



# **IDEM UPDATE**

## **Greater Elkhart Chamber of Commerce**

**November 3, 2016**

**Carol S. Comer, Commissioner**

**Indiana Department of Environmental Management**



## IDEM: Protecting Hoosiers and Our Environment While Becoming the Most Customer-friendly Environmental Agency

IDEM's mission is to implement federal and state regulations to protect human health and the environment while allowing the environmentally sound operations of industrial, agricultural, commercial and government activities vital to a prosperous economy.

# How Does IDEM Protect Hoosiers and Our Environment?

- Developing regulations and issuing permits to restrict discharges to environmentally safe levels.
- Inspecting and monitoring permitted facilities to ensure compliance with permits.
- Using compliance assistance and/or enforcement when facilities exceed their permit levels or violate regulations.
- Educating people on their environmental responsibilities.
- Cleaning up contaminated sites to eliminate public exposure to toxics and returning properties to productive use.



# Performance Metrics October 2016

**Result                      Targets                      Comments**

## Quality of Hoosiers' Environment

% of Hoosiers that live in counties that meet <b>air quality standards</b>	<b>93.04%</b>	<b>100%</b>	<b>80%</b>	Ozone in Clark, Floyd, Greene, and LaPorte counties; Muncie Lead; Sulfur Dioxide in parts of Daviess, Marion, Morgan, Pike and Vigo counties.
% of <b>CSO Communities</b> with approved programs to prevent the release of untreated sewage	<b>98.17%</b>	<b>100%</b>	<b>90%</b>	98+9 (107) out of 99+10 (109). Not Gary or Hammond.
% of Hoosiers that receive water from facilities in full compliance with <b>safe drinking water standards</b>	<b>98.49%</b>	<b>99%</b>	<b>95%</b>	Still dealing with the implementation of Stage2 Disinfection/Disinfectant ByProducts Rule affecting medium and small size public water systems that sell and purchase water; the Maximum Contaminant Level (MCL) for Total Trihalomethane and Haloacetic Acid cannot be met.

## Permitting Efficiency

Total calendar days accumulated in issuing environmental permits, as determined by state statute\*

<b>Land</b>	<b>25,045</b>	<b>30,388</b>	<b>33,963</b>	<b>35,750 statutory</b>
<b>Air</b>	<b>32,658</b>	<b>52,890</b>	<b>59,112</b>	<b>62,223 statutory</b>
<b>Water</b>	<b>36,380</b>	<b>65,153</b>	<b>72,818</b>	<b>76,650 statutory</b>

\* Places emphasis on back logged permits

## Compliance

Total percentage of compliance observations from regulated customers within acceptable compliance standards\*\*

<b>Inspections</b>	<b>97.28%</b>	<b>97%</b>	<b>75%</b>	
<b>Self-reporting</b>	<b>96.75%</b>	<b>99%</b>	<b>95%</b>	
<b>Continuous monitoring (COM)</b>	<b>99.91%</b>	<b>99.9%</b>	<b>99%</b>	

\*\* Tracks observations and not just inspections



# Performance Metrics June 2005

Quality of Hoosiers' Environment	Result	Target	Comments	
% of Hoosiers in counties meeting <b>air quality standards</b>	61%	100%	80%	12 counties and 2,408,571 of 6,195,643 residents above standard
% of <b>CSO Communities</b> with approved programs to prevent the release of untreated sewage	4%	100%	20%	75% by 2007 is goal.

**Permitting Efficiency** Total calendar days accumulated in issuing environmental permits, as determined by state statute\*

Land	100,013	66,565	86,864
Air	511,000	207,000	385,000
Water	301,000	48,000	200,000

\* Places emphasis on back logged permits

**Compliance** Total percentage of compliance observations from regulated customers within acceptable compliance standards\*

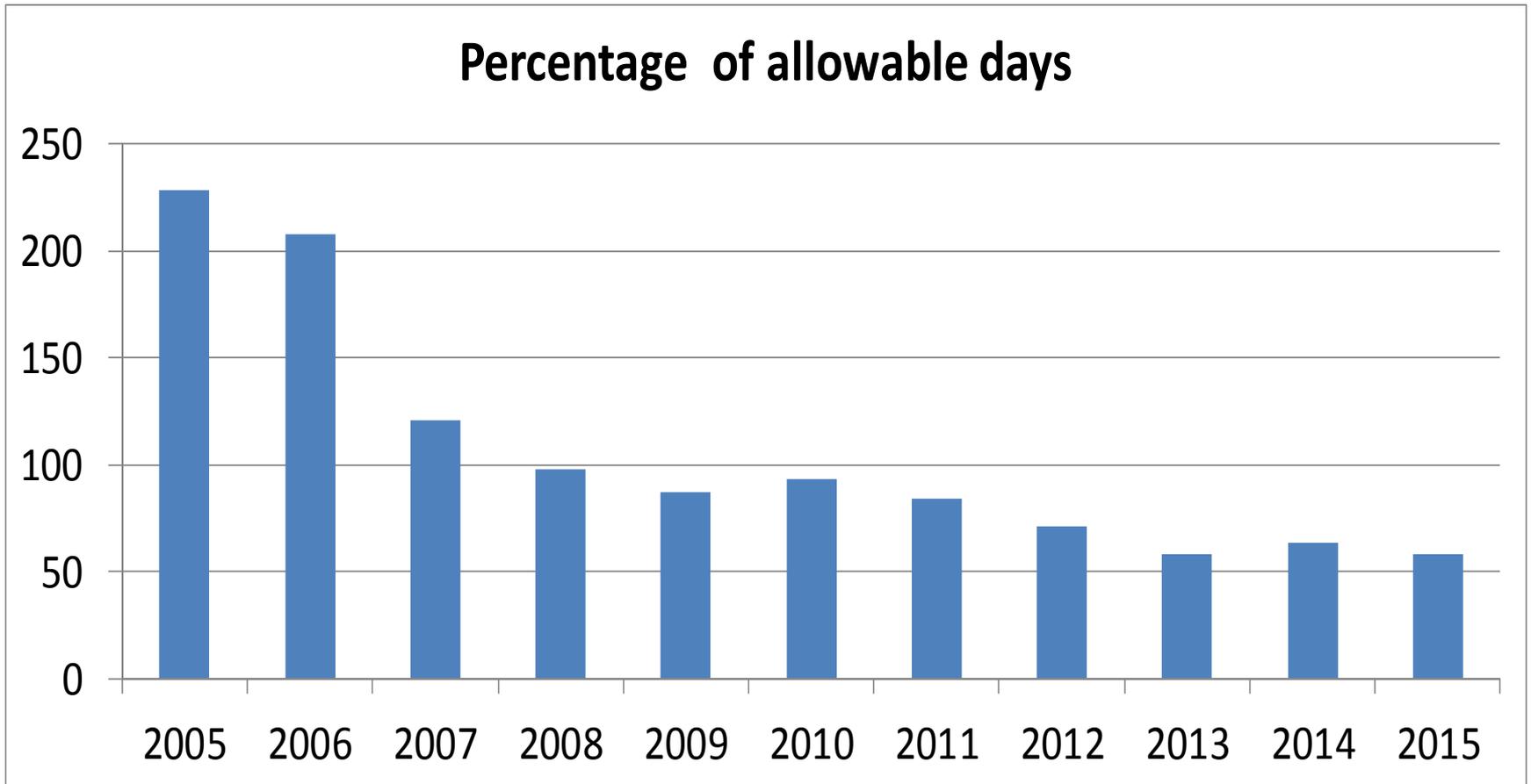
Inspections	95.46%	97%	75%
Self-reporting	97.11%	99%	95%
Continuous monitoring (COM)	99.19%	99.90%	98.95%

\* Tracks observations and not just inspections

**Organizational Transformation** Budgetary agency dollars spent on key outside contracts for core agency functions.

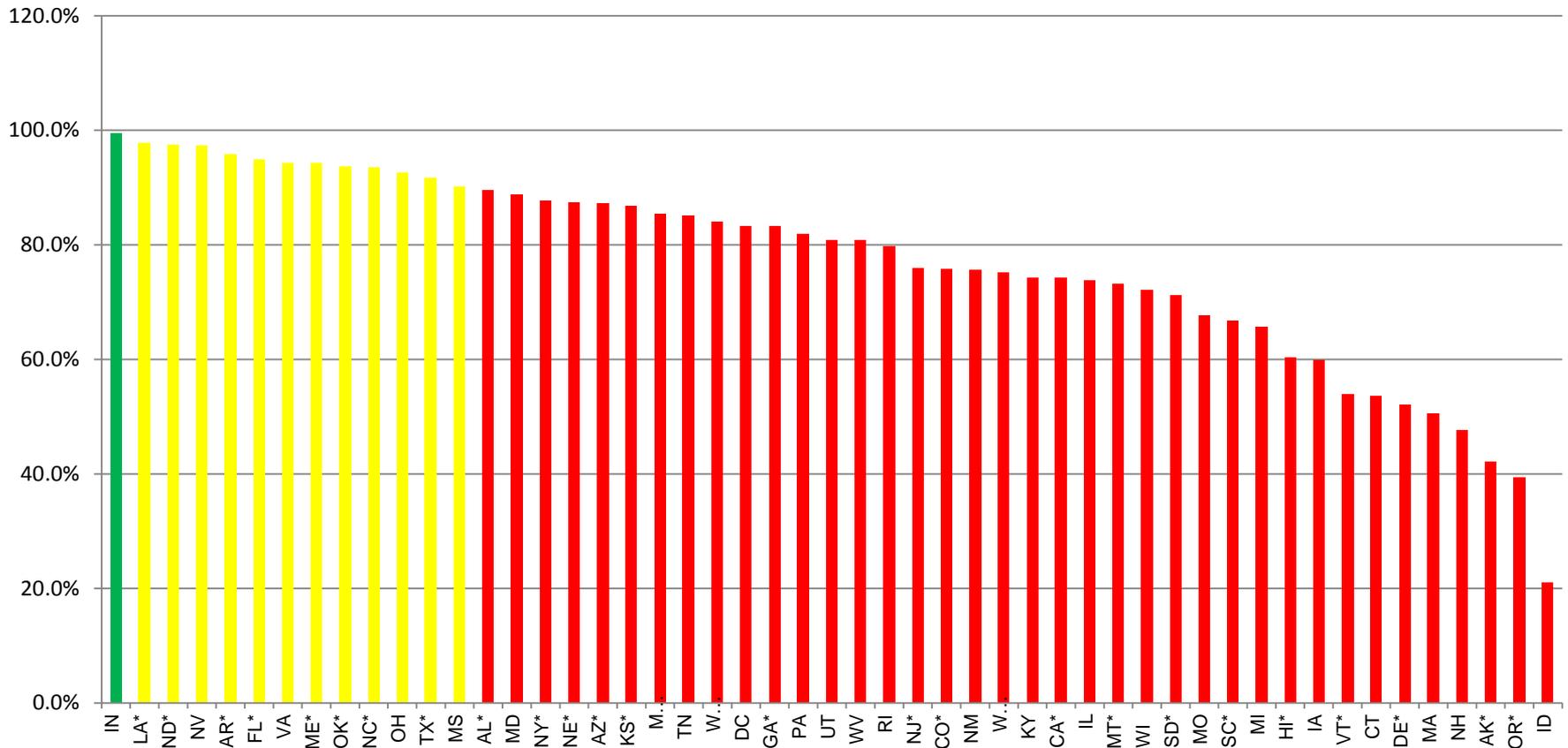
Dollars spent on outside services per year	\$6,179,367	\$0	\$3,447,017
--	-------------	-----	-------------

# Permits – Percent of Statutory Days

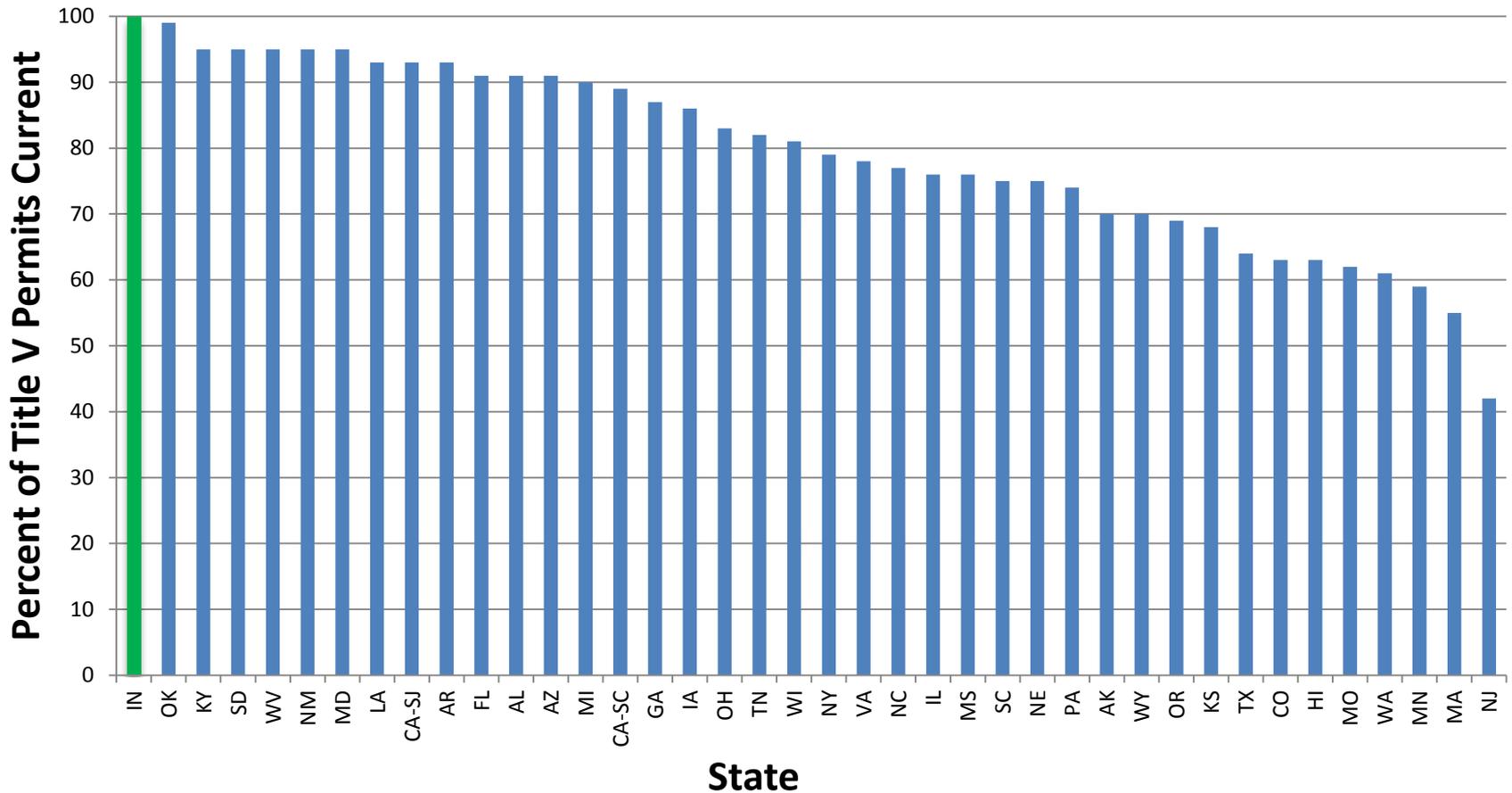


# Indiana Is Best in NPDES Permitting

## Total % Current Wastewater Permits



# Indiana Is Best in Air Permitting



# IDEM Inspects Facilities Regularly

- Full compliance evaluations of Part 70 sources once every two (2) years.
- Full compliance evaluations of all Federally Enforceable State Operating Permits once every five (5) years.
- Inspect all Treatment, Storage, and Disposal Facilities every two (2) years.
- Compliance inspections at all Confined Animal Feeding Operations every five (5) years.
- Inspect each underground storage tank once every three (3) years.
- Inspect each major and minor NPDES permitted facility every two (2) years.
- Inspect each general permitted facility every four (4) years.

## **WATCHDOG REPORT:**

***New York and other states have fallen far behind schedule in scrutiny of Clean Water Act facilities***



“In Indiana, where pollution review rules apparently are observed, **91 percent** of all facilities have been inspected in the last five years. In West Virginia, only 25 percent have been inspected.”

*Press and Sun-Bulletin, July 3, 2014.*

# Compliance and Technical Assistance

- The Compliance and Technical Assistance Program (CTAP) provides assistance to help Indiana businesses understand and comply with environmental regulations. CTAP is:
  - **Nonregulatory** – CTAP staff members are not regulators and do not have regulatory authority. Therefore, businesses will not be penalized for reporting relevant environmental information to CTAP when requesting assistance.
  - **Free and Confidential** – While CTAP staff members serve as liaisons between the regulatory programs and businesses, they do not provide any details about the company to regulators, as the information is protected under Indiana Code 13-28-3-4.
  - **Assistance** – CTAP staff members provide assistance through on-site visits or via phone and will provide a full compliance review or just target a single issue. They also develop training programs, brochures, and webinars to help businesses understand the state and federal environmental regulations that affect them.
  - **Multimedia** – CTAP staff members are knowledgeable in air, water, land, and Community-Right-to-Know regulations and are happy to answer questions in these areas.
- CTAP staff members provide assistance to businesses that contact them directly, are referred by regulatory inspectors or permit writers, or are impacted by a new U.S. Environmental Protection Agency (U.S. EPA) or state regulation.

Contact us if you need assistance

Hotline: (800) 988-7901

Email: [CTAP@idem.IN.gov](mailto:CTAP@idem.IN.gov)

Website: [www.in.gov/idem/ctap/](http://www.in.gov/idem/ctap/)

# Voluntary Recognition Programs for Businesses

Goals: Promote pollution prevention and achieve measurable reduction of pollution in Indiana



- Eligibility contingent on:
    - Good environmental compliance standing
    - Partners Pledge
  - Quarterly Networking meetings
  - Innovation sharing
  - 92 Members
  - [partners@idem.IN.gov](mailto:partners@idem.IN.gov)
  - 1-800-988-7901
- Eligibility contingent on:
    - Established Environmental Management System and ISO Certification
    - Good environmental compliance standing
    - Commitment to continuous environmental improvement
  - Regulatory Incentives
  - 54 Members
  - [esp@idem.IN.gov](mailto:esp@idem.IN.gov)
  - 1-800-988-7901

# Voluntary Recognition Program for Communities

Goal: Promote pollution prevention and achieve measurable reduction of pollution in Indiana



Comprehensive  
Local  
Environmental  
Action  
Network

- Eligibility contingent on:
  - Good environmental compliance standing
  - Establishing environmental aspects and initiatives
  - Commitment to continuous environmental improvement
- Participants choose four environmental goals for the four-year program term
- Benefits:
  - Statewide recognition
  - Networking
  - Innovation Sharing
- Currently 18 members

Contact CLEAN Community Challenge at 1-800-988-7901 or [CLEAN@idem.IN.gov](mailto:CLEAN@idem.IN.gov)

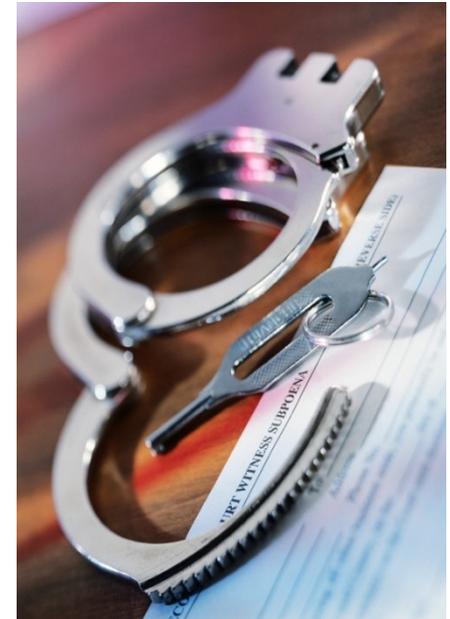
# Enforcement Statistics

Media	2013	2014	2015
Air	81	117	112
Water	95	84	47
Hazardous Waste	31	34	23
Solid Waste	16	20	22
UST/LUST	12	30	15
CFO	12	23	22
<b>TOTAL</b>	<b>247</b>	<b>308</b>	<b>241</b>

# IDEM's Office of Criminal Investigations

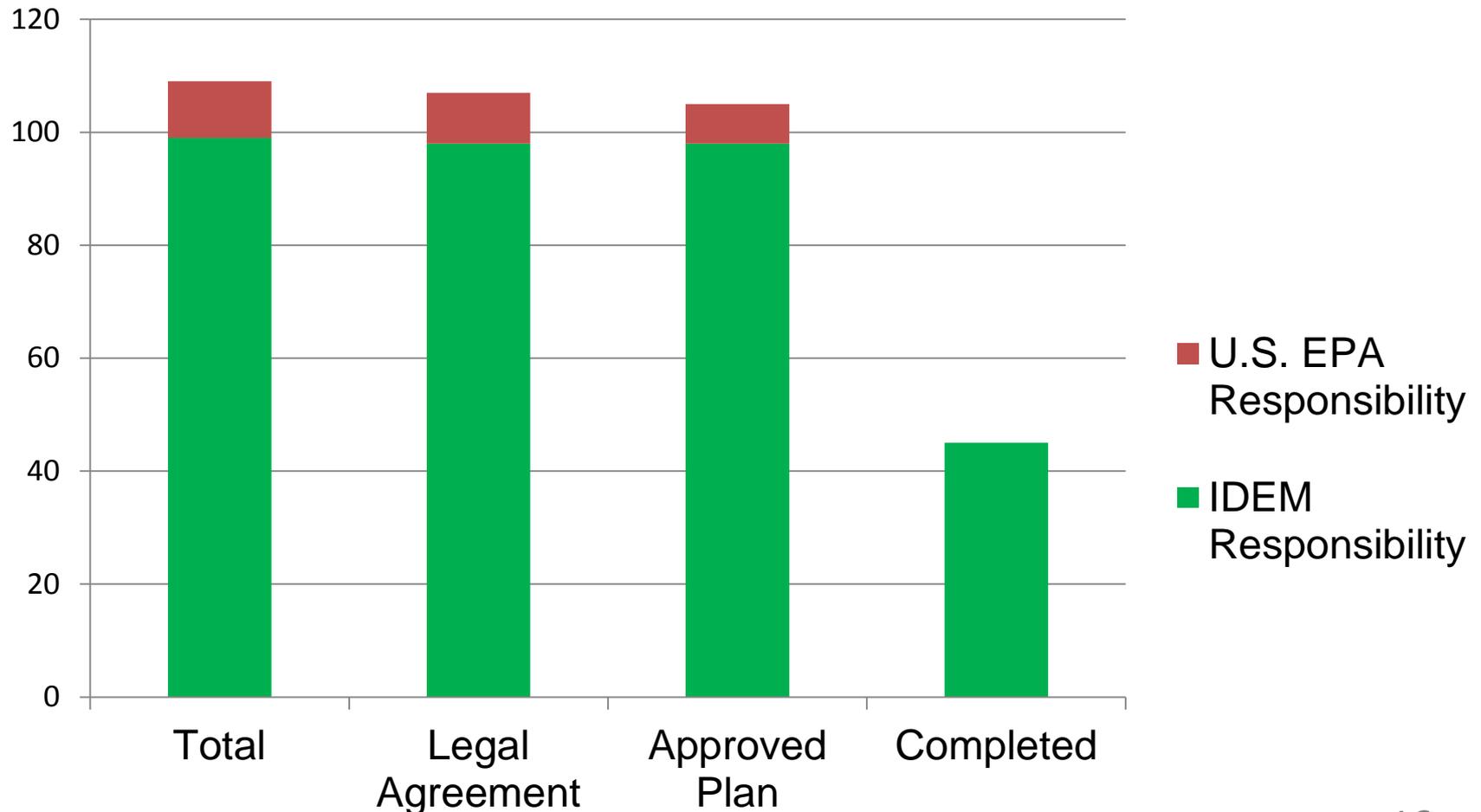
The primary duty of IDEM's investigative staff is to investigate allegations of criminal violations of Indiana's environmental protection laws, and to prepare a case for presentation to the Prosecuting Attorney who has jurisdiction over the alleged violations.

In some instances, these investigative efforts are directed toward the presentation of a case at the federal level.



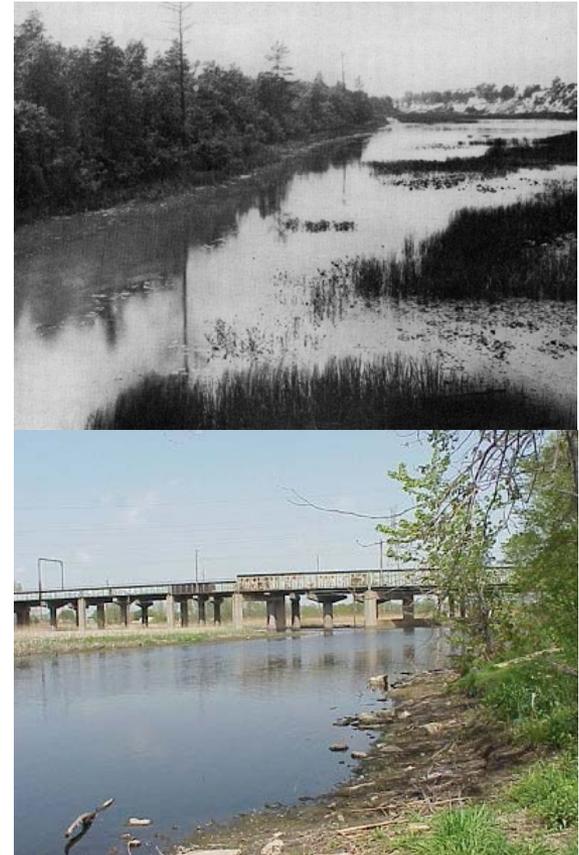
# Water Quality

## Indiana Combined Sewer Overflow Status



# Grand Calumet River/Indiana Harbor Canal

- More than 100 years of industrial pollution.
- As much as 93% of the flow in the river system is industrial and municipal discharges.
- Historically this was a slow moving river system interconnected with adjacent riverine wetlands.
- Chemicals of Primary Concern include PAH, PCB, metals, benzene
- Sediment contamination.
- Fish tissue contamination resulted in a Fish Consumption Advisory.





# Karner Blue Butterfly



# East Branch Grand Calumet River

- Design agreement, signed on March 3, 2011, to address approximately two miles of river from Kennedy to Cline Avenue.
- Required removal of approximately 133,700 cubic yards of contaminated sediment.
- Removal of approximately 362,000 cubic yards of soil from 58 acres of adjacent wetland shelves.
- Approximately 333,000 cubic yards of cap material will be used for clean fill; River will contain a reactive layer.
- Estimated cost of \$89.4 million.
- Estimated 1.09 million pounds of contaminants removed and sequestered.

# Lead in Drinking Water

- In January and February, IDEM requested an update from all 789 community public water systems regarding the locations of their lead service lines. The responses are available on IDEM's virtual file cabinet.
- During the most recent legislative session, the Indiana General Assembly passed SEA 93, which provides that schools are to be supplied safe drinking water from their public water system.
- When systems have a lead exceedance, a certified copy of the lead consumer public notification sent to ratepayers must be submitted to IDEM in accordance with the federal rule, and the notification will be posted to IDEM's virtual file cabinet.
- IDEM has taken steps to improve the administration of the drinking water program by developing and implementing "lab-to-state" wherein certified laboratories submit their drinking water sampling results electronically.

# Lead: Updates

- Working with Indiana Finance Authority (State Revolving Funds Program) to potentially create a lead removal funding program.
- Requiring systems to view and update their Lead and Copper Sampling Plan to ensure systems are monitoring from locations that are at high risk of lead or copper contamination.

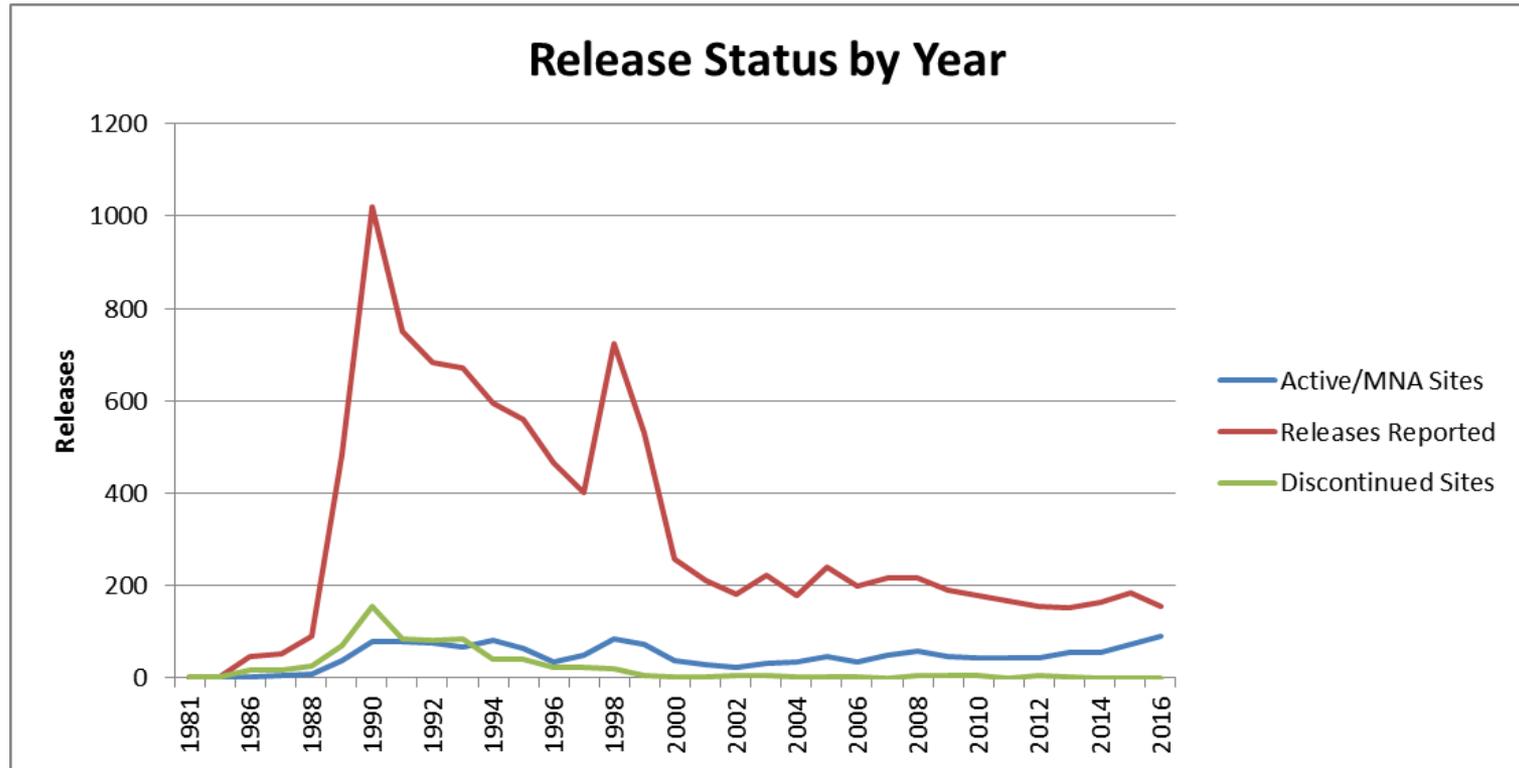


# Waters of the United States

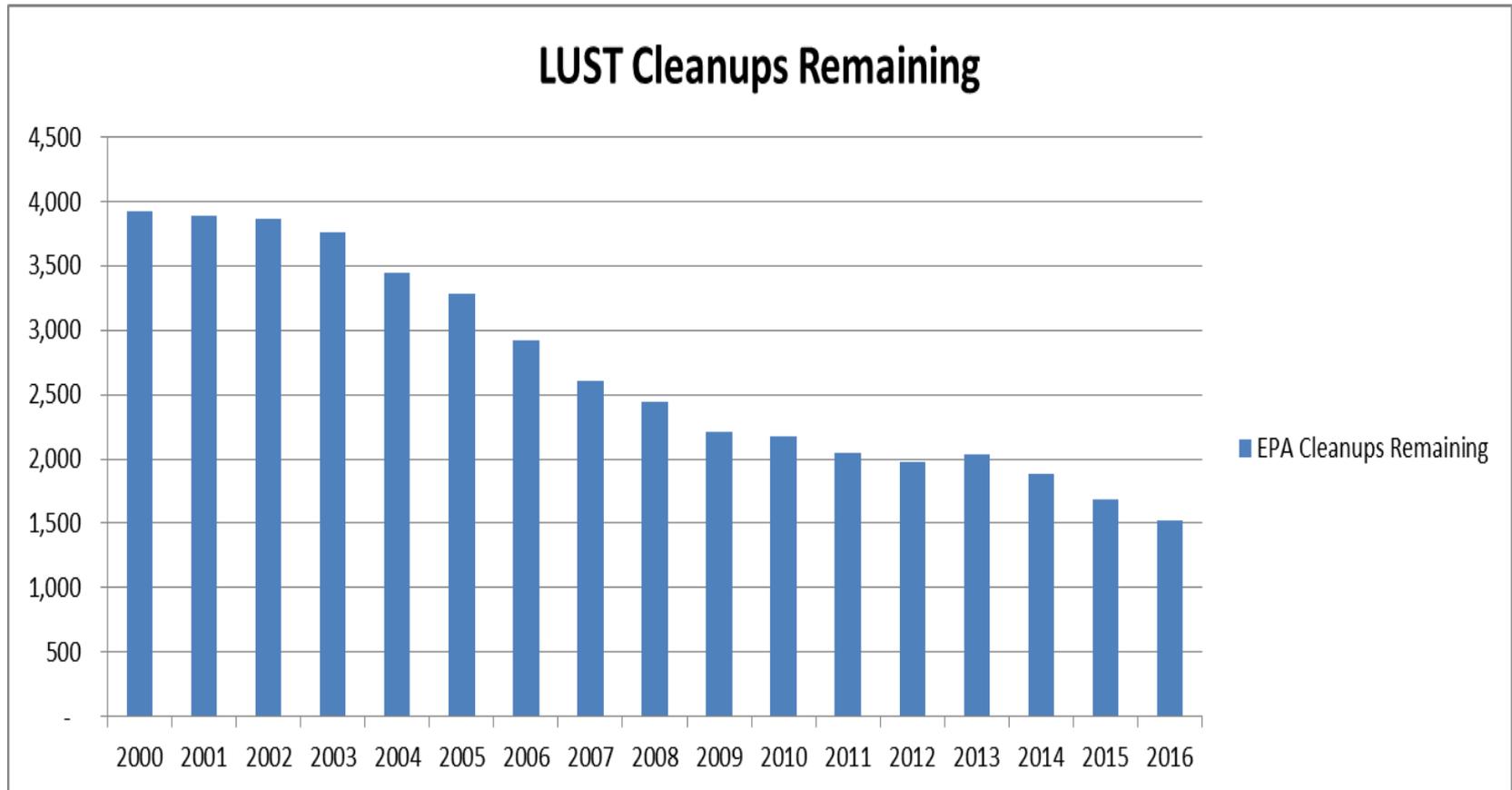
“Accordingly, on due review of the relevant considerations in light of the briefs filed by petitioners, respondents and intervenors, and in the exercise of our discretion, we GRANT petitioners’ motion for stay. The Clean Water Rule is hereby STAYED, nationwide, pending further order of the court.”

*In re: Environmental Protection Agency and Department of Defense Final Rule; “Clean Water Rule: Definition of the Waters of the United States,” Sixth Circuit District Court, October 9, 2015.*

# Petroleum Releases



# Petroleum Cleanups Remaining



# Technical Review Panel

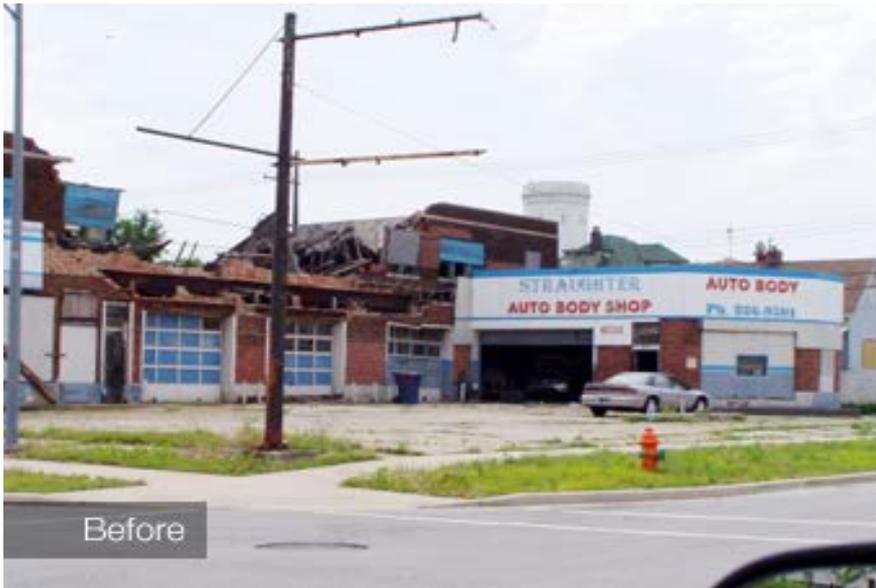
- Pilot Project for Resolving Technical Disputes.
- Applies to State Cleanup and VRP sites.
- Panel Composed of Subject Matter Experts within IDEM but outside of the Remediation Program.
- Available once internal review concurs there is an impasse and the consultant requests review by the Panel.



# Supplemental Environmental Projects

“It is the policy of IDEM to encourage the consideration, development, and implementation of SEPs to further the State’s goals of protecting and enhancing human health and the environment. In exchange for an agreement to perform an SEP, IDEM shall mitigate a portion of a Respondent’s proposed gravity-based civil penalty.”

# Straughter Body Shop



## *Applicability of RCRA Corrective Action Laws to Current Owners of Hazardous Waste Disposal Sites*

IDEM has determined that its authority to order corrective actions under RCRA, I.C. § 13-22-13 *et al.*, and related federal and state rules and regulations, **does not** extend to subsequent owners of hazardous waste facilities if the subsequent owner did not operate such a facility on the site, did not seek or receive a permit to do so, and was not required to seek or receive such a permit.

[www.in.gov/idem/files/npd-waste-0067.pdf](http://www.in.gov/idem/files/npd-waste-0067.pdf)

In general, Comfort Letters and Prospective Purchaser Agreements require a purchaser to:

- Stop any continuing releases;
- Prevent any threatened future release;
- Prevent or limit human, environmental, or natural resource exposure to any previously released hazardous substances; and
- Demonstrate there is no unacceptable risk to human health and the environment.

# GM Stamping Plant (Indianapolis)



# GM Stamping Plant Reuse Commission



# Coal Combustion Residuals: The Federal Rule

- The federal Rule became effective on October 19, 2015.
- It establishes technical requirements for CCR landfills and surface impoundments under RCRA.
- The rule contains compliance deadlines.
- The rule is self-implementing and is designed to be enforced through citizen's suits.
- It allows states to amend their own Solid Waste Management Plans in order to grant and enforce alternative compliance schedules for federal deadlines.

# Coal Combustion Residuals: The State Rule

- IDEM was approached by members of the regulated community who preferred state regulation.
- Indiana currently regulates CCR landfills; the new rule would extend Indiana's regulatory authority to surface impoundments.
- The Environmental Rules Board (ERB) passed an emergency rule in February 2016 that incorporated the relevant federal regulations into Indiana's rules to regulate CCR impoundments.
- Final Rule incorporating was adopted by the ERB in August and goes into effect in December 2016.



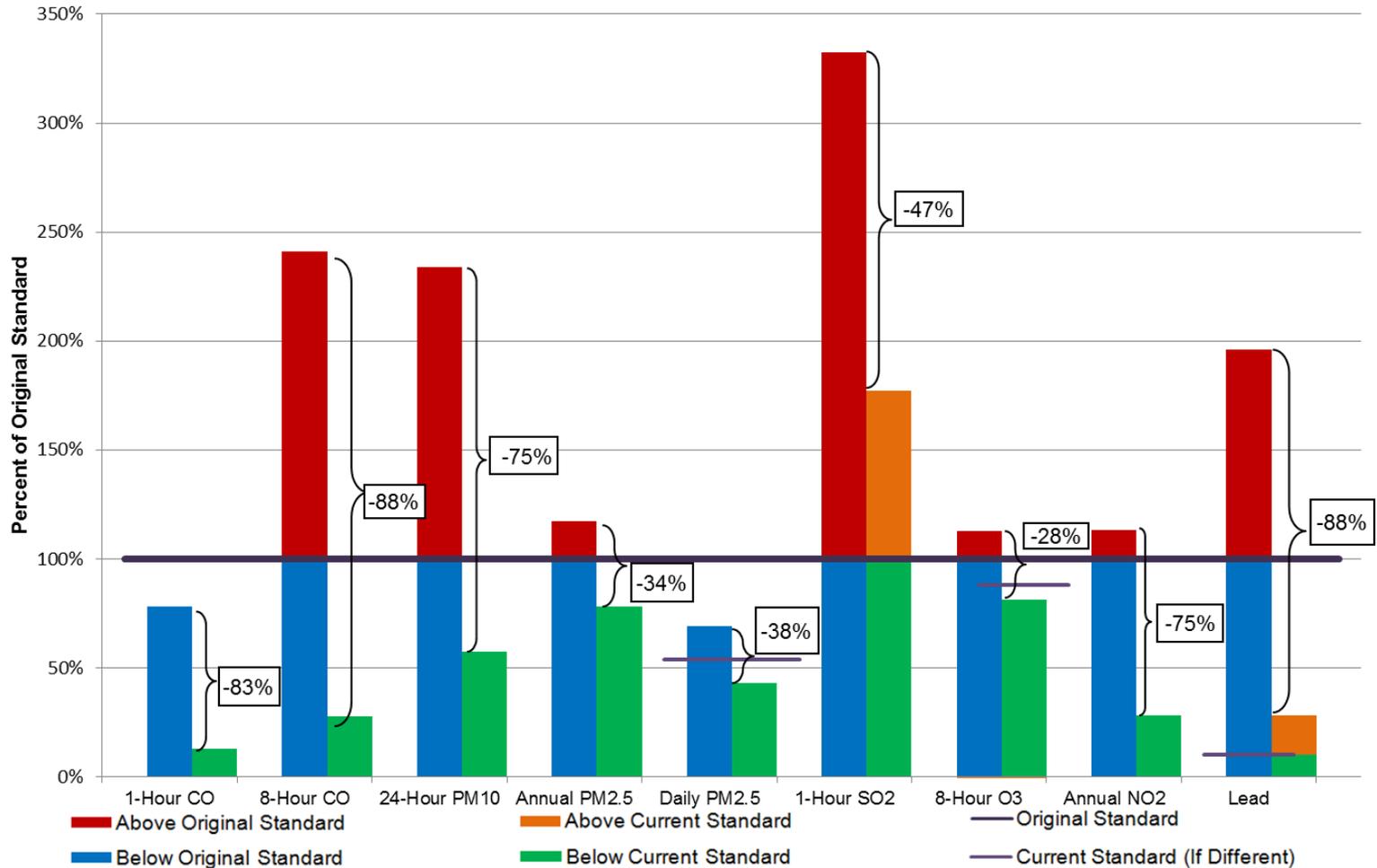
# The State Solid Waste Plan

- IDEM is drafting amendments to Indiana's Solid Waste Plan to address CCR and criteria for extending compliance deadlines.
- The amendments will conform with U.S. EPA disposal requirements and incorporate surface impoundment regulations.
- The public comment period ended on June 30, 2016.
- U.S. EPA expressed concern that Indiana's existing statutes do not provide authority to fully regulate CCR activities.
- IDEM is working with stakeholders on state legislative changes to resolve the issue.
- Congress is also moving forward with CCR-related legislation to change enforcement from citizen's suits to state programs.

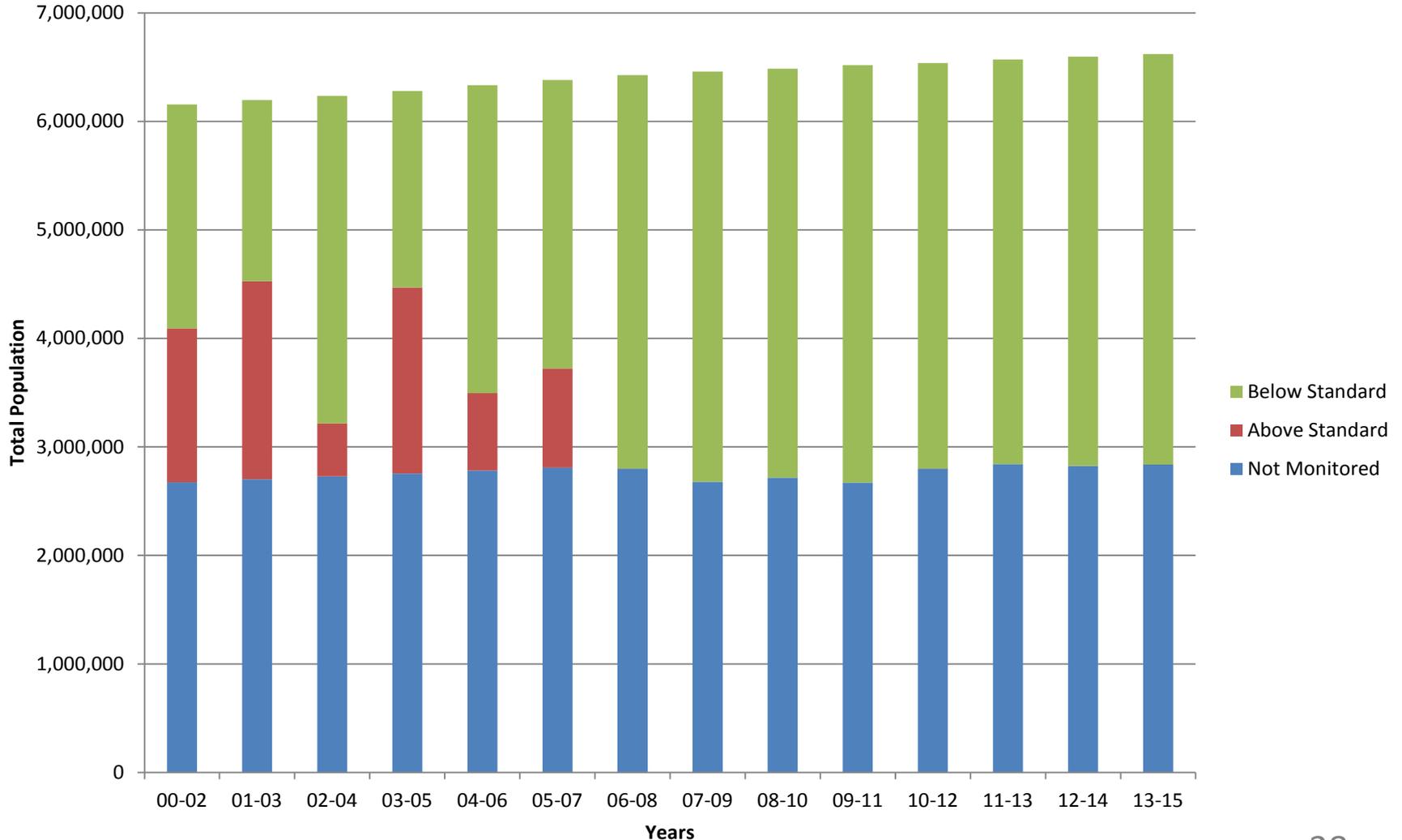
# Indiana's Air Quality

At the end of 2009, all areas of the State of Indiana met every National Ambient Air Quality Standard (NAAQS) in effect for the first time since the NAAQS were established in the 1970s.

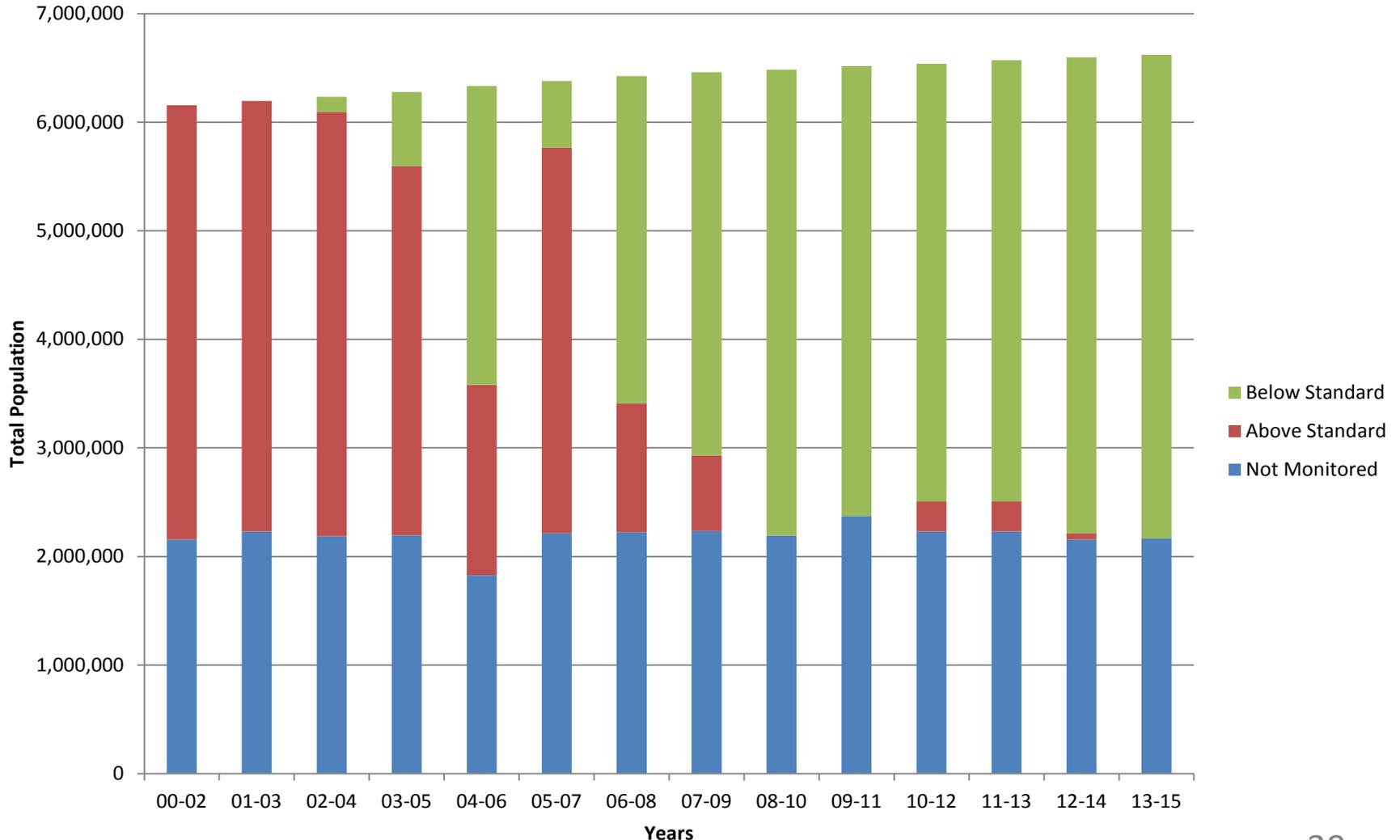
Percent Difference Between Highest Historical Monitored Concentration (Left Bar) and Highest 2015 Monitored Concentration (Right Bar) - Statewide



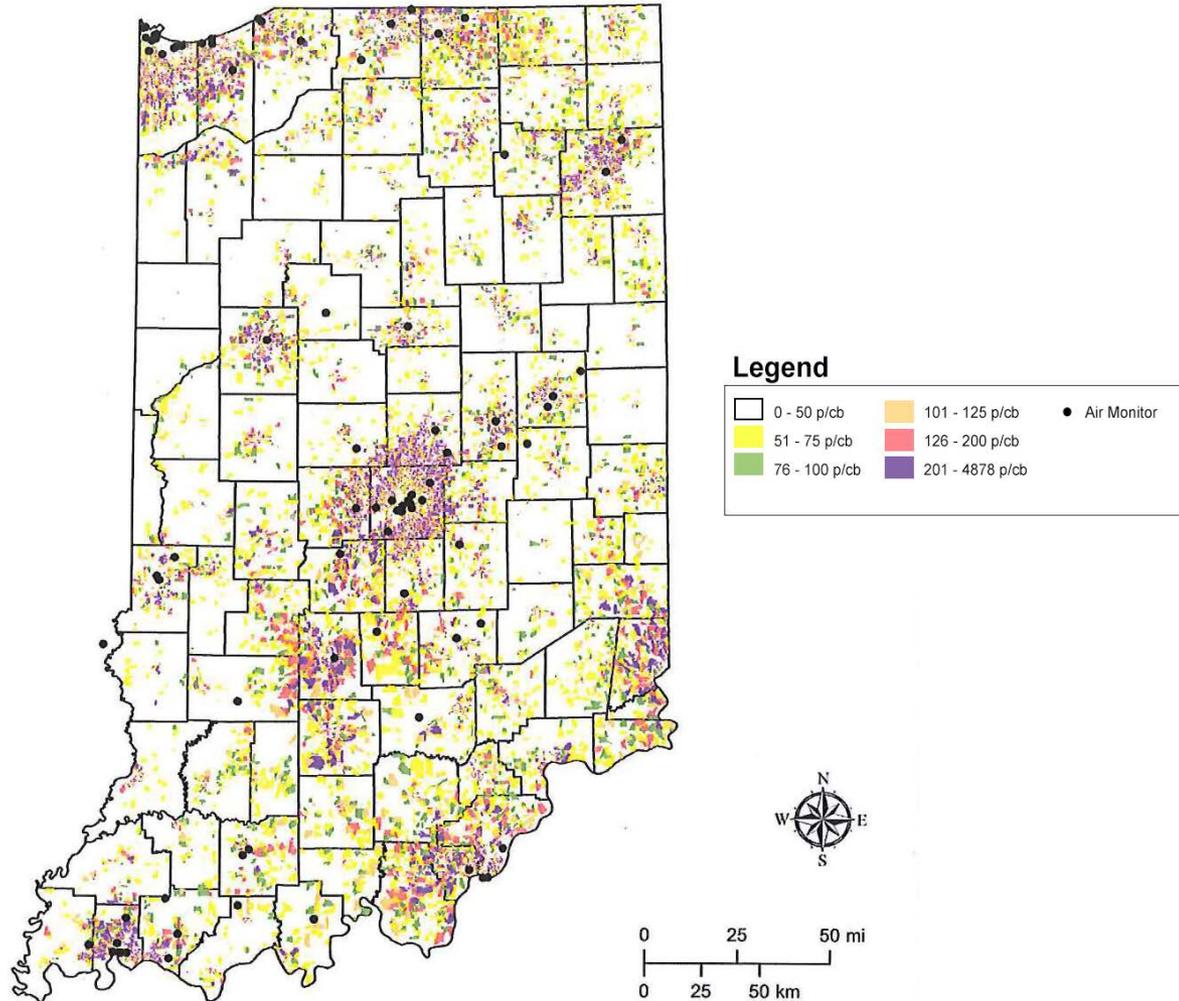
# Air Quality Levels – 24-Hour PM 2.5 – Indiana



# Air Quality Levels – 8-Hour Ozone – Indiana



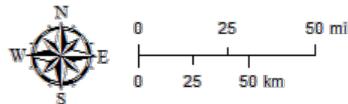
# State Monitoring Network



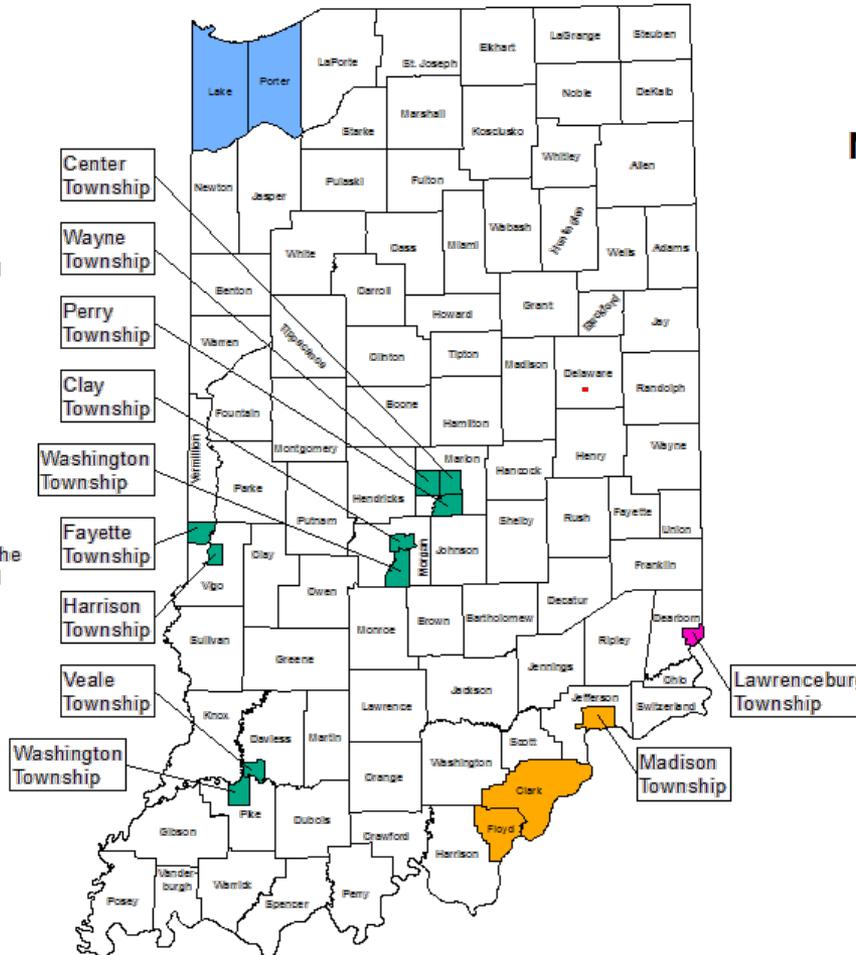
# Current Air Quality

## Legend

- Nonattainment for the 1997 Fine Particle Annual Standard
- Nonattainment for the 2008 Ozone 8-Hour Standard
- Nonattainment for the 2010 SO<sub>2</sub> 1-Hour Standard
- Nonattainment for the 2008 Lead Standard
- Nonattainment for the 2008 Ozone 8-Hour Standard and the 1997 Fine Particle Annual Standard



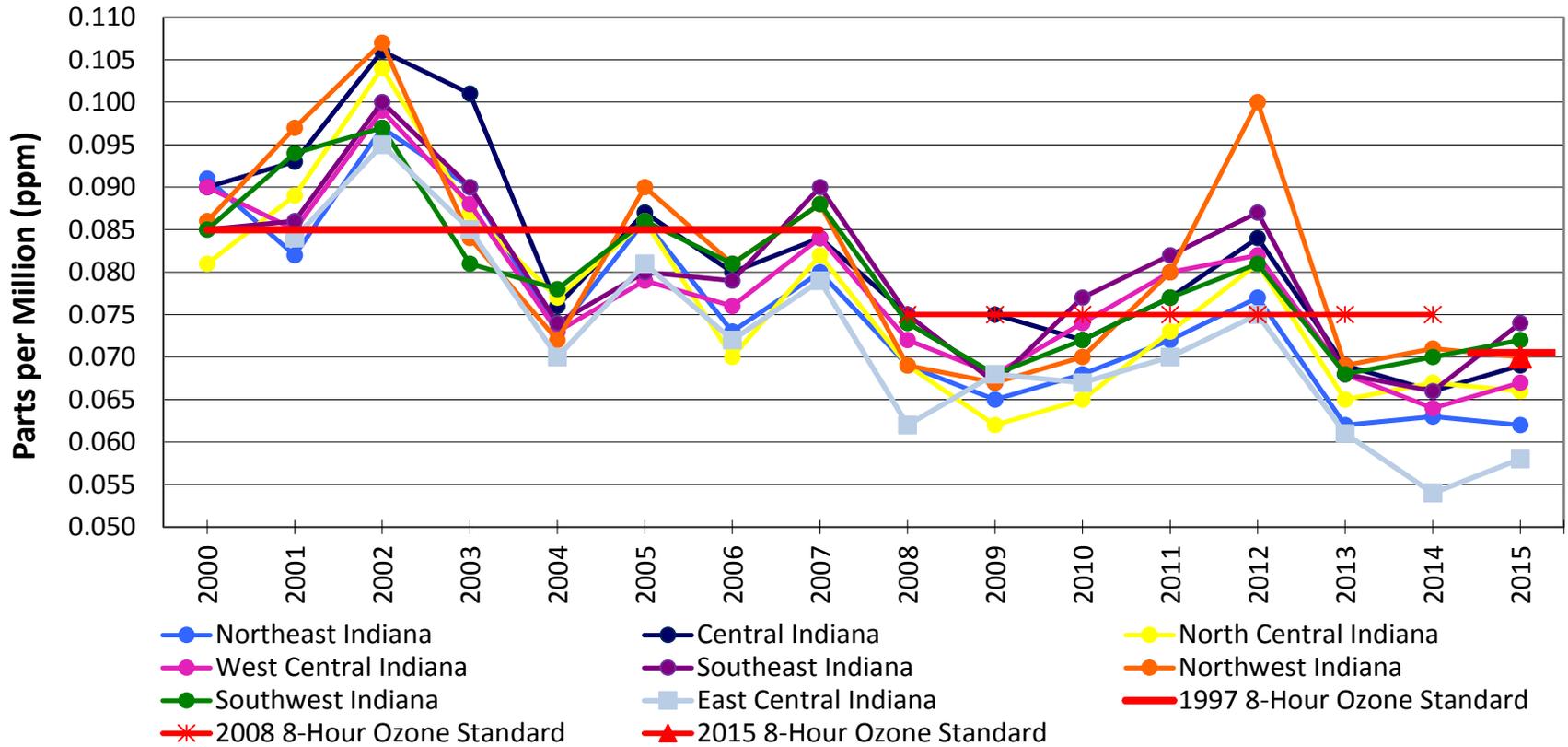
**Mapped By:** B. Callahan, OAQ  
**Date:** 03/18/2015  
**Source:** IDEM  
**Map Projection:** UTM Zone 16 N  
**Map Datum:** NAD83



## Current Nonattainment Areas

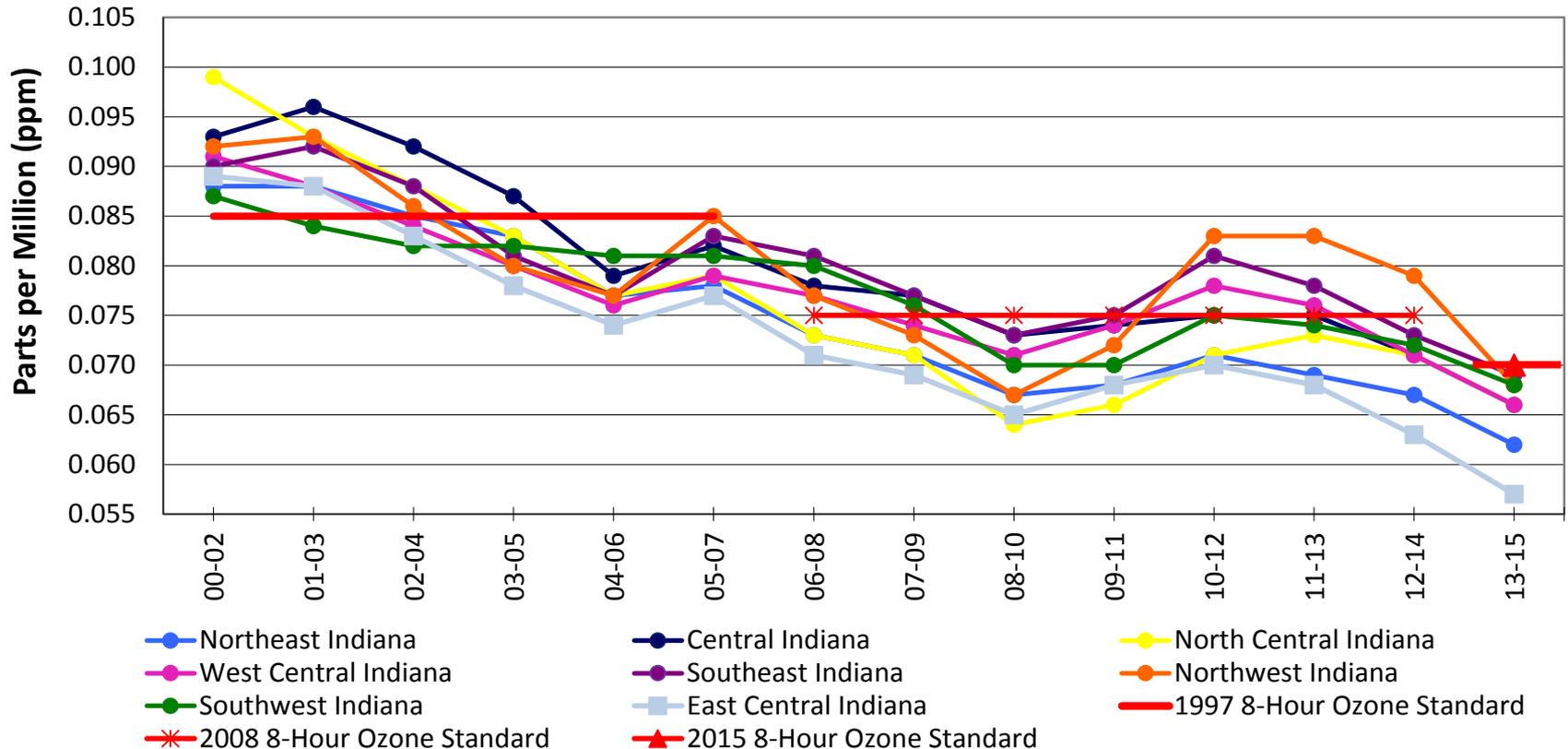
# Ozone

## Ozone 4<sup>th</sup> - High Values Monitor Trend Chart Statewide



# Ozone

## Ozone Design Values Highest Monitor Trend Chart Statewide





# New Ozone Standard

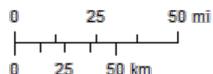
“Based on its review of the air quality criteria for ozone (O<sub>3</sub>) and related photochemical oxidants and national ambient air quality standards (NAAQS) for O<sub>3</sub>, the Environmental Protection Agency (EPA) is revising the primary and secondary NAAQS for O<sub>3</sub> to provide requisite protection of public health and welfare, respectively. The EPA is revising the levels of both standards to 0.070 parts per million (ppm), and retaining their indicators (O<sub>3</sub>), forms (fourth-highest daily maximum, averaged across three consecutive years) and averaging times (eight hours).”

<http://www3.epa.gov/ozonepollution/pdfs/20151001fr.pdf>  
(October 1, 2015)

# Ozone

## Legend

- Ozone Design Value Less Than or Equal to 0.070 ppm
- Nonattainment for the 2008 8-Hour Ozone Standard



### Notes:

- Posted Data Are in Units of Parts per Million (ppm)
- Posted Data Represent Ozone 8-Hour Average Design Values, 2013 - 2015

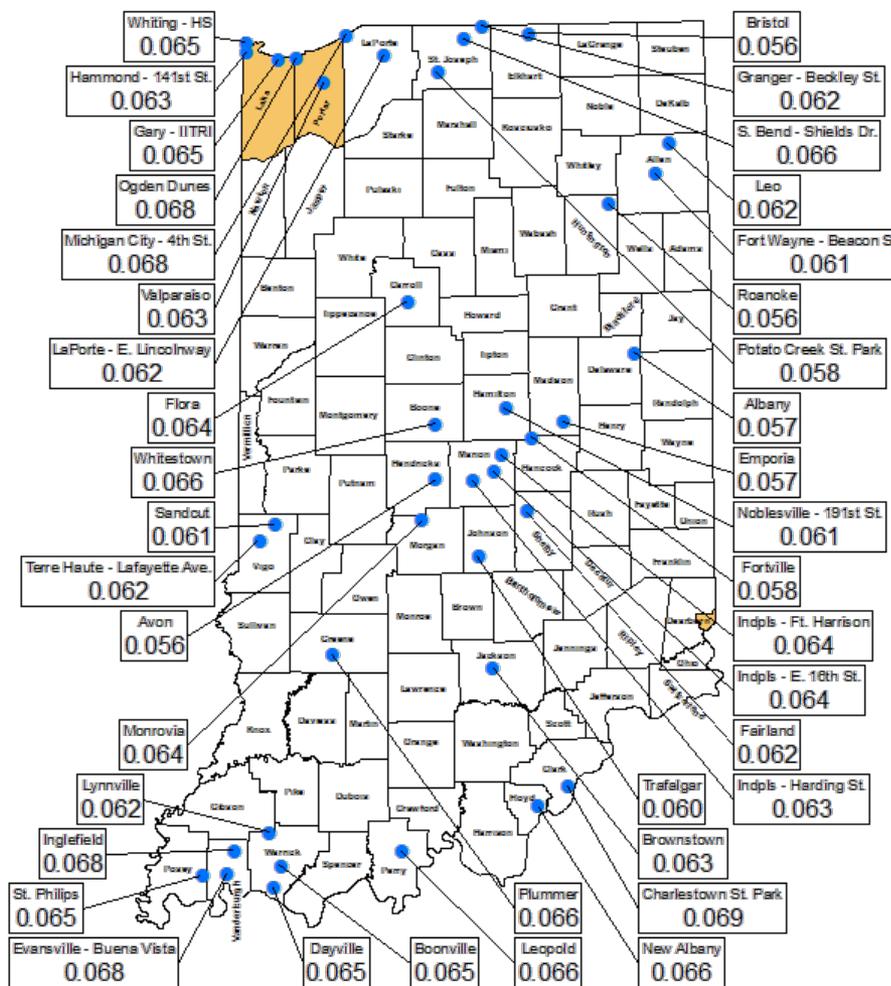
Date: 03/30/2016

Mapped By: C. Mitchell, OAQ

Sources: Office of Air Quality

Map Projection: UTM Zone 16 N

Map Datum: NAD83



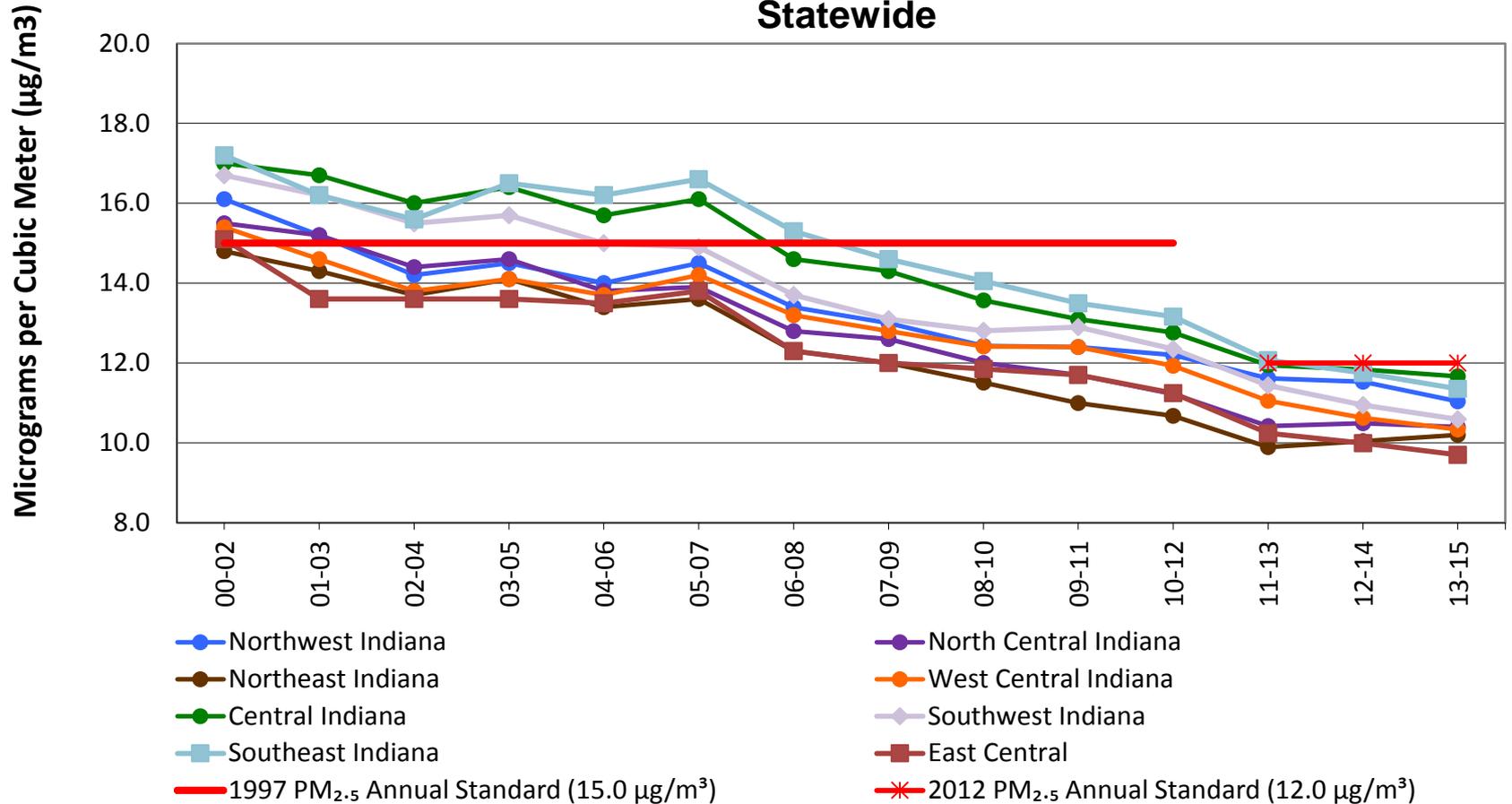
**Ozone 8-Hour Design Values (3-Year Average 4<sup>th</sup> High Daily Maximum)**

**Based on 2013 - 2015 Monitoring Data**

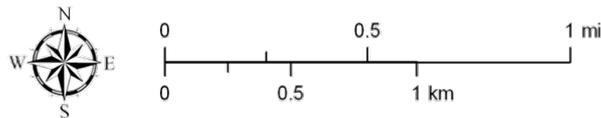
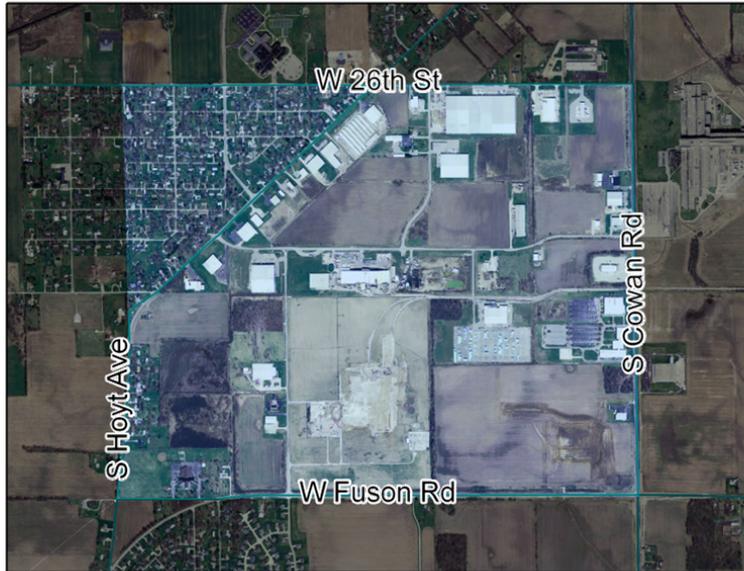
*Standard set at 0.070 ppm*

# Particulate Matter

## PM<sub>2.5</sub> Annual Design Values Highest Monitor Trend Chart Statewide



# Lead



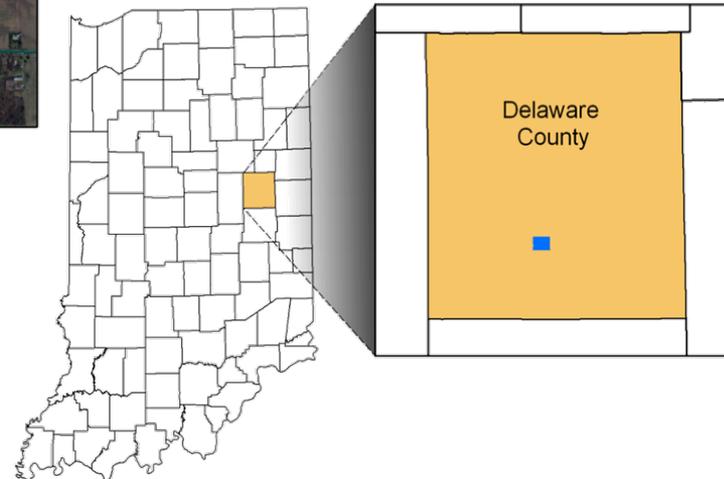
**Mapped By:** C. Mitchell, OAQ  
**Date:** 05/15/2014  
**Source:** IDEM, Office of Air Quality  
**Map Projection:** UTM Zone 16 N  
**Map Datum:** NAD83

**Note:**  
 As printed in the Federal Register (Vol. 76, No. 225/Tuesday, November 22, 2011/Rules and Regulations) the lead nonattainment boundary for Indiana is defined as "A portion of the City of Muncie, Indiana bounded to the North by West 26th Street/Hines Road, to the east by Cowan Road, to the south by West Fuson Road, and to the west by a line running south from the eastern edge of Victory Temple's driveway to South Hoyt Avenue and then along South Hoyt Avenue."

## Indiana Lead Nonattainment Boundary

### Legend

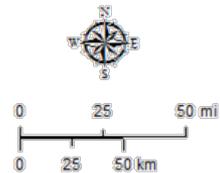
- Attainment/Unclassifiable
- Delaware County
- Enlargement of the Lead Nonattainment Area
- Nonattainment for the 2008 Lead Standard



# Sulfur Dioxide

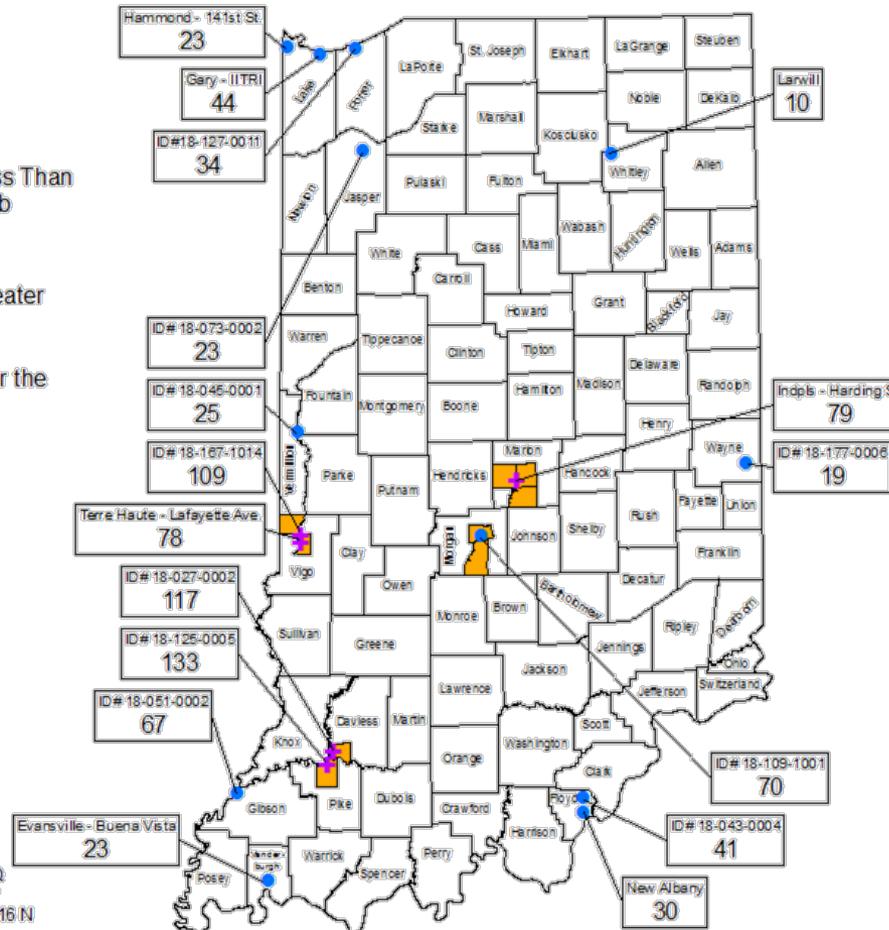
## Legend

- SO<sub>2</sub> Monitor With Design Value Less Than or Equal to 75 ppb
- + SO<sub>2</sub> Monitor With Design Value Greater Than 75 ppb
- Nonattainment for the 2010 1-Hour SO<sub>2</sub> Standard



**Notes:**  
 - Posted Data Represent 1-Hour Average Design Values, 2013 - 2015  
 - Posted Data are in Units of Parts Per Billion (ppb)

Date: 03/30/2016  
 Mapped by: C. Mitchell, OAQ  
 Sources: Office of Air Quality  
 Map Projection: UTM Zone 16 N  
 Map Datum: NAD83



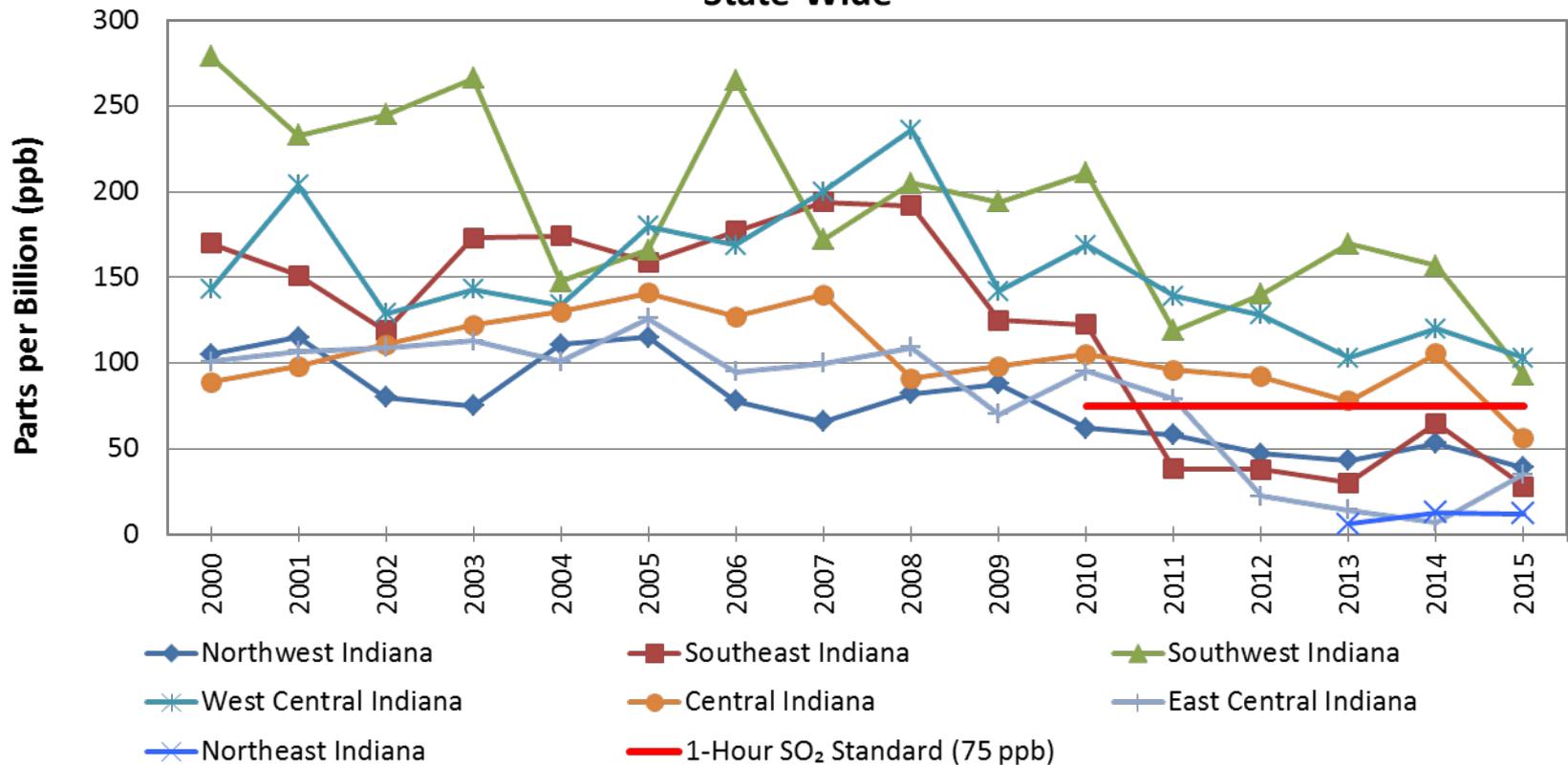
**SO<sub>2</sub> 1-Hour Design Values 2013 - 2015 and SO<sub>2</sub> Nonattainment Areas**

*Standard Set at 75 ppb*

County	Nonattainment Area
	Center Township
Marion	Perry Township Wayne Township
Morgan	Clay Township Washington Township
Daviess	Veale Township
Pike	Washington Township
Vigo	Fayette Township Harrison Township

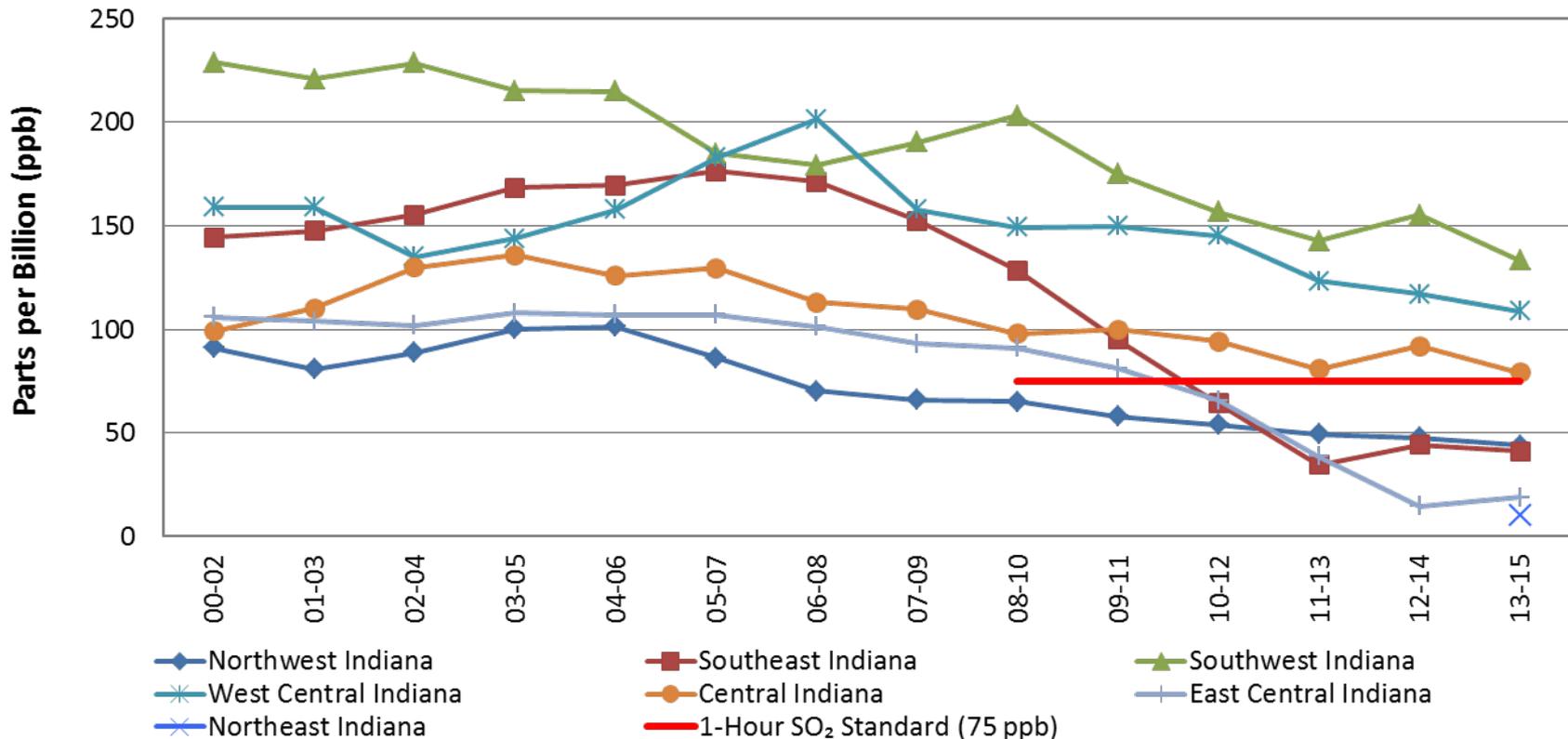
# Sulfur Dioxide

SO<sub>2</sub> 4<sup>th</sup> - High Value Highest Monitor Trend Chart  
State-Wide



# Sulfur Dioxide

SO<sub>2</sub> 1-Hour Design Value Highest Monitor Trend Chart  
State-Wide

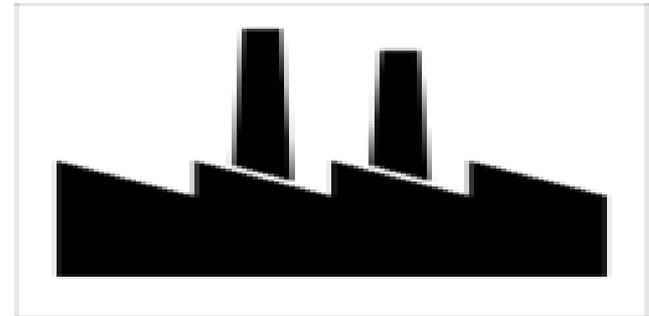


# The Clean Power Plan

- On August 3, 2015, U.S. EPA released the final rule, which requires each state to meet future goals established by U.S. EPA for CO<sub>2</sub> emissions from EGUs.
- These goals phase in from 2022 to 2030.
- September 6, 2016 – Initial State Plans due to U.S. EPA.
- September 6, 2018 – Final State Plans due to U.S. EPA.

# Indiana's Requirements Under the Clean Power Plan

- Indiana's 2012 baseline CO<sub>2</sub> emissions are 2,021 lbs. CO<sub>2</sub>/MWh.
- Under the CPP, Indiana EGUs will be required to reduce CO<sub>2</sub> emissions to 1,242 lbs. CO<sub>2</sub>/MWh.
- Indiana faces a reduction of 38.5% compared with:
  - Pennsylvania: 4% reduction.
  - West Virginia: 17% reduction.
  - Ohio: 10% reduction.





# Clean Power Plan Litigation

- 25 states (including Indiana) challenged the validity of the CPP and sought a stay while litigation is pending.
- The DC Circuit Court of Appeals denied the stay.
- On February 9, 2016, the U.S. Supreme Court granted the stay 5-4 (one of Justice Scalia's last votes).
- Oral argument was heard by the 10-member D.C. Circuit *en banc* on September 27, 2016, for more than six hours.

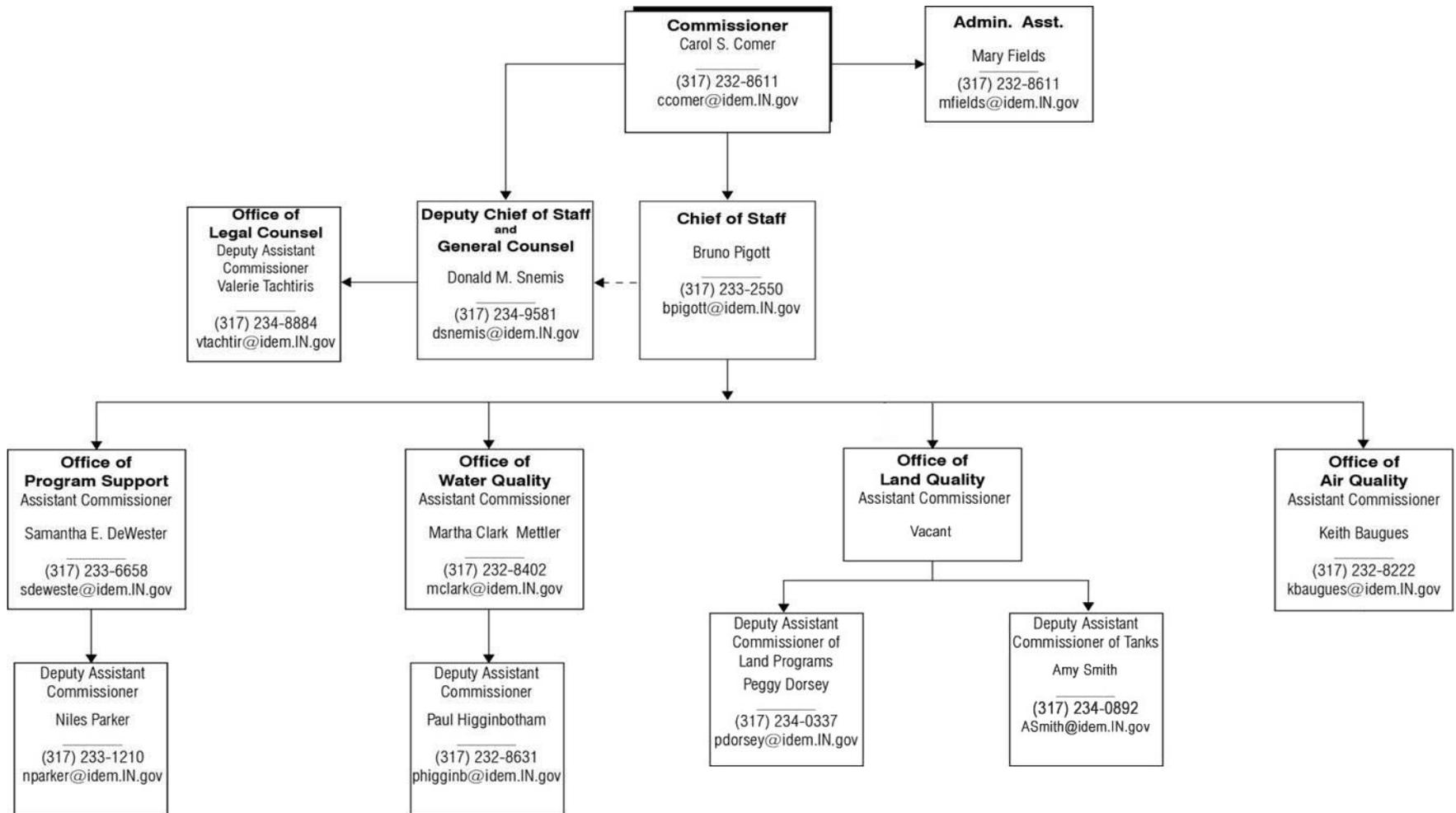
## Clean Power Plan: Where do we stand?

- None of the CPP deadlines are currently in effect.
- The State of Indiana is investing no additional resources into the CPP until the litigation is resolved.
- We continue to monitor the situation so that we are prepared to act when necessary.

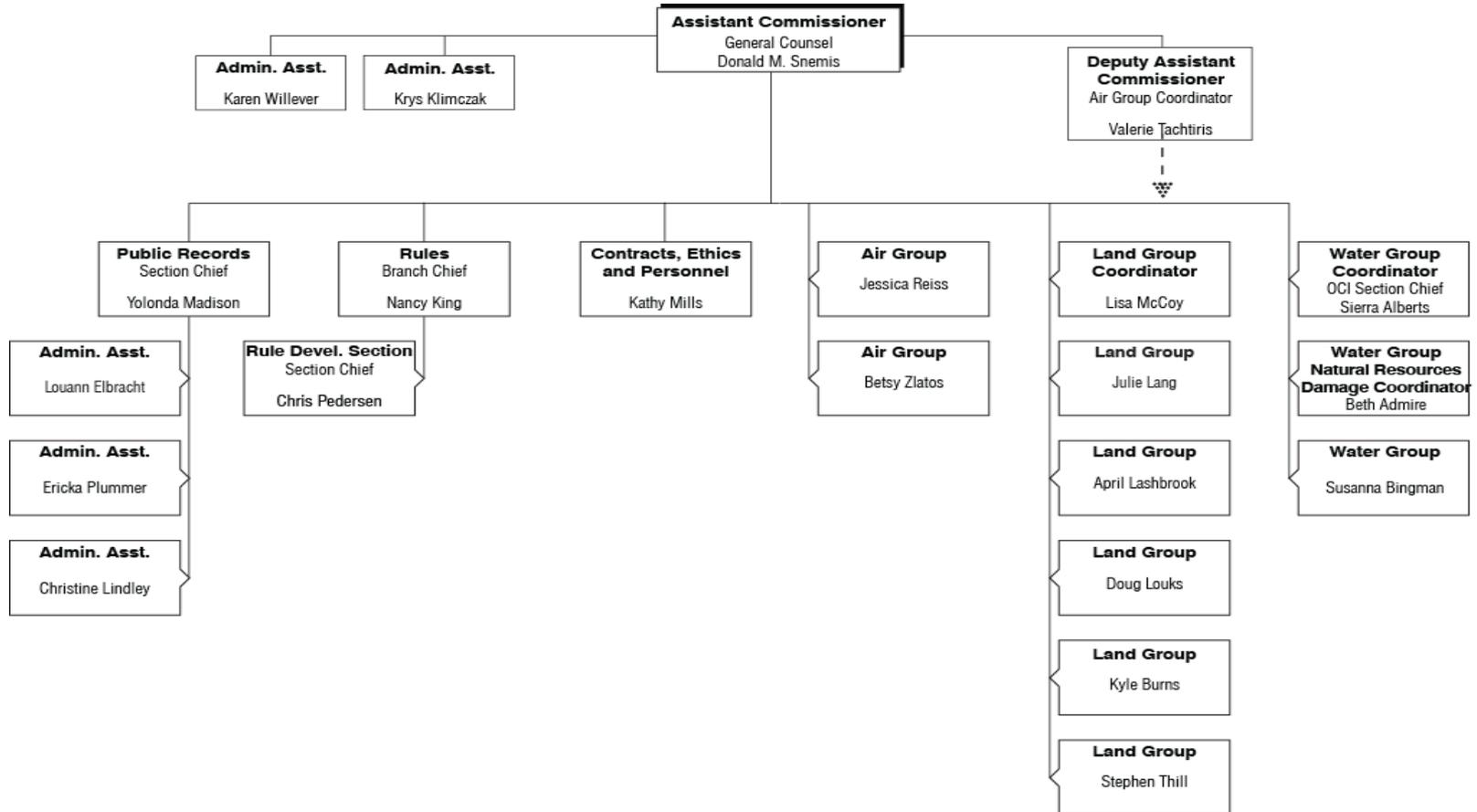
# 2016 Legislation

- **Excess Liability Trust Fund**
  - Clarifies eligibility requirements for fund access.
- **Legitimate Use of Waste**
  - Allows for the legitimate use of solid and hazardous waste.

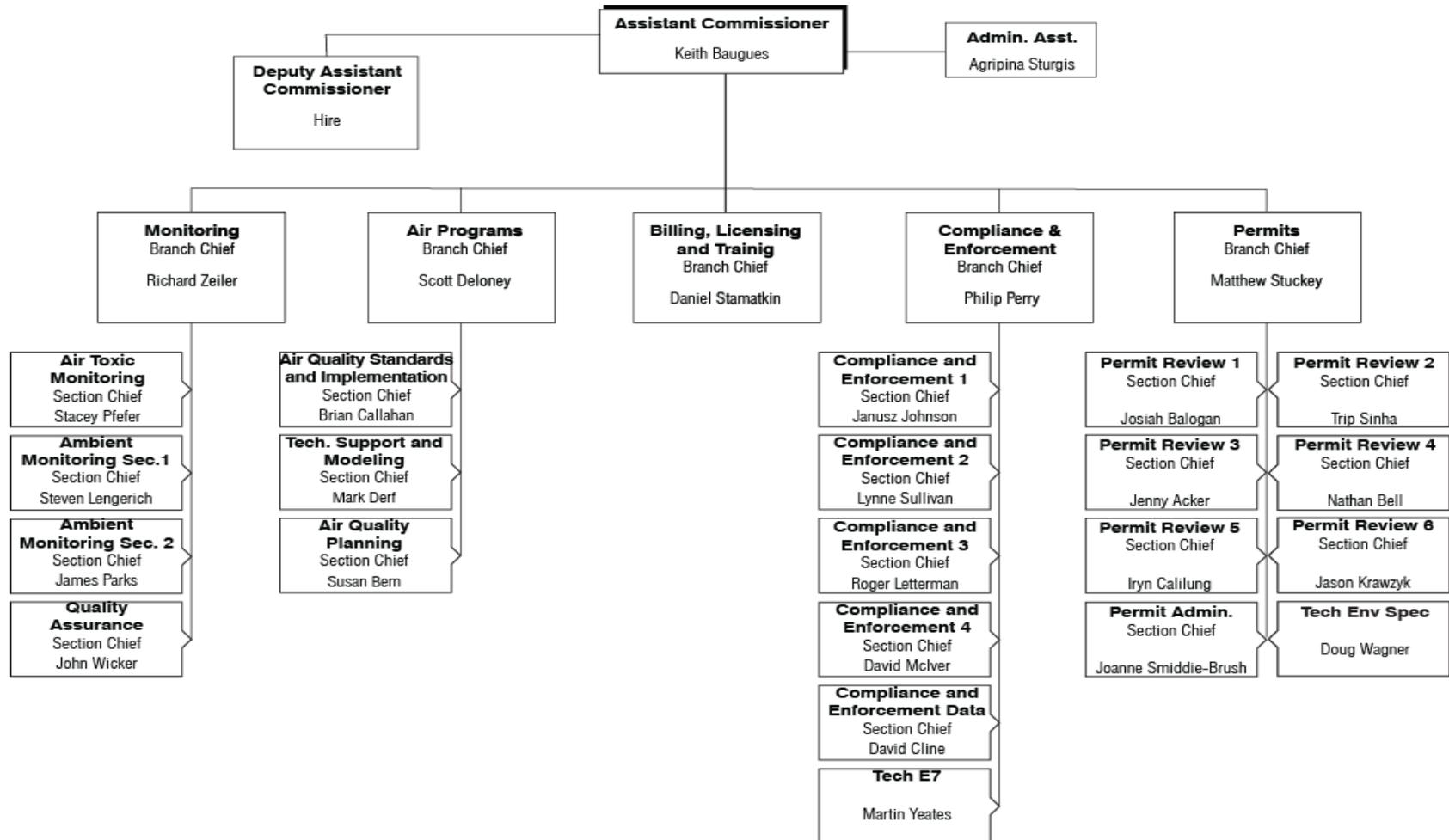
# IDEM Leadership



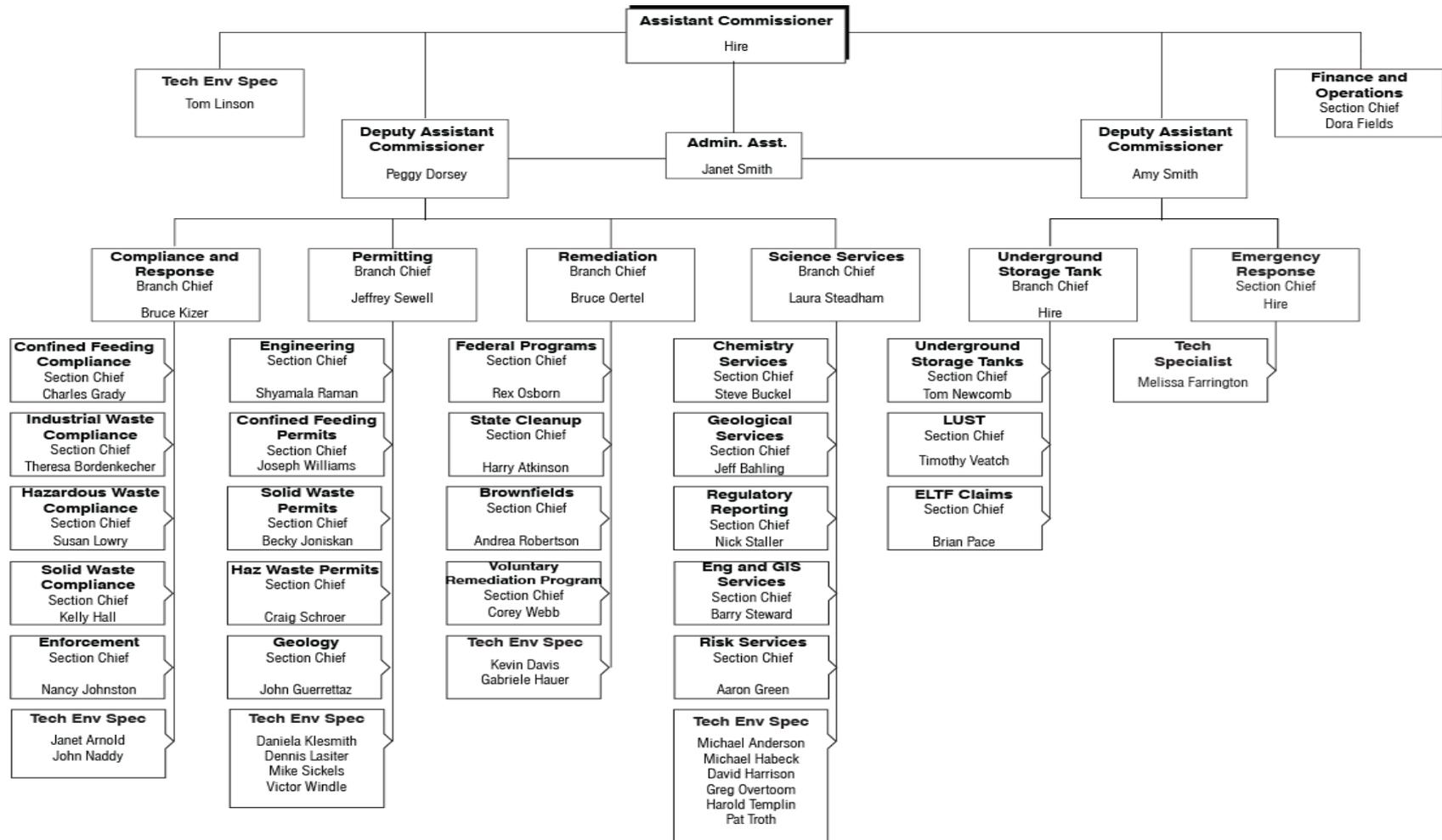
# Office of Legal Counsel



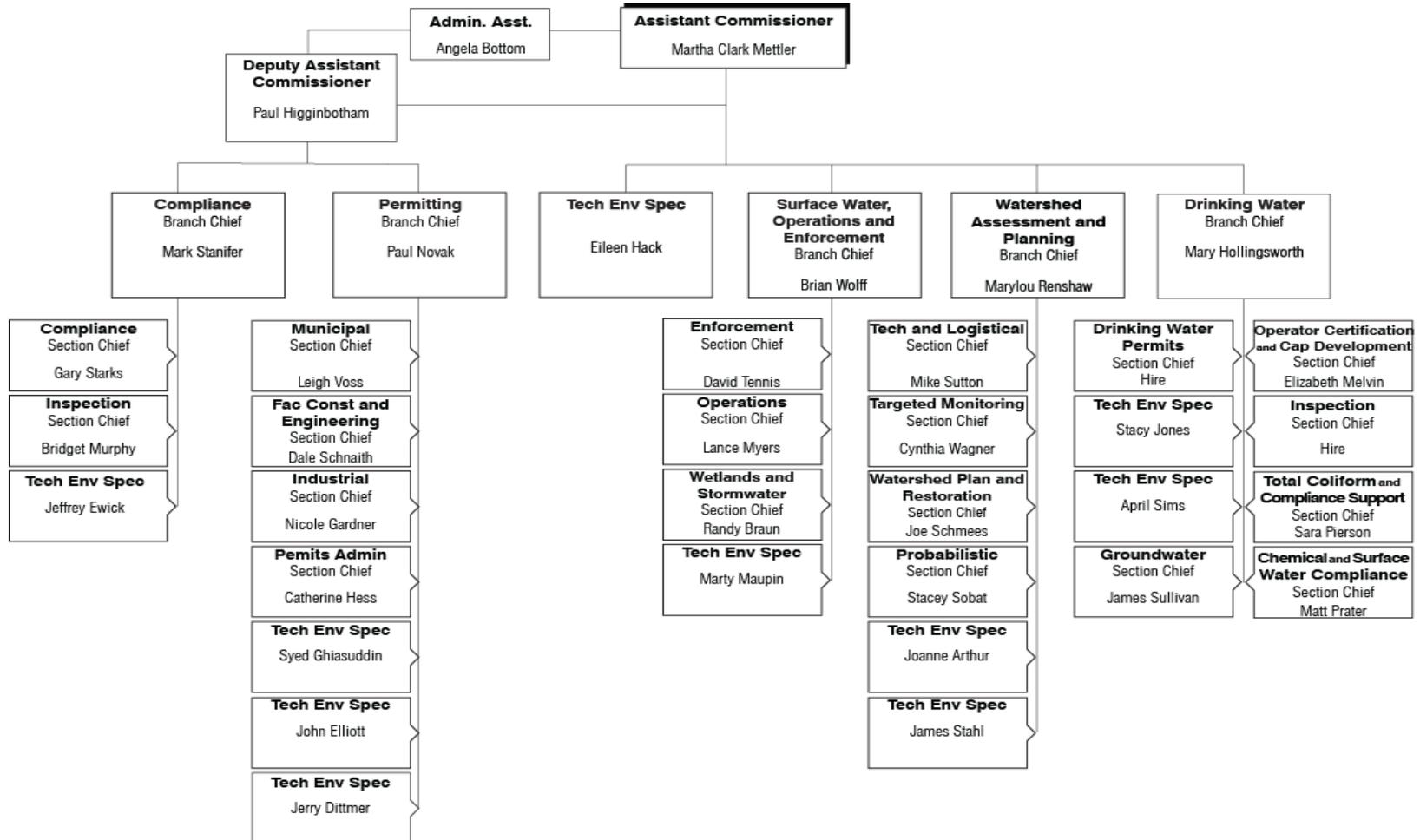
# Office of Air Quality



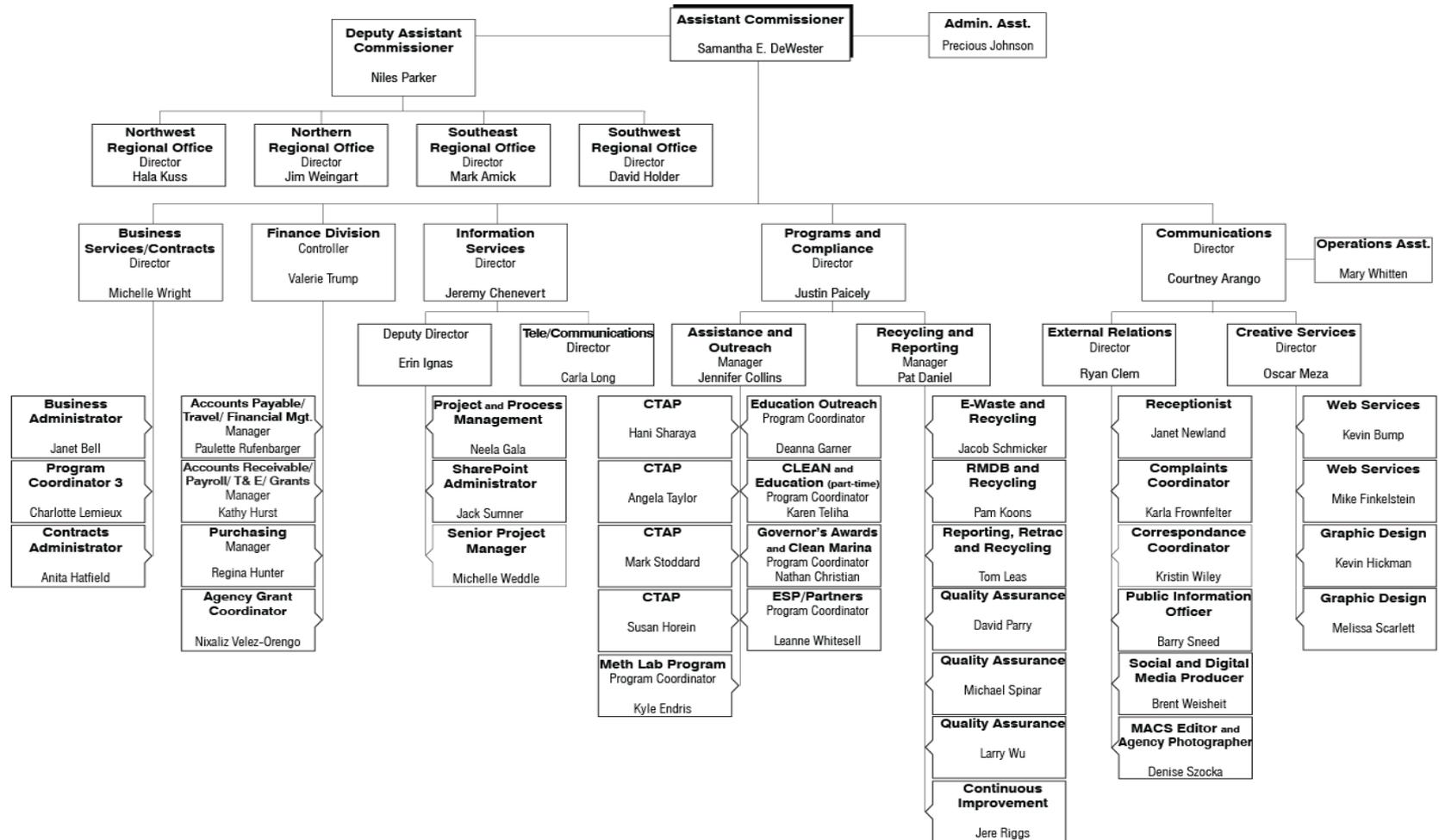
# Office of Land Quality



# Office of Water Quality



# Office of Program Support





# Questions?

**Carol S. Comer**  
Commissioner

*Indiana Department of Environmental Management*

(317) 232-8611

[ccomer@idem.IN.gov](mailto:ccomer@idem.IN.gov)