3) Starting in 2006, and every three (3) years thereafter, sources located in the following counties must submit an emission statement:

(A) Bartholomew County.
(B) Brown County.
(C) Clark County.
(D) Clay County.
(E) Crawford County.
(F) Daviess County.
(G) Dearborn County.
(H) Decatur County.
(I) Dubois County.
(J) Floyd County.
(K) Franklin County.
(L) Gibson County.
(M) Greene County.
(N) Harrison County.
(O) Jackson County.
(P) Jefferson County.
(Q) Jennings County.
(R) Knox County.
(S) Lawrence County.
(T) Martin County.
(U) Monroe County.
(V) Ohio County.
(W) Orange County.
(X) Owen County.
(Y) Perry County.
(Z) Pike County.
(AA) Posey County.
(BB) Ripley County.
(CC) Scott County.
(DD) Spencer County.

(EE) Sullivan County.
(FF) Switzerland County.
(GG) Vanderburgh County.
(HH) Vermillion County.
(II) Vigo County.
(JJ) Warrick County.
(KK) Washington County.

(c) The department will make available emission statement reporting forms to sources subject to this rule.

(d) Sources subject to this rule may submit their emission statement as follows:

(1) Electronically. Sources that submit their emission statement electronically must submit to the department a certification that complies with section 4(c)(1) of this rule by the submission deadline.

(2) By mail. The United States Postal Service postmark is the submittal date.

(3) By private carrier. Records of dates of receipt and delivery by the service must be maintained.

(4) By hand delivery to the office of air quality, Indianapolis, Indiana.

(Air Pollution Control Division; 326 IAC 2-6-3; filed Nov 12, 1993, 4:00 p.m.: 17 IR 734; filed Feb 26, 2004, 3:45 p.m.: 27 IR 2212; filed Jul 14, 2006, 1:25 p.m.: 20060809-IR-326050078FRA)

326 IAC 2-6-4 Requirements

Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 4. (a) A source subject to section 1(a) of this rule shall report estimated actual emissions in the emission statement of the following pollutants:

(1) Carbon monoxide (CO).
(2) Volatile organic compounds (VOC).
(3) Oxides of nitrogen (NO_x).
(4) Particulate matter less than or equal to ten (10) micrometers (PM_{10}).
(5) Sulfur dioxide (SO_2).
(6) Lead and lead compounds, including any unique chemical substance that contains lead.
(7) Particulate matter less than or equal to two and five-tenths (2.5) micrometers ($PM_{2.5}$).
(8) Ammonia (NH_3).

(b) Emissions from processes that are insignificant or trivial activities as defined in 326 IAC 2-7-1 are not required to be reported in an emission statement.

(c) The emission statement submitted by the source must contain, at a minimum, the following information:

(1) Certification by a responsible official that the information in the emission statement is accurate based on reasonable estimates using data available to the preparers and on a reasonable inquiry into records and persons responsible for the operation of the source, and is true, accurate, and complete. The certification shall include the:

(A) full name;
(B) title;
(C) signature;
(D) date of signature; and
(E) telephone number;

of the person signing the certification.

(2) Source identification information, to include the following:

(A) Full name, physical location, and mailing address of the source.
(B) Source universal transverse mercator (UTM) or latitude and longitude.
(C) North American Industry Classification System (NAICS) code.

(3) Operating data, for each emission unit or emissions group, to include the following:

(A) Percent annual throughput by quarter as defined in section 2 of this rule.

(B) Days per week in operation.
(C) Design capacity.
(D) Hours per day in operation.
(E) Hours per year in operation.
(F) Maximum nameplate capacity.

(4) For reporting purposes, multiple stacks that vent to the atmosphere may be grouped together to reflect any grouping of process units. Stack parameters include the following:
(A) Stack identification.
(B) Stack height and diameter (in feet).
(C) Universal transverse mercator (UTM) or latitude and longitude coordinates.
(D) Exit gas temperature (degrees Fahrenheit).
(E) Exit gas flow rates in cubic feet per minute.

(5) Emissions information for each process, to include the following:
(A) The estimated actual emissions of all pollutants listed in subsection (a) at the process level in tons per year. Actual emission estimates must:
(i) include upsets, downtime, and fugitive emissions; and
(ii) follow an emission estimation method.
Fugitive emissions may be reported as plantwide or grouped together in a logical manner. If control efficiencies are adjusted because of upsets, downtime, and malfunctions, information must be provided about how the control efficiencies are calculated.
(B) Emissions of VOC, PM_{10}, and $PM_{2.5}$ shall be reported as total VOC, PM_{10}, and $PM_{2.5}$ emissions, respectively.
(C) Calendar year for the emissions.
(D) Estimated emissions method code provided by the department.
(E) Emission factor, if part of emissions calculation. Acceptable sources of an emission factor include the following:
(i) AP-42, "Compilation of Air Pollutant Emission Factors AP-42" as defined at 326 IAC 1-2-20.5.
(ii) Site-specific values accepted by the department and the U.S. EPA.
(iii) Other documentable methodology accepted by the department and the U.S. EPA.
(F) Source classification code (SCC).
(G) Annual process rate (annual throughput) to the extent it is part of emissions calculation.
(H) If part of emissions calculation, the following:
(i) Ash content.
(ii) Sulfur content.
(iii) Heat content.

(6) Control equipment information, to include the following:
(A) Capture efficiency.
(B) Current control equipment efficiency percentage unless a controlled emission factor is applied. The actual efficiency should reflect the total control efficiency from all control equipment for each process pollutant. If the actual control efficiency is unavailable, the:
(i) efficiency designed by the manufacturer may be used; or
(ii) control efficiency limit imposed by a permit should be used.
(C) Control equipment identification code.

(d) Nothing in this rule requires stack testing. *(Air Pollution Control Division; 326 IAC 2-6-4; filed Nov 12, 1993, 4:00 p.m.: 17 IR 734; errata, 17 IR 1009; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1566; filed Feb 26, 2004, 3:45 p.m.: 27 IR 2213; filed Jul 14, 2006, 1:25 p.m.: 20060809-IR-326050078FRA; errata filed Jan 2, 2013, 2:19 p.m.: 20130123-IR-326130002ACA)*

326 IAC 2-6-5 Additional information requests
Authority: IC 13-14-8; IC 13-17-3
Affected: IC 13-15; IC 13-17

Sec. 5. The department may request emissions and emissions-related information about any regulated air pollutant as defined at 326 IAC 2-7-1 from any source permitted by the department when needed for air quality planning, air quality modeling, or state implementation plan development. A source that receives an information request pursuant to this section shall provide the information, based on reasonable estimates and using data available to the preparers, in writing to the department within sixty (60) days of receipt of the department's request. A source may request additional time to submit the information. Types of circumstances when the department may request information include the following:

(1) To identify sources or processes that emit a monitored pollutant.

(2) To address public complaints.

(3) To develop and quality assure emissions inventories, as necessary, for permit modeling, state implementation plan development, rulemaking, or perform air risk analysis.

(4) To survey industry wide sources or geographic specific areas to address potential health risks.

(5) To assess pollutants for a single industry source.

(6) To comply with an information request from a local, state, or federal agency.

(7) To verify or supplement Emergency Planning and Community Right-to-Know Act Section 313 toxic release inventory information.

(Air Pollution Control Division; 326 IAC 2-6-5; filed Feb 26, 2004, 3:45 p.m.: 27 IR 2215; errata filed Jan 2, 2013, 2:19 p.m.: 20130123-IR-326130002ACA)

Rule 6.1. Minor Source Operating Permit Program

326 IAC 2-6.1-1 Exemptions

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 1. The following shall be exempt from the requirements of this rule:

(1) A new source or existing source that meets the criteria for an exemption under 326 IAC 2-1.1-3.

(2) Except for sources described in section 2(2) of this rule, a new or existing source subject to one (1) of the following:

(A) A Part 70 permit under 326 IAC 2-7.

(B) A federally enforceable state operating permit (FESOP) under 326 IAC 2-8.

(C) A source specific operating agreement under 326 IAC 2-9.

(D) A permit by rule under:

(i) 326 IAC 2-10; or

(ii) 326 IAC 2-11.

(E) A registration under 326 IAC 2-5.5.

(Air Pollution Control Division; 326 IAC 2-6.1-1; filed Nov 25, 1998, 12:13 p.m.: 22 IR 1015; readopted filed Oct 22, 2004, 10:35 a.m.: 28 IR 795; readopted filed Aug 25, 2010, 2:42 p.m.: 20100922-IR-326100394BFA; filed Feb 6, 2012, 2:54 p.m.: 20120307-IR-326090493FRA)

326 IAC 2-6.1-2 Applicability

Authority: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11
Affected: IC 13-15; IC 13-17

Sec. 2. The following sources shall apply for an air operating permit as described in this rule:

(1) A source that meets the applicability criteria of 326 IAC 2-5.1-3(a)(1) and is not exempted under section 1 of this rule.

(2) A source with the potential to emit below the Part 70 thresholds as defined in 326 IAC 2-7-1(22) that includes:

(A) a chromium electroplating tank;

(B) a chromium anodizing tank; or

(C) an operation subject to 326 IAC 20-8.

Sources consisting only of decorative chromium electroplating tanks that use a trivalent chromium process that incorporates

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