

# Paying Less to Pollute

*A Year of Environmental Enforcement Under the Trump Administration*



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## ACKNOWLEDGEMENTS

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## THE ENVIRONMENTAL INTEGRITY PROJECT

The Environmental Integrity Project (<http://www.environmentalintegrity.org>) is a nonpartisan, nonprofit organization established in March of 2002 by former EPA enforcement attorneys to advocate for effective enforcement of environmental laws. EIP has three goals: 1) to provide objective analyses of how the failure to enforce or implement environmental laws increases pollution and affects public health; 2) to hold federal and state agencies, as well as individual corporations, accountable for failing to enforce or comply with environmental laws; and 3) to help local communities obtain the protection of environmental laws.

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### PHOTO CREDITS:

Cover photo from Politico. Photo of Scott Pruitt on page 1 by Associated Press.

# A Year of Environmental Enforcement Under the Trump Administration

## Executive Summary

The U.S. Environmental Protection Agency brought fewer civil enforcement actions across the finish line in the first year of the Trump Administration than the previous three administrations during their first 12 months, while the total civil penalties paid by polluters also declined. The Environmental Integrity Project examined federal records and found that the Trump Administration resolved 48 civil cases in court actions that recovered \$30 million in penalties from polluters from Inauguration Day to January 23, 2018. That was 44 percent fewer cases and 49 percent less in penalties than the averages during the same period under the Obama, Bush, and Clinton administrations. Penalties declined by nearly 60 percent compared to the amounts in President Obama's first year. When adjusted for inflation, polluters in President Trump's first year paid between 32 and 43 percent of the penalties recovered through civil consent decrees lodged in court during the previous three administrations.

This report is based on the Environmental Integrity Project's review of consent decrees that resolved violations of the federal Clean Air Act, the Clean Water Act, and other environmental laws that are announced in the Federal Register and lodged in federal courts. Our analysis does not include Superfund, criminal cases, or the administrative actions that EPA takes to resolve smaller violations.

### Civil Cases and Penalties Against Polluters in First Year

*(From Civil Consent Decrees Lodged in Court)*

Administration	Cases Lodged	Penalties (millions)	Penalties (millions, inflation adjusted)
Clinton	73	\$55	\$93
Bush	112	\$50	\$70
Obama	71	\$71	\$81
Trump	48	\$30	\$30

*(Note: Numbers are for civil environmental cases filed by the U.S. Department of Justice and EPA and penalties imposed from the first working day after Inauguration Day in the first term of each administration to one year later. Penalties were adjusted for inflation based on December 2017 dollars, based on consumer price index.)*

EPA records also show a sharp decline in the amount that polluters are expected to spend to clean up their violations. Those investments – or “injunctive relief” in legal terms -- include equipment like air pollution controls or wastewater upgrades, but also improved monitoring and maintenance practices that can make plant operations more efficient and save money in the long run. In its first year in office, the Trump Administration estimated that these expenditures to clean up illegal pollution would total \$966 million, based on results from 30

cases. (EPA does not provide such data for all consent decrees). That's less than a third of the \$3.3 billion violators were expected to spend on pollution controls in 54 civil enforcement cases lodged in federal court within a year of President Obama's inauguration, and 32 percent lower than the \$1.4 billion in 36 cases lodged during President George W. Bush's first year. Adjusted for inflation, these settlements will require about half the expenditures obtained from consent decrees lodged in court during President Bush's first year, and less than one third of the amount secured by the Obama Administration.

The Trump Administration total includes \$300 million that EPA claims Exxon Mobil will spend to comply with a Clean Air Act consent decree lodged in October of 2017. But the Exxon Mobil estimate includes expenditures the company has made since 2011 to comply with permit requirements.

### **Value of Pollution Control Costs (Injunctive Relief) for Civil Cases Lodged Within One Year**

<b>Administration</b>	<b>Number of Cases</b>	<b>Cost (millions)</b>	<b>Cost (millions, inflation adjusted)</b>
Clinton	Not Available	NA	NA
Bush	36	\$1,400	\$2,000
Obama	54	\$3,300	\$3,800
Trump	30	\$966	\$966

*(Figures are for injunctive relief required as part of civil lawsuits filed by EPA and the U.S. Department of Justice from the first working day after Inauguration Day to a year later for each administration. Sources include the Federal Register, EPA records and the agency's Enforcement and Compliance History Online database. Penalties were adjusted for inflation based on December 2017 dollars.)*

It should be noted that the investigations and negotiations that lead to these types of cleanup projects – and settlement agreements, more generally – often take months or years, so many of the cases credited to the Trump Administration were actually started during the Obama Administration. However, the same would be true for cases filed during the first year of any new administration, so the figures in these charts – although imperfect – are parallel.

## CONTENTS

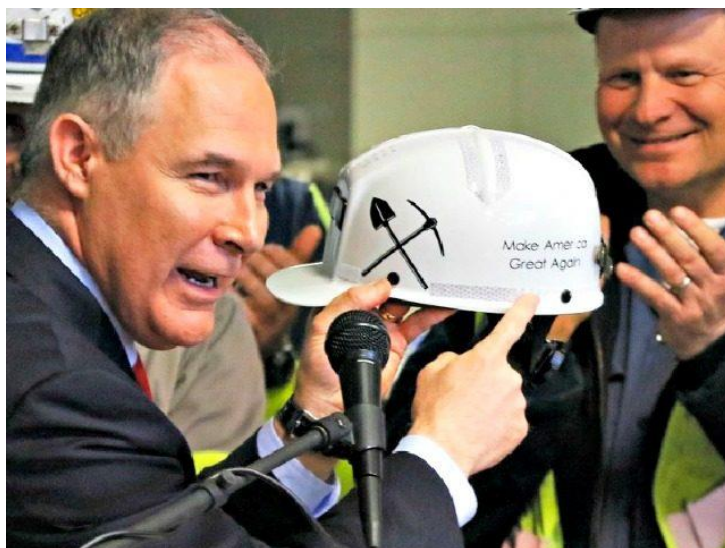
Executive Summary .....	1
Pruitt’s Record of Enforcement .....	4
EPA’s Shrinking Budget and Changing Policies .....	5
Enforcement Cases that Need Follow Up .....	6
ILLINOIS .....	9
1. WRB Refining LP, Wood River Refinery (Roxana, IL) .....	9
2. Behr Iron & Metal (Rockford, IL) .....	10
INDIANA .....	11
3, 4. American Iron Oxide Co. (Portage, IN)/Magnetics International, Inc. (Burns Harbor, IN) .....	11
MICHIGAN .....	13
5. Empire Iron Mining Partnership (Palmer, MI) .....	13
MINNESOTA .....	14
6. St. Paul Park Refining Company, LLC (St. Paul Park, MN) .....	14
7. USG Interiors, Inc. (Red Wing, MN) .....	15
8. United Taconite, LLC (Forbes, MN) .....	16
9. Gopher Resource, LLC (Eagan, MN) .....	18
OHIO .....	20
10. Globe Metallurgical, Inc. (Waterford, OH) .....	20
11, 12. TimkenSteel Corporation, Harrison and Faircrest Steel Plants (Canton, OH) .....	21
13. DiGeronimo Aggregates, LLC (Independence, OH) .....	22
14. Gulfport Energy Corporation (Belmont/Guersney/Harrison Counties, OH) .....	24
15. Chesapeake Energy Corporation (Carroll/Columbiana Counties, OH) .....	25
16. MarkWest Energy Partners, LP, Seneca Gas Plant (Summerfield, OH) .....	26
Methodology .....	28



## Pruitt's Enforcement Record

When Scott Pruitt was sworn in as EPA Administrator on February 17, 2017, he brought with him a record, as an Oklahoma Attorney General, of taking legal action more frequently against the federal agency than against polluters in his own state for environmental violations. Pruitt had disbanded the Environmental Protection Unit at the Oklahoma Attorney General's Office, and instead assigned attorneys to a new Federalism Unit that sued EPA 14 times to challenge federal air and water pollution control regulations.

Nevertheless, he pledged to be strong and vigilant in his enforcement of environmental laws as head of EPA. "They don't know me," Pruitt said of skeptics during an interview with Bloomberg News.<sup>1</sup> "We are going to do enforcement, to go after bad actors and go after polluters."



*EPA Administrator Scott Pruitt appeared at a coal mine in Western Pennsylvania on April 13 and assured miners that EPA is "going to partner together with you."*

During his first year in office, the Trump Administration did – in fact – go after some polluters, although significantly fewer than previous administrations. For example, in May, the administration fined Volpak Terminal North America Inc. \$2.5 million for air pollution violations from a Houston chemical storage tank facility.<sup>2</sup> In December, the administration fined StarKist Co. \$6.5 million for water pollution violations at a processing plant in American Samoa.

However, the administration has also inflated results and withdrawn or delayed enforcement actions against big companies. Four examples are the following:

**Exxon Mobil case:** On October 31, 2017, EPA and Exxon Mobil announced a consent decree to resolve air pollution violations at eight chemical plants in Texas and Louisiana. Pruitt touted the agreement as an example of EPA's "commitment to enforce the law." EPA's press release said that Exxon Mobil would spend \$300 million to install pollution controls that would eliminate tons of pollutants a year. But these totals include emission reductions that have occurred since 2011 – more than five years before the enforcement agreement with EPA. And the consent decree's performance standards for several of the company's flares are actually weaker than the requirements of existing permits. Most of the flare gas pollution recovery systems (the most expensive component of the \$300 million EPA claims will be spent under the consent decree) appear to have been installed before the Oct. 31 agreement was signed to comply with permit terms or to offset emission increases from the planned expansion of some facilities. EPA's estimate of cleanup costs under some consent decrees in past years may

also have included prior expenditures. But claims that an enforcement action somehow prompted pollution control investments that occurred more than five years earlier is simply not credible.

**Carbon Black case:** EPA estimates that over the next few years, four companies that make carbon black (a product of petroleum combustion that is used as an ingredient in tires and other rubber products) will spend nearly \$300 million to reduce emissions from ten plants under a consent decree announced on December 17, 2017. That announcement did not mention, however, that the agency simultaneously postponed, for up to three years or more, the deadlines for cleaning up six other carbon black plants under consent decrees with Cabot Corporation and Continental Resources. The modified consent decrees claim the delays were due to the “unique circumstances” of the carbon black industry, without further explanation. While EPA has extended deadlines for compliance in the past, that is usually because more time is needed to overcome unexpected technical challenges, and not for unexplained “circumstances.”

**Harley Davidson case:** On July 20, 2017, EPA allowed Harley Davidson to back out of an agreement to spend \$3 million for cleanup of wood stove emissions to help offset the public harm it caused through the sale of motorcycles with dirty engines. The previous year, Milwaukee-based motorcycle maker had agreed to pay a separate \$12 million civil fine and stop selling illegal after-market devices that caused its vehicles to emit too much pollution.

**Lima Refinery:** EPA has acknowledged that the \$150 million this petroleum refinery in northwest Ohio will spend to meet consent decree requirements includes earlier investments made to comply with a 2007 settlement of Clean Air Act violations.

## EPA's Shrinking Budget and Changing Policies

President Trump's recently released budget for 2019 proposes another dramatic cut in EPA's budget, reducing agency spending by 23 percent, to the lowest levels since President Reagan's first term.

Overall, more than 700 EPA employees have left or been forced out of the agency over the last year, meaning that the administration is almost a quarter of the way to its goal of shrinking total EPA staff by 3,200 employees (or roughly 20 percent of its workforce of about 15,000). Those budget and staffing cuts are occurring at the same time Pruitt is attempting to expand his own personal security detail to a total of thirty staff, or nearly four times the number of bodyguards assigned to former Administrator Gina McCarthy.

EPA cannot enforce environmental laws without support from its political management and Congress. As has been widely reported, Scott Pruitt and his team of advisors do not trust career staff. While the Administrator frequently has traveled to his home state of Oklahoma at taxpayers' expense, he has yet to visit any of the agency's ten regional offices where at least 80 percent of EPA's enforcement staff work. On May 31, Pruitt's Office of Civil Enforcement issued a memo that instructed EPA regional offices that

from now on they must first seek permission from agency headquarters before starting investigations of potential pollution violations by asking for information from companies or conducting monitoring. This report focuses on the number and quality of the consent decrees that are the end product of civil enforcement actions. But it is also important to know whether Pruitt's EPA is building new cases, which are initiated when the agency files a notice of intent to sue a company for illegal pollution. The Environmental Integrity Project expects to address that issue in a later report.

## Enforcement Cases that Need Follow Up

EPA has a significant backlog of enforcement cases that have yet to be resolved, based on a review of the detailed "notices of violation" that EPA has issued to hundreds of facilities across the U.S. for failing to comply with environmental laws. The discussion below summarizes 14 cases of Clean Air Act violations at industrial plants that increased emissions of lead, particulate matter, smog forming volatile chemicals and other pollutants. The accompanying maps describe the characteristics of the population living within three miles of each plant, because they are the most likely to inhale this illegal pollution. Not surprisingly, the poverty rate in most of these communities is higher than the national average of 13.5 percent, and at least twice as high for more than half of them.

EPA uncovers violations by inspecting sites, requesting and reviewing plant records, and occasionally testing for certain pollutants. Unless criminal conduct is involved, the agency will usually send the facility's owner or operator a notice letter that identifies specific emission limits or other pollution standards that are not being met, and explains the evidence supporting EPA's allegations. The defendants are offered the opportunity to meet with EPA to dispute the findings or negotiate a compliance agreement. The most serious cases are referred to the Department of Justice and are almost always resolved through a consent decree that becomes enforceable after it is approved by a federal court. Less significant cases may be handled administratively, through compliance orders or agreements and payment of a smaller penalty. Criminal cases are usually kept under wraps to shield evidence that will be presented to grant juries for indictment. Once an indictment is issued, criminal violations of environmental law are resolved through plea agreements or sentencing.

The summaries below are based on the allegations and supporting evidence detailed in the notices of violations sent to each company involved, which EIP obtained through a Freedom of Information Act request. Our review of records indicate that these cases are still unresolved, although EPA or the Justice Department may be actively trying to obtain a resolution. Finally, the



*Locations of facilities with unresolved violations of the Clean Air Act featured in this report.*



examples below are only a fraction of the hundreds of notices of violation that EPA issued between 2014 and 2016.

Some highlights of the cases to follow include:

- **Illinois and Minnesota:** A scrap metal processing facility owned by Behr Iron & Steel in Rockford, Illinois, and a lead recycling plant south of Minneapolis owned by Gopher Resource, violated standards meant to minimize emissions of lead. On December 28, 2016, EPA notified Behr that lead levels at the Illinois plant's fence line failed health-based standards. On November 25, 2015, the agency notified Gopher that its smelter in Eagan failed to control emission of lead, as well as dioxins and furans. Minnesota determined in 2009 that the area downwind of the Gopher smelter had not yet met the air quality standard for lead, a dangerous neurotoxin.
- **Minnesota:** On January 8, 2016, EPA notified the St. Paul Refinery that its flare gas contained up to 13 times more hydrogen sulfide than its permit allowed, which means the flare released much higher amounts of sulfur dioxide. That pollutant contributes to asthma attacks and other respiratory ailments, and forms fine particles that increase the risk of heart disease and premature death.
- **Indiana:** On June 28, 2016, EPA notified American Oxide and Magnetics International that their chemical plants in Portage and Burns Harbor had violated the Clean Air Act hundreds of times over the previous decade by failing to maintain the controls needed to minimize releases of hydrochloric acid. At high enough doses, the acid is corrosive to the eyes, skin, and mucus membrane, and can cause inflammation of the lungs.
- **Ohio:** On December 21, 2016, EPA notified Chesapeake Energy that 15 of its well pads in Eastern Ohio's Carroll and Columbiana counties were releasing illegal amounts of smog-forming pollutants (volatile organic compounds) that can cause headaches, asthma attacks, irritations, and damage to the liver and central nervous system.
- **Ohio:** A metal manufacturing plant owned by Globe Metallurgical in Waterford received a violation notice from EPA on January 30, 2015 for emitting illegal amounts of particulate air pollution (soot) and expanding without first obtaining a required permit or upgrading its pollution control equipment.
- **Ohio:** EPA notified Timken Steel on November 2, 2015, that two of its steel plants in Canton had multiple Clean Air Act violations, which included the Faircrest Plant releasing twice as much mercury as permitted and the Harrison Plant emitting three times as much soot as allowed.

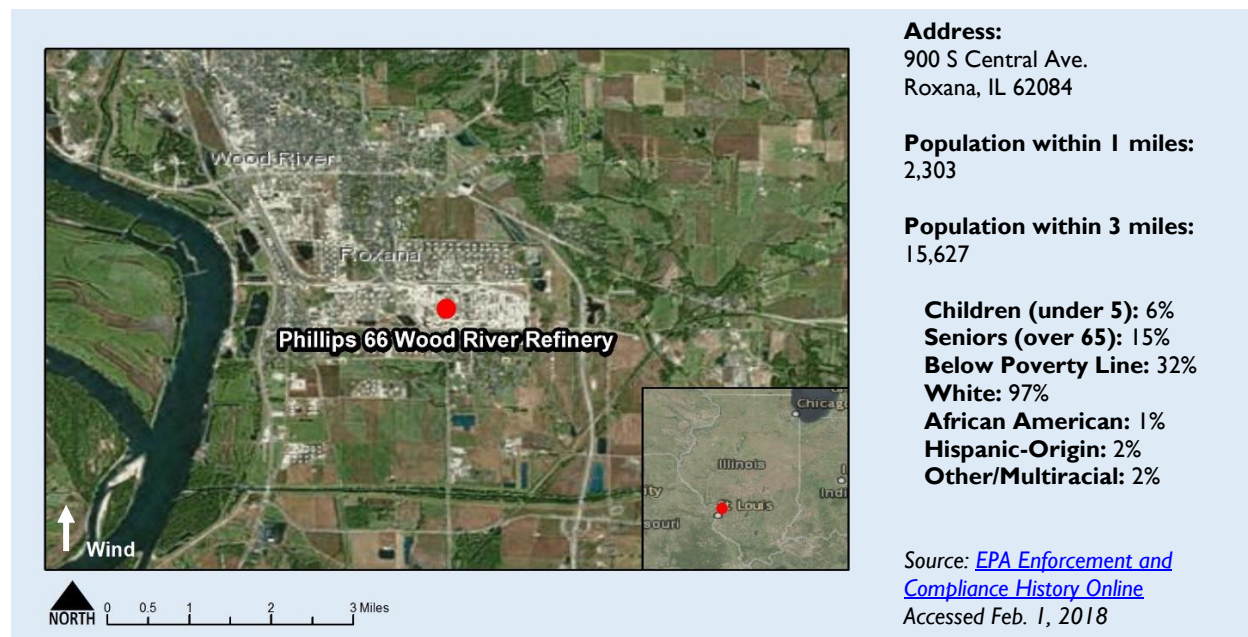
The following table identifies each facility and the pollutants at issue:

Case	Location	Date	3-mile Population	3-mile % below poverty	Pollutant	Violation Type
WRB Refining, LP	Roxana, IL	1/30/2014	15,627	32	H2S, VOCs, Benzene	Improper operation, low combustion efficiency of flare
Behr Iron & Metal	Rockford, IL	12/28/2016	67,005	54	Lead	Exceed Emission Limit
American Iron Oxide Co./Magnetics International Inc.	Portage, IN	6/28/2016	14,315 - 23,209	24 - 31	HCl	Improper Operation of Pollution Controls
Empire Iron Mining Partnership	Palmer, MI	2/20/2014	573	42	Arsenic, Manganese, Particulates	Bypass Pollution Controls, Improper Operation of Pollution Controls
St. Paul Park Refining Company, LLC	Saint Paul Park, MN	1/8/2016	48,279	20	SO2	Exceed Emission Limit
USG Interiors Inc.	Red Wing, MN	1/7/2016	10,570	24	SO2	Exceed Emission Limit
United Taconite, LLC	Forbes, MN	2/21/2014	405	23	SO2, NOx, Arsenic, Manganese Particulates	Bypass Pollution Controls, Improper Operation of Pollution Controls
Gopher Resource, LLC	Eagan, MN	11/25/2015	38,122	13	Lead, dioxins, furans	Improper Operation of Pollution Controls
Globe Metallurgical, Inc.	Waterford, OH	1/30/2015	1,050	45	SO2, PM	Exceed Emission Limit, Improper Operation of Pollution Controls
TimkenSteel Corporation	Canton, OH	11/2/2015	23,731 - 61,821	34 - 51	Hg, PM	Exceed Emission Limit
DiGeronimo Aggregates, LLC	Independence, OH	12/29/2016	40,445	23	SO2, NOx, Opacity	Exceed Emission Limit, Improper Operation of Pollution Controls, Bypass Pollution Controls
Gulfport Energy Corp.	Belmont/Harrison, OH	12/22/2016	400 - 1,118	11 - 31	VOCs	Failure to Monitor & Repair Leaks
Chesapeake Energy Corp.	Carroll/Columbia, OH	12/21/2016	2,024 - 2,894	31 - 36	VOCs	Failure to Monitor & Repair Leaks
MarkWest Energy Partners, LP	Summerfield, OH	9/7/2016	690	21	VOCs	Failure to Monitor & Repair Leaks

*\*Note: Some cases show ranges for both population and poverty rates, this is due to both operations covered in a consent decree being within three miles of each other. To avoid double counting, a range is given.*

## ILLINOIS

### I. WRB Refining LP, Wood River Refinery (Roxana, IL)



The Wood River oil refinery in southern Illinois processes more than 300,000 barrels of crude per day, including Canadian tar sands from Alberta. On June 30, 2014, EPA notified Wood River that between July 1, 2009, and May 9, 2013, mismanagement of the facility's flaring devices Clean Air Act standards and illegally released large quantities of smog forming chemicals and hazardous air pollutants. Wood River refinery is operated by Phillips 66, and jointly owned by Phillips 66 and Cenovus Energy through WRB Refining.<sup>3</sup>

More specifically, EPA rules require that any vent gas sent to steam or air assisted flares have a minimum heat value of 300 million British thermal units. But EPA has also warned refineries not to undermine the standard by adding too much steam to the combustion zone at the flare tip, since that reduces heat values well below the amount needed for good combustion. In extreme cases, drenching the flare tip with steam can put out the flame and allow all of the pollutants to be vented directly to the atmosphere.

The waste gases burned off in flares include hydrogen sulfide, volatile compounds that contribute to ozone formation, and carcinogens like benzene. Flares are designed to destroy at least 98% of these harmful substances so long as they are well operated, e.g., ensuring that the gases burned have enough heat value (are "hot enough") for efficient combustion and are not over-steamed.

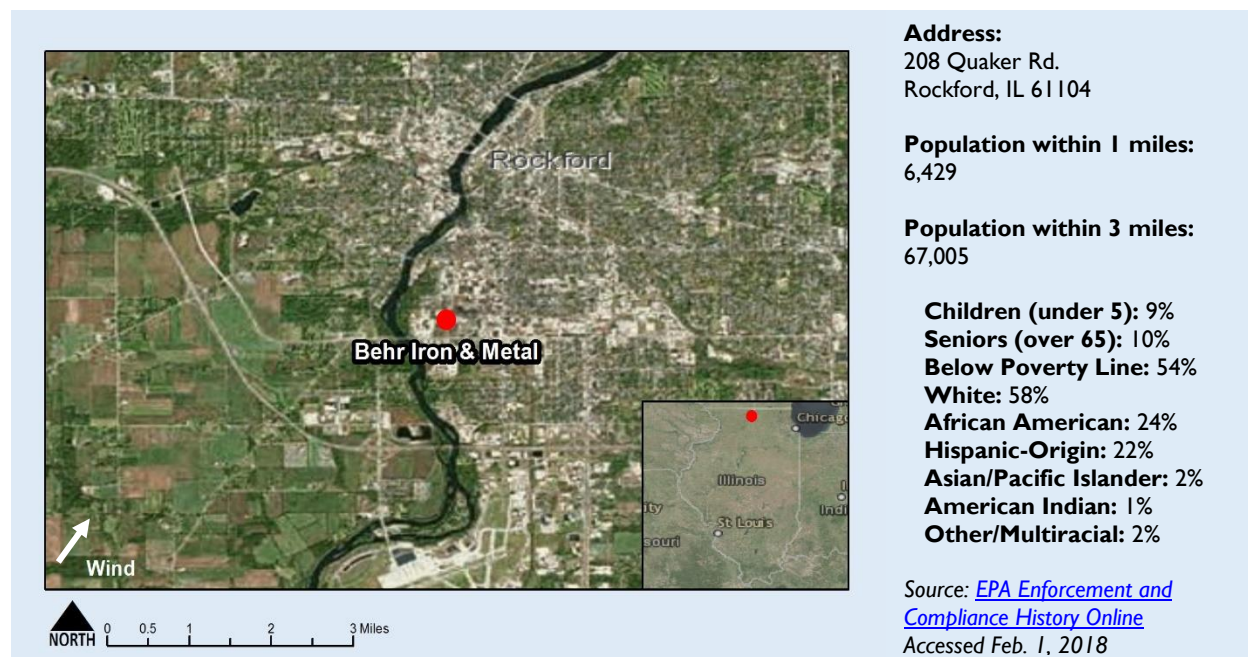
Wood River's federally enforceable permit requires flares and other combustion devices to destroy at least 85% of any volatile chemicals. EPA's 2014 notice letter alleges that by over-steaming eight flares, the refinery failed to meet this limit for a combined total of more than

60,000 hours between July 1, 2009, and May 9, 2013. The violations are based on periods when the refinery added steam at rates that EPA determined were likely to reduce destruction efficiency to 82.2% or lower. Below is a table taken from the Notice of Violation which lists the hours over-steamed for each flare.

Flare	Hours Over-Steamed
Alkylation Flare	6,267
Aromatics North Flare	18
Aromatics South Flare	46
Coker North Flare	72
Distilling Flare	34
Hydrogen Plant 2 Flare	14,151
LSG Flare	31,844
NP Flare	8,144

The Notice of Violation also cites Phillips for failing to comply with good pollution control practices, which include limiting the amount of steam applied to flares. As noted above, EPA has determined that well managed flares with good pollution control practices can destroy all but 2% of the hazardous hydrocarbons in flare gas, while (based on EPA emission factors) the over-steamed flares at Wood River would release at least 18%, or nine times the amount of pollution.

## 2. Behr Iron & Metal (Rockford, IL)





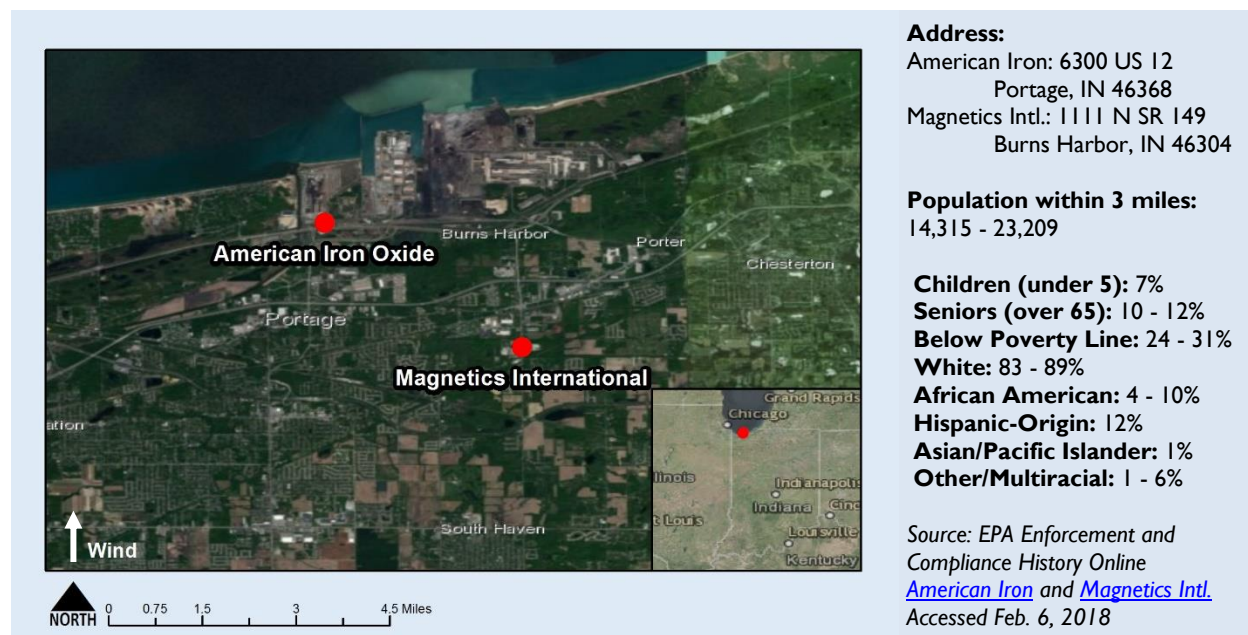
Behr Iron and Metal operates a scrap processing facility in Illinois with several lead emission sources, including two foundry material separators, two thermal processing units, three metal melting pots and a lead recovery rotary furnace. On December 28, 2016, EPA notified the company that emissions from the Rockford plant were contributing to a violation of health-based federal air quality standards for lead.

The federal standard is designed to limit airborne lead exposure to no more than 15 micrograms per cubic meter averaged over three months. EPA determined that lead concentrations at the property boundary averaged 19 micrograms from August through October of 2016, based on data from the company's own monitor. EPA's Notice of Violation includes a statement of the risks of exposure to high lead levels:

“This violation is associated with excess emissions of lead. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. Lead exposure also affects the oxygen carrying capacity of the blood. The most common lead effects currently are neurological effects in children and cardiovascular effects (e.g., high blood pressure and heart disease) in adults. Infants and young children are especially sensitive to lead, which may contribute to behavioral problems, learning deficits and lowered IQ.”

## INDIANA

### 3, 4. American Iron Oxide Co. (Portage, IN)/Magnetics International, Inc. (Burns Harbor, IN)





American Iron Oxide Co. and Magnetix International, Inc. own and operate hydrochloric acid regeneration plants that recover spent “pickle liquor,” an acid solution used to remove rust and other contaminants from iron, copper, aluminum alloys, and other metals. The spent solution is vaporized in large roasters so that iron oxide can be removed before the gas is cooled back down to liquid form for reuse in the pickling process. These units are required to install and operate air pollution controls to minimize the release of hydrochloric acid and chlorine during the roasting process.

On June 28, 2016, EPA notified American Iron Oxide and Magnetix that both companies had violated these Clean Air Act standards hundreds of times between 2006 and 2016 at, respectively, their Portage and Burns Harbor facilities in Indiana. The notice also alleges that both companies failed to comply with emission control, testing, and reporting requirements of a 2006 consent decree meant to control hydrochloric acid and chlorine releases.

More specifically, the rules require regenerating plants to identify and comply with certain operating parameters to keep emissions below the required limit. Those include minimizing oxygen levels to limit hydrochloric acid emissions, keeping temperatures high enough to inhibit the formation of chlorine, and maintaining wet scrubber flow rates high enough to remove acid gases.

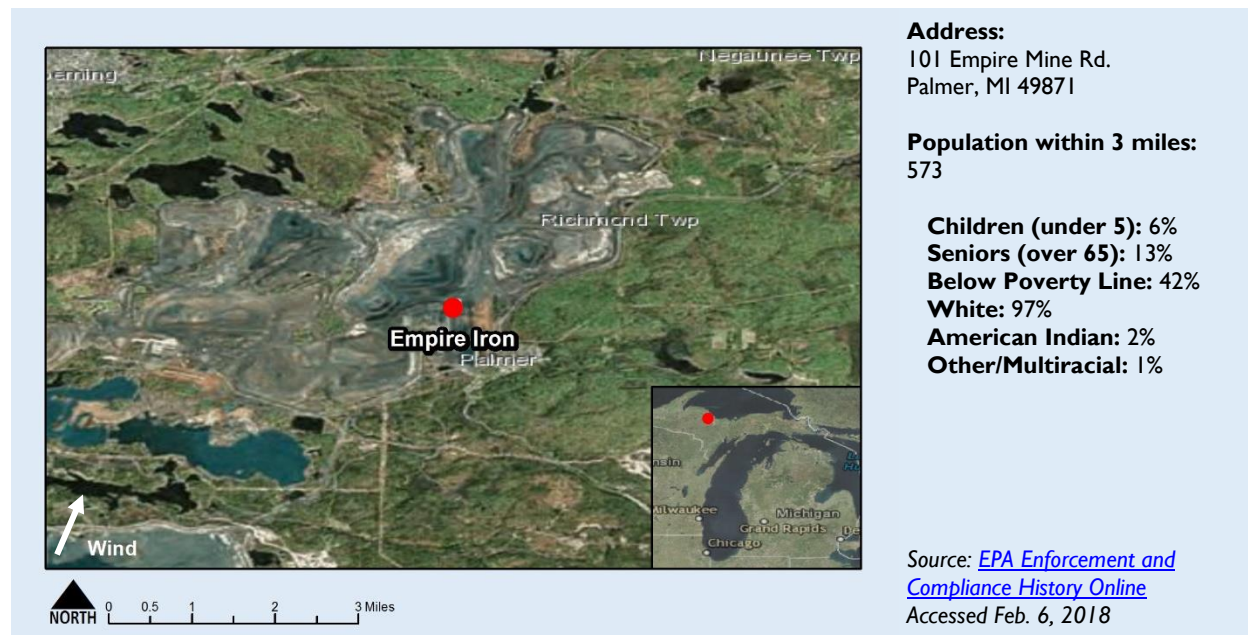
EPA’s 2016 notice letter alleges that American Iron Oxide and Magnetix International consistently failed to meet the operating parameters established by each company, indicating that their emissions of these hazardous air pollutants were higher than allowed or reported. For example:

- Between October 28, 2007, and March 11, 2016, American Iron Oxide “Roaster A” operated for 2,000 days at temperatures lower than the minimum operating requirement of 732 degrees. EPA also cited multiple failures to comply with other conditions at Roaster A and Roaster B that determine whether emission limits are met.
- Between December 28, 2006 and May 28, 2014, Magnetix International’s “Roaster A” failed to establish the minimum temperature requirements or scrubber flow rates needed to ensure compliance with emission limits for chlorine and hydrochloric acid. After these operating limits were finally set in 2014, EPA found that Roaster A failed to meet them on “multiple days.” The notice letter identifies multiple violations of similar requirements at Roaster B.

At high enough doses, hydrochloric acid is corrosive to the eyes, skin, and mucus membrane, and can cause inflammation of the lungs. Prolonged exposure to lower doses can cause dental discoloration. Chlorine is a highly reactive respiratory irritant that also contributes to the formation of hydrogen chloride.

## MICHIGAN

### 5. Empire Iron Mining Partnership (Palmer, MI)



The Empire Iron Mining Partnership owns and operates a taconite ore processing plant in Palmer, Michigan, owned by Cliffs Natural Resources. The facility has three large grate-kiln indurating furnaces that bake iron ore pellets at high temperatures to prepare them for use in steelmaking and operates fifteen wet scrubbers to control emission from the process. On February 21st, 2014 EPA notified the company that it had found multiple violations of the facility's Clean Air Act permit and had failed to meet federal standards for hazardous air pollutants.

The rules required Empire to establish and comply with certain operating parameters to keep emissions below the required limit. These include operating wet scrubbers with enough pressure and water flow to ensure removal of acid gases from the furnaces and other units. The furnaces are also required to meeting emission limits for particulate matter to minimize the release of arsenic, manganese, and other toxic metals that cling to particles released in the exhaust from the combustion process. EPA's notice letter identifies a widespread failure to meet these requirements. For example:

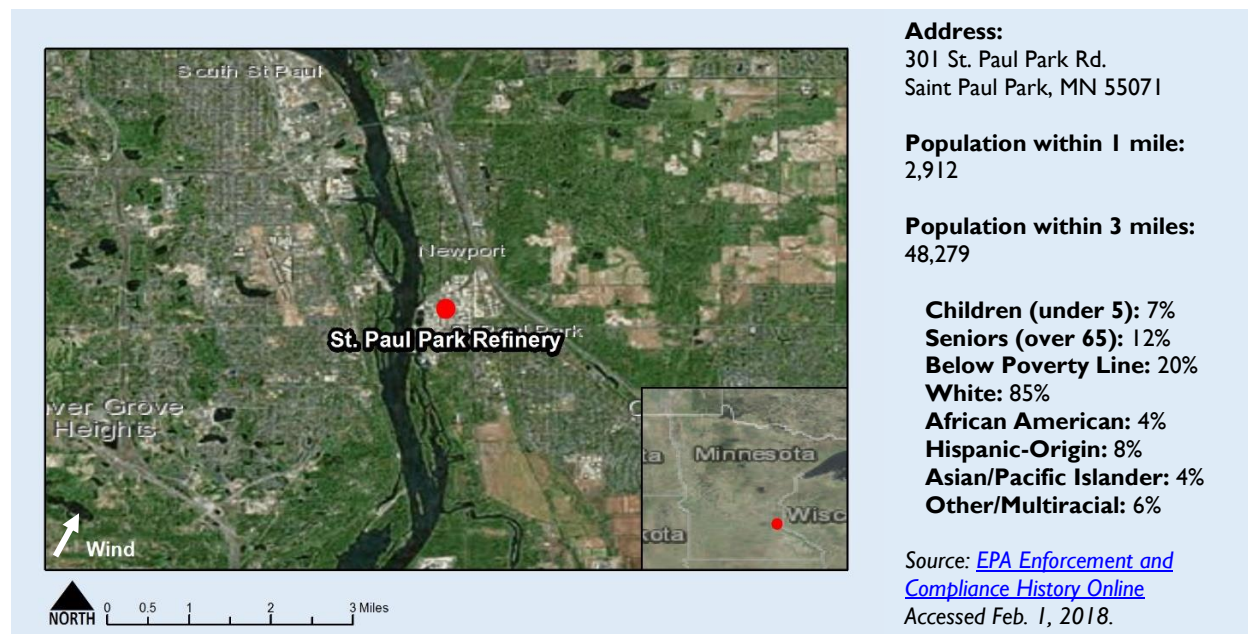
- In 2011, the company ran one of its large furnaces for 31 days and another for 18 days without operating the electrostatic precipitator that is supposed to remove most of the particulate emissions from its stack, along with arsenic, manganese, and other metals.

- The facility also failed to meet the minimum pressure and water flow requirements needed for effective operation of the wet scrubbers that also remove particulates. For example, one scrubber unit failed to meet the water flow and pressure minimums for 227 out of 349 days between April 13, 2012, and March 28, 2013. Another unit failed to operate its scrubber at the required water levels for nearly half the time between October 1, 2008, and January 3, 2013.

Bypassing pollution controls or failing to operate them effectively at taconite plants will release large amounts of fine particles, as well as arsenic, manganese and other toxic metals. Fine particles contribute to asthma attacks and other respiratory ailments, and long term exposure increases the risk of heart and lung diseases that lead to premature death. Arsenic is a known carcinogen while manganese can irritate the lungs and, at high levels of exposure, damage the central nervous system.

## MINNESOTA

### 6. St. Paul Park Refining Company, LLC (St. Paul Park, MN)



The St. Paul Paul Park refinery processes 102,000 barrels of Canadian and Bakken crude oil on its 170 acre property in [St. Paul Park, MN](#).<sup>4</sup> The refinery was purchased in late 2016 by Andeavor Community Investments ([formerly Tesoro](#)), its fourth owner in six years.<sup>5</sup>

The facility's "Title V" operating permit includes a federal requirement that prohibits St. Paul Park from burning any fuel gas that has a hydrogen sulfide (H<sub>2</sub>S) content greater than 162 parts per million (ppmv) by volume. That limit is intended to minimize exposure to sulfur dioxide, a byproduct of hydrogen sulfide combustion that contributes to asthma attacks and other respiratory ailments, and forms fine particles that increase the risk to heart

disease and premature death. Refineries and other sources are expected strip hydrogen sulfide and other sulfur rich compounds (e.g., through “sulfur recovery units”) before they are sent to flares or other combustion devices.

EPA’s January 8, 2016, notice letter cites the St. Paul Park refinery for violating the 162 ppmv hydrogen sulfide standard for 2,871 of the 2,928 hours between April 1, 2015, and July 31, 2015. The *average* concentration of H<sub>2</sub>S over the four month period was 2,061 ppmv, or nearly 13 times the limit, while maximum values reached 96,339 ppmv (nearly 600 times the limit). The relationship between H<sub>2</sub>S combustion and sulfur dioxide formation is approximately linear, i.e., burning H<sub>2</sub>S at concentrations thirteen times higher than the permit and federal law allowed likely released about 13 times as much sulfur dioxide as would have been emitted had St. Paul Park kept H<sub>2</sub>S levels at the allowable limit. Based on its contribution to disease and premature mortality, EPA has estimated<sup>6</sup> that each ton of sulfur dioxide released from a refinery adds between \$88,000 and \$200,000 in public health costs.

## 7. USG Interiors, Inc. (Red Wing, MN)



USG Interiors owns and operates a mineral wool production facility in Red Wing, Minnesota. The plant has four large units that operate without emission controls for sulfur dioxide (Cupolas 1 and 2, and Blow Chambers 1 and 2). Sulfur dioxide (SO<sub>2</sub>) can harm the respiratory system and trigger asthma attacks, especially among children and the elderly.

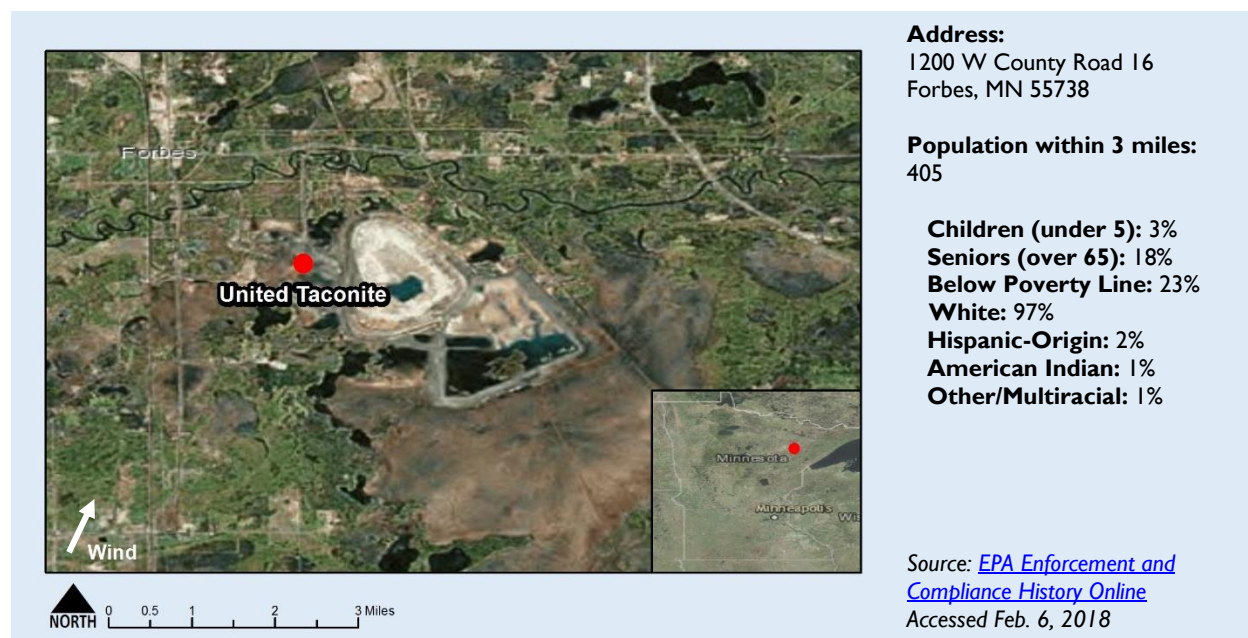
After reviewing new evidence, EPA adopted a more stringent standard designed to limit maximum hourly exposure to 75 parts per billion, or 196 microgram per cubic meter, not to be exceeded more than three times per year. Based on emissions test data from the Red Wing facility from 2011 through 2014 and air modeling information from Minnesota,



EPA's Notice of Violation informed USG Interiors on January 7, 2016, that its pollution was violating the SO<sub>2</sub> standard, "over an extensive offsite area surrounding the Red Wing plant." More specifically, EPA found that SO<sub>2</sub> concentrations would exceed the standard for more than three hours a year, with concentrations in the fourth highest hour expected to be greater than 900 micrograms per cubic meter, or more than four times the limit.

Nearly 10,000 people live within a 3 mile radius of USG Interior's facility. According to USEPA's "ECHO" website, 25% of that population lives at or below the poverty line, while 22% are either children five years or younger or senior citizens sixty five or older. Sulfur dioxide is especially hazardous to the very young and the elderly, and low income families may lack the health care needed to treat the respiratory symptoms brought on by air pollution.

## 8. United Taconite, LLC (Forbes, MN)



United Taconite (UTAC) operates an iron ore processing plant in Forbes, Minnesota, owned by Cliffs Natural Resources. The facility has two large grate-kiln indurating furnaces that bake iron ore pellets at high temperatures to prepare them for use in steelmaking. On February 21, 2014, EPA notified UTAC that it had multiple violations of Clean Air Act standards for hazardous air pollutants between 2008 and 2013.

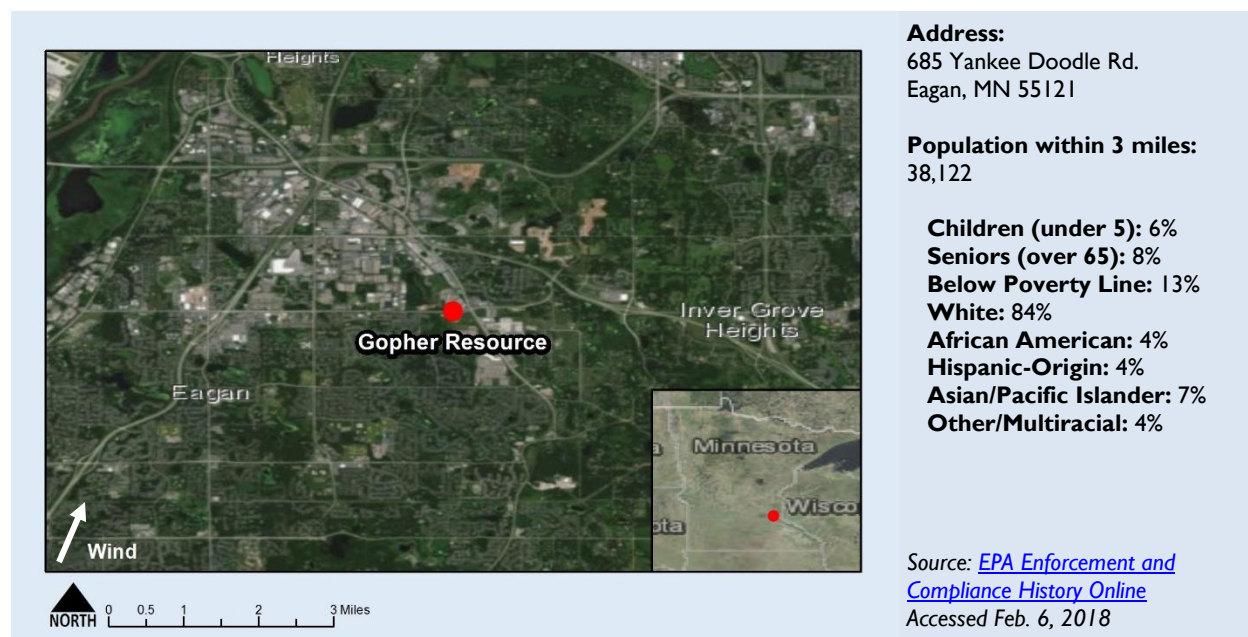
The rules required UTAC to establish and comply with certain operating parameters to keep emissions below the required limit. These include operating wet scrubbers with enough pressure and water flow to remove particulates along with arsenic, manganese, and other toxic metals that cling to particles released in the exhaust from the combustion process. EPA's notice letter identifies a widespread failure to meet these requirements. For example:



- Between July 2012 and June 3013, the furnaces released particulates directly to the atmosphere for nearly 600 hours, bypassing the baghouses that ordinarily should be able to remove 90% of these pollutants. In other words, these uncontrolled emissions release more than 10 times as much particulate matter as the amount released after treatment in baghouses.
- EPA alleges that when pollution controls were deployed, UTAC's own monitoring data showed they were frequently not operating properly. For example, some units failed to maintain the pressure that wet scrubbers need to effectively remove particulates for up to 40% of the operating time over a three month period.
- UTAC also frequently bypassed pollution controls for sulfur dioxide and nitrogen dioxide, e.g., for more than 200 hours between April 4 and June 26, 2013, releasing these pollutants directly to the atmosphere instead of scrubbing them out of stack gases.

Bypassing pollution controls or failing to operate them effectively at taconite plants will release large amounts of fine particles, as well as arsenic, manganese and other toxic metals. Fine particles contribute to asthma attacks and other respiratory ailments, and long term exposure increases the risk of heart and lung diseases that lead to premature death. Arsenic is a known carcinogen while manganese can irritate the lungs and, at high levels of exposure, damage the central nervous system.

## 9. Gopher Resource, LLC (Eagan, MN)



Gopher Resource owns and operates a secondary lead smelter in Eagan, Minnesota. On November 25, 2015, EPA notified the company that it had violated multiple Clean Air Act standards to limit hazardous air pollutants, including lead, dioxins and furans, and certain organic combustion byproducts of coke, natural gas, or plastics (e.g., battery casings).

Gopher Resource is required to maintain “negative pressure” to keep emissions from lead or other pollutants from escaping its building, and to ensure that these “fugitive” emissions are routed to control devices. EPA’s review found that the company failed to either maintain or monitor this negative pressure at least 8.8% of the time between January 6, 2014, and December 31, 2014. The sample size used to measure lead emissions from two large furnaces in 2014 was also smaller than the rules allow.

In 2009, Minnesota determined that airborne lead concentrations in the neighborhoods downwind from the plant were likely to be higher than allowed under the federal health-based standard of 0.15 micrograms, averaged over three months. While more recent monitoring data suggests that area lead levels have fallen below that limit, the failure to keep this deadly pollutant from leaking out of the plant’s enclosure or to measure lead emissions based on accurate sampling could undermine that recent progress.

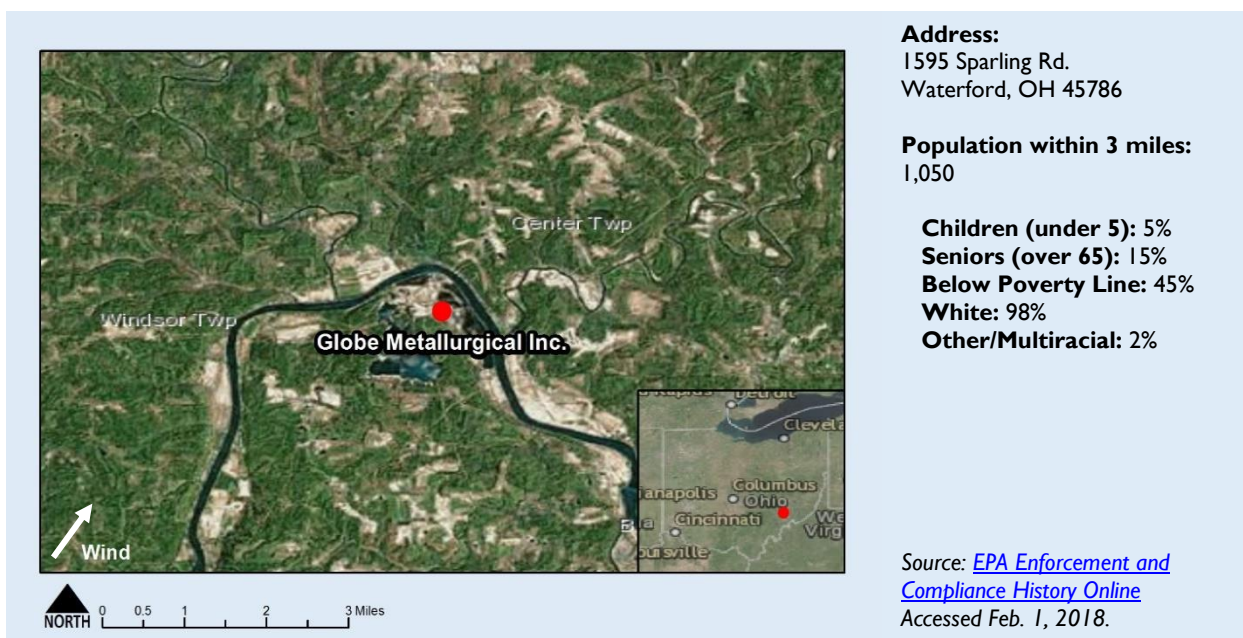
Also, on December 12, 2013 the company proposed to add natural gas to its furnaces in amounts sufficient to maintain the high temperatures needed to destroy dioxins, furans, and other organic pollutants. Between January 6, 2014, and March 8, 2015, EPA found that Gopher Resource failed to feed gas to its furnaces in the amounts promised for 10.9% of their operating time, making it likely that temperatures were too low to destroy these pollutants. EPA also alleges the company failed to establish and monitor exhaust

temperatures for individual furnaces to ensure heat rates high enough to destroy dioxins and related toxins. Dioxins and furans are a family of extremely toxic, persistent organic chemicals that bio-accumulate once they enter the food chain. Chronic exposure can cause cancer, learning disabilities, and reproductive and immune system damage. <sup>7</sup>

EPA online records shows this company has received multiple administrative orders of the past few years from EPA and the state agency for Clean Air Act violations.

## OHIO

### 10. Globe Metallurgical, Inc. (Waterford, OH)



Globe Metallurgical operates a metals (ferroalloy) manufacturing plant in Washington County, Ohio, that includes several electric arc furnaces.

The January 30, 2015 Notice of Violation alleges that in 2013: Globe expanded the capacity of one of its electric arc furnaces (EAF 5), resulting in higher emissions of particulates and sulfur dioxides (SO<sub>2</sub>). The company did not notify permitting authorities of this modification, which apparently increased sulfur dioxide by more than 40 tons, enough to require a Major New Source Review permit and public hearing before that permit is granted. Because the area has not met federal air quality standards for sulfur dioxide emissions, the New Source Review Permit would require EAF 5 to: 1) meet the lowest achievable emission rate for that pollutant, and 2) offset any remaining SO<sub>2</sub> increases by, for example, paying another facility to reduce its emissions.

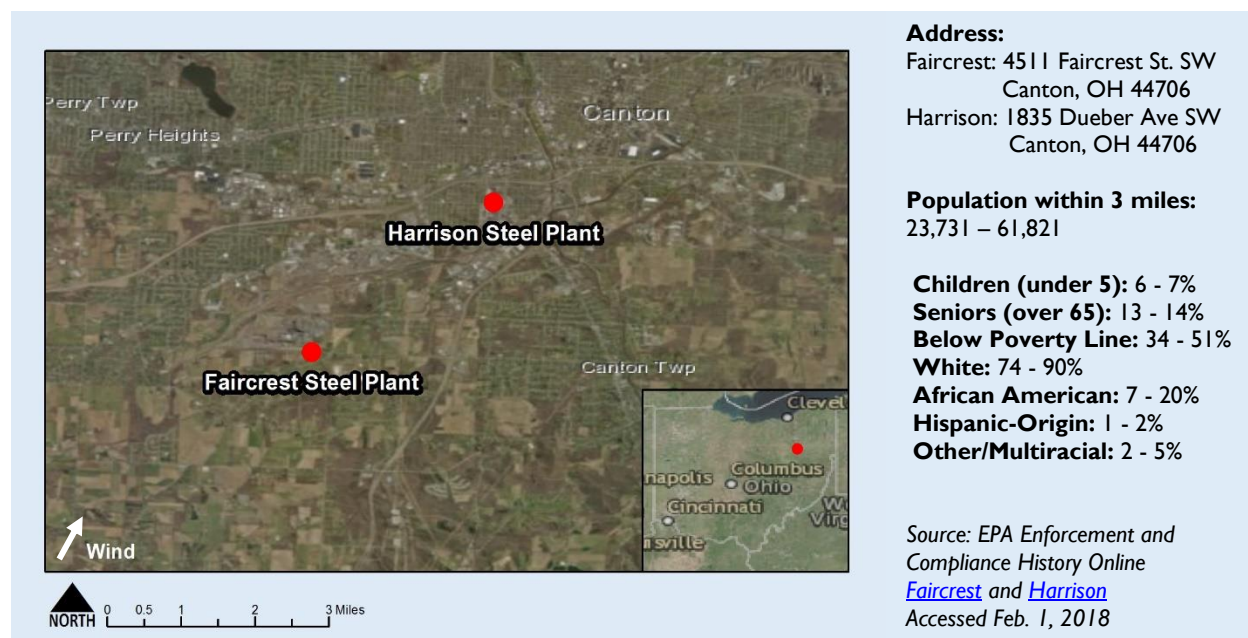
Sulfur dioxide contributes to the formation of fine particles, which contribute to lung cancer, heart disease, and premature death. Taking into account the cost of premature mortality and other health effects, EPA estimates that reducing sulfur dioxide emissions from electric arc furnaces saves between \$78,000 and \$180,000 per ton per year.

The Notice of Violation also alleges that Globe failed to maintain the pressure level needed to ensure that the baghouses are collecting and removing particulates from various operations at the desired rate. For example, the No. 1 Shop Sizing Line Baghouse failed to maintain the required pressure on more than 345 days between July 2011 and April 2014. Where pressure does not stay within the required parameters, particulates are more likely to

be released to the atmosphere rather than captured on baghouse filters and eventually removed.

That is likely why EPA measured such high levels of “opacity” (or soot) when it took “Method 9” readings on December 9, 2014. Globe also recorded visible emissions on some days, though almost certainly undercounted those, as these Method 9 observations are based on infrequent visual inspections. High opacity levels indicate high levels of fine particulates, which are very hazardous. The incidents cited in the Notice of Violation violate either the 20% opacity limit that applies to some units, or the prohibition on any visible emissions (which usually means 3 to 5% opacity) that applies to other sources within the plant.

## 11, 12. TimkenSteel Corporation, Harrison and Faircrest Steel Plants (Canton, OH)



TimkenSteel operates two steelmaking plants in Canton Ohio, both with electric arc furnaces. The Faircrest site has an annual “melt capacity” of 2 million tons with an electric arc furnace that can process enough scrap to yield 175 tons of steel per hour. Harrison has a melt capacity of 600,000 tons and two electric arc furnaces with a combined 240 ton per hour capacity. The state of Ohio apparently considers both plants in Canton to be part of a single facility.

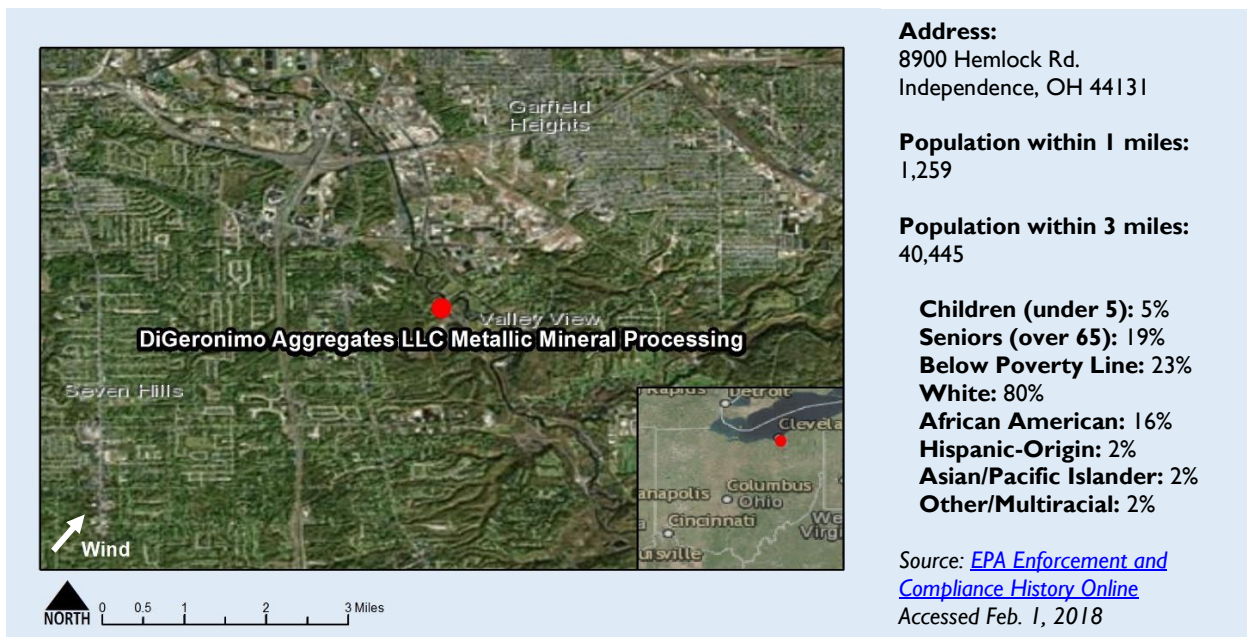
According to EPA’s November 2, 2015 Notice of Violation:



- The Faircrest federal operating permit limits mercury emissions from the facility's electric arc furnaces to 0.0037 pounds per hour. The facility's 2015 performance test (to evaluate compliance with that limit) measured 0.0085 lbs of mercury per hour, or more than twice the limit.
- The Harrison federal operating permit limits fine particulate emissions to no more than 0.042 lbs per ton of steel produced. The 2015 Performance test measured 0.122 lbs per ton, or nearly three times the permit limit.

Fine particulates contribute to asthma attacks and other respiratory ailments, and to heart and lung diseases that lead to premature death. Based on its contribution to disease and premature mortality, EPA estimates that each ton of fine particle pollution from electric arc furnaces costs the public between \$460,000 and \$1 million in public health costs.

### 13. DiGeronimo Aggregates, LLC (Independence, OH)



DiGeronimo Aggregates mines and processes shale at its facility in Independence, Ohio. The permit for the facility's coal fired rotary kiln limits nitrogen oxide emissions to no more than 45 pounds per hour and 90 tons per year, and sulfur dioxide (SO<sub>2</sub>) emissions to 270.2 pounds per hour. To minimize sulfur dioxide emissions, the permit requires spraying the exhaust with lime slurry at a rate that averages no less than 300 pounds per hour over a 30 day period. The pollution control equipment includes a baghouse to remove particulates, and the permits limits "visible" emissions of particulate matter to no more than 10% opacity.

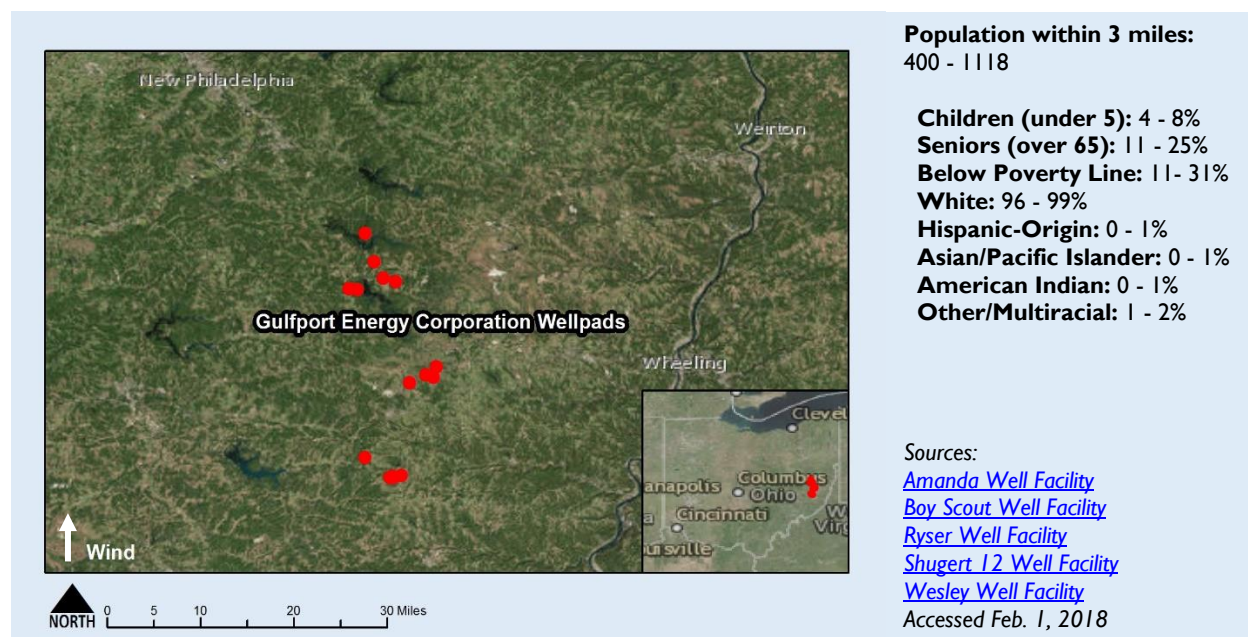
Compliance is determined based on the results from "stack tests," which are designed to measure emissions under normal operating conditions, from records of coal consumption and lime slurry injection rates, and from a monitor that continuously measures opacity

levels. Among other violations, EPA's December 29, 2016 notice letter alleges that DiGeronimo exceeded:

- The annual 90 ton NO<sub>x</sub> limit from January 2012 through at least December 2015;
- The 45 pound per hour NO<sub>x</sub> limit at least 3,257 times since the 2014 stack test;
- The 270.2 pound per hour SO<sub>2</sub> limit throughout June of 2014, and February, March, and July of 2015, based on stack test results;
- The hourly SO<sub>2</sub> limit from January 12 through April 2016, due to DeGeronimo's failure to inject lime slurry at a rate of at least 300 pounds per hour, averaged over a month's time. From January 8 through March 24, 2015, and again from February 1, 2016 through March 8, 2016, DiGeronimo apparently used no lime slurry at all, which means SO<sub>2</sub> emissions were completely uncontrolled;
- The 10% opacity limit for 21,839 six minute periods between January 1, 2012, and June 2, 2016.

EPA's notice letter also alleges that DeGeronimo should have obtained a federal New Source Review permit for a 2006 modification that allowed the rotary kiln to burn coal, because that modification resulted in a significant increase in emissions. That would have required the plant to install more advanced air pollution controls (based on the lowest achievable emission rate for the industry). Because it is located in Cuyahoga County, where ozone levels violate health based standards, DiGeronimo would also have to offset any increases in nitrogen oxide, e.g., through paying another source within the area to reduce an equivalent amount.

## 14. Gulfport Energy Corporation (Belmont, Guersney, and Harrison Counties, OH)



Gulfport Energy is an Oklahoma-based oil and gas developer with multistate operations that include numerous well pads in eastern Ohio. Each well pad site includes a cluster of tanks to store the gas or liquids extracted from the wells connected to these storage facilities until those materials are shipped offsite and processed into chemicals or fuel.

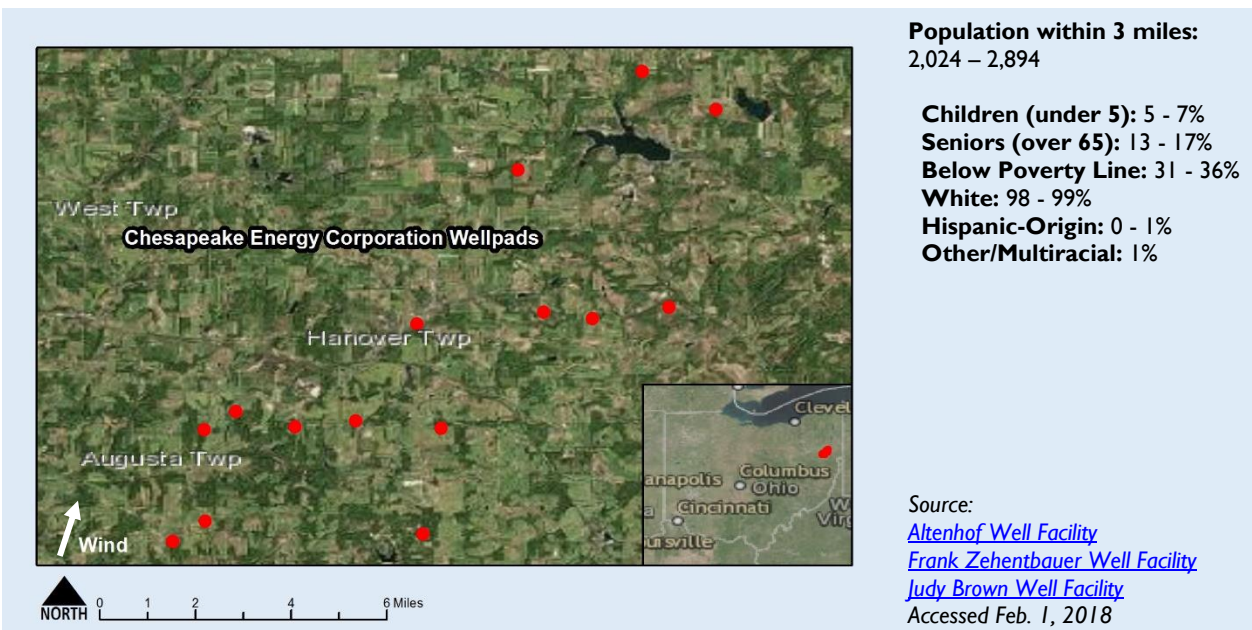
On December 22, 2016, EPA notified Gulfport that storage tanks at 15 well pads in Belmont, Guernsey and Harrison counties in Ohio had violated Clean Air Act rules that limit leaks and require that waste gases be either recovered or destroyed through combustion.

The violations are based in part on an August 2015 inspection by EPA that detected leaks from thief hatches and relief valves, safety devices that are supposed to release gas only when extreme pressure builds up in tanks. EPA also observed vapors routed to combustion units when no pilot flame was operating, which means the pollutants in those gases were vented to the atmosphere instead of being destroyed through combustion as federal law requires.

These volatile organic compounds (VOCs) contribute to the formation of smog, which impairs lung function and can worsen bronchitis, emphysema, and asthma. VOC emissions can include pollutants that, according to EPA's letter, "...can cause eye, nose, and throat irritation, headaches, loss of coordination, nausea and damage to liver, kidney and the central nervous system." Some VOCs, like benzene, are also known to increase the risk of cancer.

The notice letter targets violations of EPA standards that apply to VOC emissions from storage tanks built between August 23, 2011 and September 18, 2015. Although the rules in question do not specifically apply to methane, storage tanks that are leaking VOC's also simultaneously release large amounts of this global warming pollutant.

## 15. Chesapeake Energy Corporation (Carroll/Columbiana Counties, OH)



Chesapeake Energy Corporation is an Oklahoma-based oil and gas developer with multi-state operations that include numerous well pads in Ohio. Each well pad site includes a cluster of tanks to store the gas or liquids extracted from the wells connected to these storage facilities until those materials are shipped offsite and processed into chemicals or fuel. On December 21, 2016, EPA notified Chesapeake that 15 well pads in Carroll and Columbiana counties in eastern Ohio violated Clean Air requirements that stop gas from leaking out of storage tanks.

EPA's notice letter targets sites with larger tanks which, when operating without the required emission controls, are likely to release at least six tons of volatile organic compounds within the first thirty days of operation. As well pads are typically served by at least four of these storage vessels, the emissions from all of the sites targeted by EPA can add up to hundreds of tons per year. The violations are based in part on April and November 2015 inspections by EPA that found leaks from thief hatches and relief valves, safety devices that are supposed to release gas only when extreme pressure builds up in tanks.

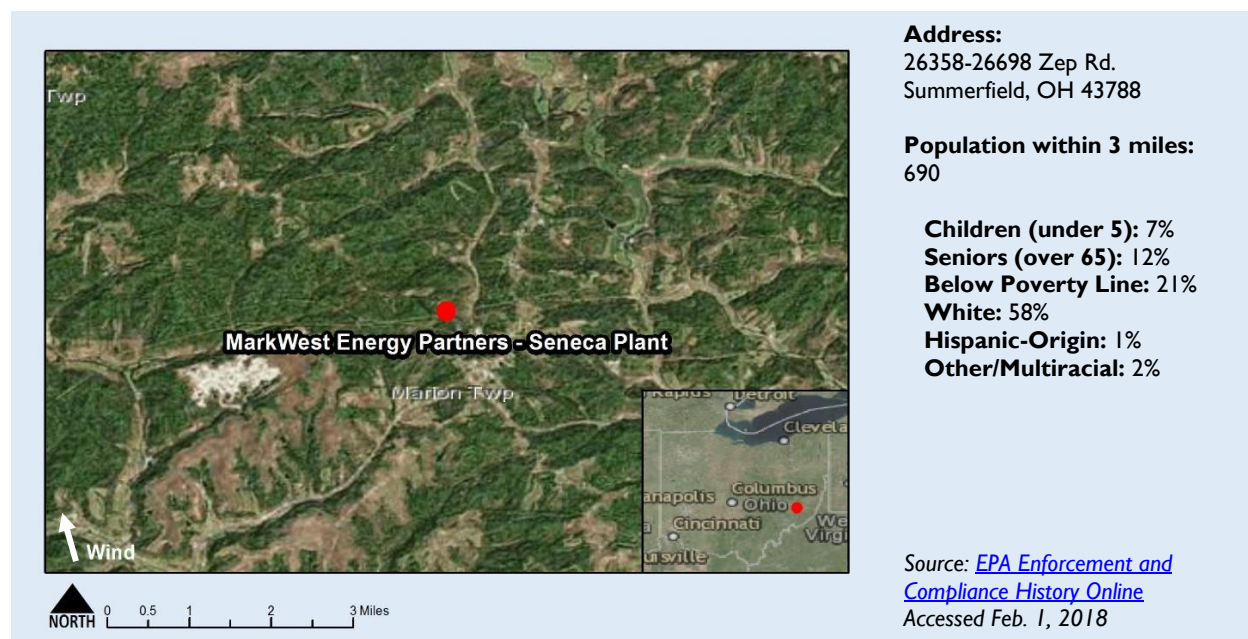
These VOCs contribute to the formation of smog, which impairs lung function and can worsen bronchitis, emphysema, and asthma. VOC emissions can include pollutants that, according to EPA's letter, "...can cause eye, nose, and throat irritation, headaches, loss of



coordination, nausea and damage to liver, kidney and the central nervous system.” Some VOCs, like benzene, are also known to increase the risk of cancer.

The notice letter targets violations of EPA standards that apply to VOC emissions from storage tanks built between August 23, 2011 and September 28, 2015. Although the rules in question do not specifically apply to methane, storage tanks that are leaking VOC’s also simultaneously release large amounts of this global warming pollutant.

## 16. MarkWest Energy Partners, LP, Seneca Gas Plant (Summerfield, OH)



MarkWest owns and operates the Seneca Gas Plant in Summerfield, Ohio, which removes natural gas liquids from field gas. The facility is required by Clean Air Act New Source Performance Standards (NSPS) to monitor several thousand valves, connectors, and pumps to detect and promptly repair any leaks of volatile organic compounds that cause smog and impair lung function. EPA notified MarkWest that it violated these requirements in multiple ways that included:

- Failing to prevent large leaks from pressure relief devices and pumps;
- Waiting from 18 months to 3 years to begin monitoring 3,746 new connectors for potential leaks, instead of completing these tasks within 12 months as required;
- Waiting from 6 to as long as 16 months to begin monitoring 3,633 new valves for potential leaks, instead of the completing these tasks within the required 30 days; and



- Failing to calibrate leak detection instruments to ensure accurate measurement of leaks from pumps.

Poor monitoring practices means that leaking components are not identified and repaired, while higher leak rates release larger amounts of VOCs and other pollutants to the atmosphere. For example, EPA's April 2016 inspection found leak rates at 4.66% of the plant's components were high enough to require repair, compared to the average 2.39% reported by MarkWest.

Volatile organic compounds contribute to ozone (smog) formation when released to the atmosphere. EPA's notice letter lists other health effects that can be traced to volatile chemicals, including eye, nose, and throat irritation, headaches, loss of coordination, nausea, damage to the liver, kidney, and central nervous system and, for some chemicals, cancer.

## Methodology

The data in this report are based on consent decrees lodged in federal court that resolve violations of environmental law that EPA has referred to the Justice Department for civil prosecution. Once lodged, these consent decrees are announced in the Federal Register and the public is given thirty days to comment on its terms. After any comments are reviewed by the court and Justice Department, the consent decree will be “entered” as a final judgment. Although lodged settlements may be revised in response to public input before they are entered, that rarely happens in practice.

Most EPA civil enforcement actions are resolved through consent decrees, although the outcome may be shaped by earlier decisions by the court, e.g., that determine the scope of the defendant’s liability for the violations that EPA has alleged. These settlements may come after a year or more of negotiations, so any consent decrees lodged within the first few months of a President’s first year in office will reflect work done in a prior Administration. However, the number and quality of these cases may indicate whether enforcement is on track, or whether the new Administration and their team are more directly involved in reviewing settlements and taking longer to approve them.

All lodged cases were identified through Federal Register announcements, which also indicated the amounts paid in civil penalties<sup>8</sup> for all but a few cases. Where necessary, EIP reviewed press announcements by the Department of Justice or data posted on EPA’s webpage<sup>9</sup> to identify the government’s estimates of injunctive relief and reductions in emissions, as well as any civil penalty data not provided in Federal Register notices.

## APPENDIX A: Civil Enforcement Cases Filed Under the First Year of the Clinton Administration (Listed in Order of Size of Penalty)

Case	Final Order Lodged	Federal Penalty (\$1,000)	Statute
Louisiana Pacific, Inc., and Kirby Forest Industries	5/24/1993	11,100	CAA
United Technologies Corporation	8/23/1993	5,302	RCRA, CWA
Inland Steel Corp.	3/9/1993	3,500	CWA, CAA, RCRA, SDWA
CSX Transportation, Inc.	9/27/1993	3,000	CWA
Sanders Lead Company, et al.	5/13/1993	2,000	RCRA
USX	2/19/1993	1,800	CAA
Grumman St. Augustine Corp.	5/13/1993	1,500	RCRA
Dana Corporation, Perfect Circle Division	1/21/1993	1,300	RCRA
Hanlin Group, Inc.	10/27/1993	1,152	RCRA
Tropicana Energy Company, et al.	12/21/1993	1,100	CAA
Monitor Sugar Company	8/2/1993	1,064	CAA
Puerto Rico Industrial Development Company	3/22/1993	1,000	CWA
Butte Water Company	9/10/1993	900	SDWA
Alpha Cellulose Corp.	3/9/1993	850	CWA
US v. Modine Manufacturing	5/28/1993	750	CWA
Oklahoma Ordnance Works Authority and State of OK	10/29/1993	750	CWA
Arctic Fisheries Inc.	11/8/1993	725	CWA
Group Dekko, Inc.	5/13/1993	550	RCRA
Bethlehem Steel	7/14/1993	545	CAA
Shenango, Inc.	4/12/1993	540	CAA
Consolidated Papers Inc.	8/26/1993	510	CAA
Texaco Refining and Marketing, Inc.	2/10/1993	500	CWA
Florida Tile	7/26/1993	493	CWA
U.S. Oil Company	2/10/1993	470	CWA
Fina Oil and Chemical Company	3/10/1993	450	CWA
Easton Area Joint Sewer Authority	3/28/1993	435	CWA
GK Technologies, Inc., et al.	1/6/1994	425	RCRA
Georgia-Pacific Corp.	9/9/1993	390	CAA, CWA
O'Donnell-Usen Fisheries Corp.	8/17/1993	375	CWA
Union Tank Car	7/6/1993	350	CWA
Residual Technologies, Inc.	8/4/1993	300	SDWA
Laclede Steel Company	9/24/1993	300	RCRA
City of Middletown, OH	12/10/1993	288	CWA
Rubicon Vista Associates, LP, et al.	12/2/1993	275	CAA
New Boston Coke Corporation	3/9/1993	250	CAA

Case	Final Order Lodged	Federal Penalty (\$1,000)	Statute
Alaska Pulp Corporation	8/4/1993	250	RCRA
Lucas Western Inc.	11/17/1993	250	CWA
Coors Brewing Company, Inc.	11/24/1993	245	CAA
Cole Muffler, Inc.	9/14/1993	238	CAA
City of Philadelphia	10/28/1993	225	CWA
Consolidated Edison	1/25/1993	220	CAA
City of Kenner, et al.	9/30/1993	215	CWA
Petro Power Insulation, Inc., et al	11/19/1993	210	CAA
New York City	1/22/1993	200	CAA
Cressona Aluminum	5/4/1993	200	CWA
Archer Rubber Co.	8/18/1993	200	CAA
City of New Albany, IN	2/9/1993	175	CWA
Gary Steel Products Corp. and Percell McQueen	10/12/1993	155	CAA
The Telluried Co., et al.	10/15/1993	143	CWA
GNB, Inc.	2/4/1993	135	RCRA
Amelia Associates and Joey's Excavating, Inc.	7/29/1993	125	CAA
Pacific Coast Producers, Inc.	6/28/1993	101	CAA
IMC Fertilizer, Inc.	3/29/1993	100	CWA
MTD Products Inc. and Columbia Manufacturing	6/28/1993	100	CWA, RCRA
Port of Portland	3/5/1993	92	CWA
Nicholas P. Klamut	9/15/1993	90	CAA
Columbia Aluminum Corporation	11/5/1993	90	CAA
Bank of Canton, et al.	11/29/1993	90	CAA
Martech USA Inc.	12/20/1993	85	CAA
Windward Properties, Inc.	3/16/1993	75	CWA
Texas Tank Car	3/31/1993	60	CWA
NY City Board of Education, et al.	10/8/1993	55	CAA
Leslie Salt Company	2/18/1993	50	CWA
Global, Inc.	6/18/1993	50	CAA
Washington DOT, et al.	8/25/1993	50	CAA, CWA
Hagadone Hospitality Co.	7/13/1993	48	CAA
Williams Pipe Line Company, et al.	1/12/1994	45	CAA
Foodland Supermarket Inc., et al.	11/18/1993	40	CAA
California State University, et al.	12/7/1993	35	CAA
Western Mobilie New Mexico, Inc.	10/20/1993	30	CAA
Peter R Cimmino	11/22/1993	30	CWA
MSA Manufacturing, Inc.	3/1/1993	29	CAA
Eastern Environmental Services of the Southeast	3/4/1993	28	CAA
Phoenix Union High School District, et al.	4/8/1993	28	CAA

Case	Final Order Lodged	Federal Penalty (\$1,000)	Statute
Superior Contract Maintenance, Inc.	12/28/1993	28	CAA
Zemlicka	8/26/1993	26	CAA
International Crane Compay	3/5/1993	25	CAA
Boliden Intertrade, A.G.	6/25/1993	25	CAA
Elliott Drywall and Asbestos, Inc.	6/10/1993	22	CAA
Donald E. Buchs and Lorain Properties Company	7/14/1993	20	CAA
Connolly Development	8/24/1993	20	CWA
Coleman Trucking Co., et al.	2/25/1993	20	CAA
City of New York and Dino Oil Company	12/8/1993	17	CAA
Leith Jeep-Eagle, Inc.	4/26/1993	15	CAA
Bethlehem Village District	8/13/1993	15	SDWA
Petro Power Insulation, Inc., et al	9/20/1993	15	CAA
Rihr and Arizona Board of Regents	11/2/1993	15	CAA
Beany's Mufflerland Inc.	11/19/1993	15	CAA
American Felt & Filter	5/19/1993	13	CWA
El Paso Natural Gas	5/13/1993	10	CAA
Masco Corporation	5/14/1993	10	CAA
Alloyd Asbestos Abatement Co.	8/5/1993	10	CAA
Arnold B. Charpiot	8/13/1993	8	CWA
Twin County Recycling Corp.	1/22/1993	7	CAA
Pellazar	6/25/1993	6	CAA
Ali Virani d/b/a Pit Stop	10/7/1993	6	CAA
Richard Nelson	5/7/1993	5	CWA
Donald A. Johnson	9/9/1993	5	RCRA
Robert L. Brown	11/4/1993	5	CAA
Town of Hastings	5/13/1993	5	CWA
Geoffrey B. Campbell d/b/a/ Clarion Muffler Center, Inc.	8/12/1993	4	CAA
Blue Earth Equipment Co., et al.	9/15/1993	3	CAA
Hobucken Gun Club, Inc. and Hale & McCotter Inc.	10/8/1993	3	CWA
City of Niagra Falls, NY	3/8/1993		CWA
In-Tek Constructors, et al.	3/29/1993		CAA
Meadow Gold Dairies, Inc.	8/12/1993		CWA
Nautilus Motor Tanker Company, Ltd.	8/18/1993		FWPCA
Metropolitan Dade County et al.	9/8/1993		CWA
AFG Industries, Inc.	9/15/1993		CAA
Oriental Republic of Uruguay	9/29/1993		CWA
Browning-Ferris Industries, et al.	9/29/1993		RCRA
Sunshine Biscuits, Inc. and International Dismantling and Machinery Corp.	11/2/1993		CAA

\*CWA: Clean Water Act, CAA: Clean Air Act, RCRA: Resource Conservation and Recovery Act, FWPCA: Federal Water Pollution Control Act, SDWA: Safe Drinking Water Act



**APPENDIX B: Civil Enforcement Cases Filed Under the First Year of the George W. Bush Administration  
(Listed in Order of Size of Penalty)**

Case	Final Order Lodged	Federal Penalty (\$1,000)	SEP/Mitigation (\$1,000)	Injunctive Relief (\$1,000)	Statute
Motiva, Equilon, and Shell	3/21/2001	9,500	5,500	400,000	CAA
Mobil Oil Corporation	12/13/2001	8,200	3,000		RCRA
Air Liquide America Corporation	6/21/2001	4,500	500	12,000	CAA
IBP, Inc.	10/12/2001	4,100		10,000	CAA, CWA, RCRA, CERCLA
Marathon Ashland Petroleum, Inc.	5/11/2001	3,800	5,900	263,000	CAA
Guide Corporation and Crown EG, Ind.	6/18/2001	2,000	6,000	2,025	CWA, CAA, RCRA, CERCLA
Premcor Refining Group, Inc. (formerly Clark Refining and Marketing)	7/12/2001	2,000		22,000	CAA
ATOFINA Chemicals, Inc.	12/28/2001	1,900	300	10,000	CAA, CWA, RCRA
Conoco Inc.	12/20/2001	1,539	5,630	110,000	CAA
MaCalloy Corp.	6/26/2001	1,200		1,800	CWA, RCRA, SPCPA
Diamond Shamrock Refining Co., LP	7/25/2001	1,200		2,250	CAA, CWA, RCRA
Powell Duffryn Terminals, Inc.	7/25/2001	1,200	320	25,000	CAA, CERCLA
Wal-Mart Stores, Inc.	6/7/2001	1,000		4,500	CWA
Premium Standard Farms, Inc./Continental Grain Company, Inc.	11/19/2001	1,000	300	50,000	CAA, CWA, EPCRA, CERCLA
City of Baton Rouge and Parish of East Baton Rouge	11/13/2001	946	1,125	461,000	CWA
Chevron USA Inc.	9/28/2001	750		3,150	CWA
Navajo Refining, Co., et al.	12/20/2001	750	1,400	21,000	CAA
Chevron USA Inc.	2/19/2001	650	150	748	CAA
Texaco	7/16/2001	568		1,700	CAA
Alcoa, Inc.	1/16/2002	550	2,000		CWA
National Railroad Passenger Corp.	6/28/2001	500	900	11,000	CWA

Case	Final Order Lodged	Federal Penalty (\$1,000)	SEP/Mitigation (\$1,000)	Injunctive Relief (\$1,000)	Statute
V-I Oil Company	5/2/2001	478			CWA
Aristech Chemical Corporation	11/7/2001	450			CAA
Clean Harbors Inc., et al.	11/28/2001	400			RCRA
Shell Oil Company and Motiva Enterprises LLC	4/27/2001	390		46	CAA
Lee Brass Co., Inc.	9/26/2001	350		250	RCRA
Caribbean Airport Facilities, Inc. and Anthony Tirri	9/5/2001	300			CWA
Town of Greenwich	12/27/2001	285			CWA
New Castle County, DE, DE DoT, and DE	8/29/2001	275			CWA
LWD, Inc.	1/16/2002	275		500	RCRA
Texaco Exploration and Production Inc. and Envirotech Inc.	12/28/2001	254	51	4	CAA, EPCRA
Monongahela Power Company Inc.	11/9/2001	252		7,350	CWA
Preston Engravers Inc.	2/5/2001	245		1	CAA
Natural Gas Pipeline Co.	2/1/2001	215	100		CAA
Cohen, et al.	12/5/2001	210		500	CERCLA, CAA
University of R.I.	4/5/2001	195	550		CAA, CWA, RCRA
Michael's Furniture Co.	1/25/2001	186			CAA
City of New Albany	9/27/2001	180			CWA
Harsco Corporation	8/29/2001	175		800	CAA
MIT	4/18/2001	155	405	2,000	RCRA
Viktron, L.P.	3/20/2001	150			CWA
Black Mesa Pipeline	4/7/2001	128			CWA
R&R Distributing Company, Inc.	8/17/2001	120			RCRA
Honeywell International Inc.	11/23/2001	110	772		CERCLA, EPCRA, RCRA
J.L. Land Development, Inc.	2/15/2001	100			CWA
Mallory Creek Developers, Inc., et al.	8/22/2001	100			CWA
Arlington Valley Land Company, Inc., et al.	10/11/2001	90			CWA
Hartz Construction	6/15/2001	80		80	CWA
Precision Fabricating and Cleaning Co. Inc.	12/20/2001	75		1,400	RCRA/SDWA
Murphy Family Farms	7/10/2001	72		17	CWA
Knauf Fiber Glass GmbH	9/27/2001	70			CAA
City of Boonville	8/20/2001	61			CWA
Fort Lewis, US Army	5/18/2001	60	200		RCRA
Robert Desmond	8/20/2001	58			CWA

Case	Final Order Lodged	Federal Penalty (\$1,000)	SEP/Mitigation (\$1,000)	Injunctive Relief (\$1,000)	Statute
Cenex Harvest States Cooperatives	6/15/2001	56	300		CWA
Charles T. Cannada	6/20/2001	50			CWA
East Lake Management and Development Corp.	10/9/2001	50	77		Lead-Based Paint Hazardous Reduction Act
A&S Tribal Industries	5/14/2001	40		112	CWA
Gulf Oil L.P. and Catamount Management Co.	7/5/2001	40	421	10	CAA
Oak Park Real Estate, Inc., et al.	10/4/2001	40		400	Lead-Based Paint Hazardous Reduction Act
Tropical Fruit, S.E., et al.	8/21/2001	35			FIFRA, CERCLA
Forsch Polymer Corp.	2/8/2001	32			CAA
National Metal Finishing Corporation	9/26/2001	30		1	CAA
Wolin-Levin, Inc.	10/11/2001	25	100		Lead-Based Paint Hazardous Reduction Act
Hoosier Calcium Corporation	9/27/2001	20			CAA
Tesoro Hawaii Corporation	8/23/2001	15	55		CWA, OPA
Oleander Company, Inc. and Nelson MacRae	12/20/2001	15			CWA
Specialty Minerals, Inc., John J. Foley, Jr. and Dorothy K. Foley	10/3/2001	11	330		CWA
Raymond T. James, et al	5/7/2001	6		15	RCRA
Kenneth McDonald and Nicholas Menegatos	9/11/2001	3			CAA
Gillette	2/9/2001				CWA
Metropolitan Council	9/4/2001		1,600		CAA
Surfrider Foundation and US Section of International Boundary and Water Comission	9/12/2001				CWA

\*CWA: Clean Water Act, CAA: Clean Air Act, RCRA: Resource Conservation and Recovery Act, SDWA: Safe Drinking Water Act, FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act, EPCRA: Emergency Planning and Community Right-to-Know Act, OPA: Oil Pollution Act, CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act, SPCPA: South Carolina Pollution Control Act

**APPENDIX C: Civil Enforcement Cases Filed Under the First Year of the Obama Administration (Listed in Order of Size of Penalty)**

Case	Final Order Lodged	Federal Penalty (\$1,000)	SEP/Mitigation (\$1,000)	Injunctive Relief (\$1,000)	Statute
BP Texas City	2/19/2009	12,000	6,000	161,000	CAA
Patriot Coal Corp. (5 Facilities)	2/5/2009	6,500		6,000	CWA
Lafarge North America, Inc., et al.	1/21/2010	5,075		170,000	CAA
Aleris International, Inc. et al.	8/4/2009	4,600		4,100	CAA
Magellan Ammonia Pipeline et al.	8/14/2009	3,650		550	CWA
INEOS ABS (USA) Corporation, et al.	7/31/2009	3,100		2,000	CAA, EPCRA, CERCLA
Formosa Plastics Corp. TX, Formosa Hydrocarbons Co., Formosa Plastics Corp. LA	9/29/2009	2,800		10,000	CAA, CWA, RCRA, EPCRA
Aggregate Industries - Northeast Regional	8/6/2009	2,750		6,673	CWA
Mosaic Fertilizer, LLC	10/5/2009	2,400		30,000	CAA
Saint-Gobain Containers, Inc.	1/21/2010	2,250	250	112,000	CAA
Lucite International & E.I. Dupont deNemours	4/20/2009	2,000			CAA
Cinergy Corporation, et al.	12/22/2009	1,750	6,250	85,000	CAA
INVISTA S.a.r.l. (National Case)	4/13/2009	1,700		500,000	CAA
Kentucky Utilities – E.W. Brown	2/3/2009	1,400	3,000	147,000	CAA
Citygas Gasoline Corporation, et al.	7/6/2009	1,400			RCRA
Pacific Pipeline Systems, LLC	1/20/2010	1,300			CWA
Frontier El Dorado Refining Co. (National Case)	2/10/2009	1,230	1,307	127,000	CAA
Anadarko Petroleum Corporation	5/7/2009	1,050		8,718	CWA
Colorado Interstate Gas Co.	7/23/2009	1,020		727	CAA
Hampton Roads Sanitation District	9/29/2009	900		460,000	CWA
Alaska Gold Co., Rock Creek Mine	5/12/2009	884		8,177	CWA
Union Pacific Railroad Company	8/6/2009	800		31,000	CWA
First Chemical Corporation	8/20/2009	731		50	CAA

Case	Final Order Lodged	Federal Penalty (\$1,000)	SEP/Mitigation (\$1,000)	Injunctive Relief (\$1,000)	Statute
Paul Revere Transportation	8/4/2009	650			CAA
Delek/ La Gloria - Crown Central Petroleum Corporation (d.b.a. La Gloria Oil and Gas Company)	7/20/2009	624		25,000	CAA
D.D. Williamson & Company, Inc.	8/20/2009	600		50	CAA
Ameripride Services, Inc	8/24/2009	525		1	CWA
Cooper Land Development	8/18/2009	514		105	CWA
City of Akron, OH and State of OH	11/13/2009	500	900	897,000	CWA
Nutrition Specialties LLC	8/21/2009	450	705	1,750	CAA
American Laboratories, Inc.	6/16/2009	440		181	CAA
Magellan Pipeline Company LP	1/19/2010	418		3,920	CWA
City of Duluth / Western LK Superior SD	6/23/2009	400		130,000	CWA
BASF Corporation	10/19/2009	384		250	CAA
John Wieland Homes and Neighborhoods, Inc. et al	11/6/2009	350		8,361	CWA
Friction Holdings LLC	5/29/2009	338		55	CAA
Anderson-Wilcox Corp.	2/3/2009	300			CAA
Sierra Properties I, LLC	7/28/2009	276			CWA
City of Independence	3/31/2009	255	450	35,000	CWA
Dominion Exploration - Kings Canyon	4/17/2009	250		6,100	CAA
City and County of San Francisco, CA	10/27/2009	250			CWA, RCRA
North Hill Creek Compressor Station/Bill Barrett/Wind River	4/17/2009	240	200	372	CAA
Elan Chemical Company, Inc.	12/10/2009	200		15	RCRA, EPCRA
Allegheny Ludlum Corp. and Harso Corp.	11/23/2009	185		580	CAA
Holcim (US) Inc.	6/25/2009	160			CAA
Wyoming Refining Company	2/10/2009	150		14,000	CAA
City of West Point, et al.	6/12/2009	150			CWA
Miller Dyer & Company	4/17/2009	142		90	CAA
The Port of Astoria, Oregon	3/20/2009	125			CWA



Case	Final Order Lodged	Federal Penalty (\$1,000)	SEP/Mitigation (\$1,000)	Injunctive Relief (\$1,000)	Statute
J.T. Walker Industries, Inc. / MI Metals, Inc.	5/20/2009	105		100	CAA
Wimmer's Meat Products, Inc	11/13/2009	102	43		CWA
Wallside, Inc.	6/16/2009	100	350	695	TSCA
Bradford Industries	8/7/2009	75		34	RCRA
City of Jeffersonville	9/17/2009	58	248	125,000	CWA
JLG Enterprises	6/23/2009	50		195	CWA
City of St. Martinville	7/30/2009	50			CWA
Lennar Communities Development, Inc.	10/28/2009	38		144	CAA
Charleswood, Inc.	8/28/2009	38		157	CWA
Bowater Incorporated	8/25/2009	30		110	CAA
Zelmer, Inc./Spencer Heights, Inc.	5/21/2009	25	445		CWA
Pacific Gas & Electric Company	9/24/2009	20			CAA
Midwest Renewable Energy, LLC	9/23/2009	10		42	CAA
Corbett Package Co., et al.	11/10/2009	10		25	CWA
Jose and Guillermina Sierra	12/28/2009	6		349	Lead-Based Paint Hazardous Reduction Act
East Shoshone County Water District	10/2/2009	5	20		SDWA
Carmen Neapolitan	6/18/2009	2		142	Other
Skull Valley Band of Goshute Indians	7/13/2009	1	4	1	SDWA
North Carolina DOT Ferry Division, et al.	4/17/2009				CWA
Lebanon WWTF	5/27/2009			30,200	CWA
City of Portsmouth, NH	8/17/2009			140,300	CWA
Countrymark Cooperative LLP	8/19/2009				CWA, OPA

\*CWA: Clean Water Act, CAA: Clean Air Act, RCRA: Resource Conservation and Recovery Act, SDWA: Safe Drinking Water Act, EPCRA: Emergency Planning and Community Right-to-Know Act, OPA: Oil Pollution Act, CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act, TSCA: Toxic Substances Control Act

**APPENDIX D: Civil Enforcement Cases Filed Under the First Year of the Trump Administration (Listed in Order of Size of Penalty)**

Case	Final Order Lodged	Federal Penalty (\$1,000)	SEP/Mitigation (\$1,000)	Injunctive Relief (\$1,000)	Statute
StarKist Co. and Starkist Samoa Co.	12/22/2017	6,500		10,000	CWA
Vopak North America, Inc.	5/17/2017	2,500		5,000	CAA
Exxon Mobil Corp	10/31/2017	2,500	2,572	300,000	CAA
PDC Energy, Inc.	10/31/2017	1,500	1,700	18,000	CAA
ArcelorMittal Monessen LLC, et al.	12/20/2017	1,500		2,000	CAA
Momentive Performance Materials Silicones, LLC	4/21/2017	1,250			RCRA
JW Aluminum Company	9/19/2017	1,230		100	CAA
Lima Refining Company	6/22/2017	1,000	11,750	150,000	CAA
Sid Richardson Carbon, LTD	12/22/2017	999	490	100,000	CAA
Sunoco Pipeline LP	3/31/2017	990			CWA
Bayer CropScience LP	8/31/2017	975	3,050		CAA
Harcros Chemicals, Inc	7/31/2017	950	2,500		CAA
Orion Engineered Carbons, LLC	12/22/2017	800	550	100,000	CAA
Columbian Chemical Company	12/22/2017	650	375	94,000	CAA
Apache Nitrogen Products	12/20/2017	600			CAA
Westward Seafoods, Inc.	4/17/2017	570			CAA
Nevada Cement Company	5/12/2017	550		3,000	CAA
Rocky Mountain Company	6/26/2017	475			CAA
Alon USA Big Spring Refinery	5/30/2017	456	1,500		CAA
NVR, Inc. d/b/a Ryan Homes (National Case - no NLPs)	6/15/2017	425		2,008	CWA
EMD Millipore	1/30/2017	385		3,500	CWA
The City of North Las Vegas	9/27/2017	385		150	CWA
Georgia Coastal Land Co., et al	4/7/2017	333			CWA
Duarte Nursery, Inc. and John Duarte	8/15/2017	330			CWA
United Rolls Inc.	10/27/2017	310			CAA

Case	Final Order Lodged	Federal Penalty (\$1,000)	SEP/Mitigation (\$1,000)	Injunctive Relief (\$1,000)	Statute
Hammond Sanitary District	2/3/2017	248	555	140,000	CWA
Evergreen Power, LLC	6/19/2017	246		454	CWA
PPG Industries Ohio, Inc	5/2/2017	225		175	CAA
Clean Rentals Inc.	3/13/2017	200		1,100	CAA
Valero Refining Company d/b/a Paulsboro Refining Company	4/19/2017	180		1,000	CAA
Mesabi Nugget	5/15/2017	150		160	CAA
United States Seafoods LLC, et al.	11/9/2017	135			CAA
City of Lancaster, PA	12/20/2017	135	2,300	140	CWA
City of Waterbury, CT and Synagro Northeast, LLC	8/14/2017	104			CAA
Borough of Naugatuck and Naugatuck Environmental Technologies, LLC	1/10/2018	100			CAA
Falcon Petroleum, LLC et al.	4/25/2017	60	220	218	RCRA
Accolade Construction Group Inc.	7/25/2017	58			TSCA
Homeca Recycling Center Co. Inc. et al.	5/12/2017	50			RCRA
Maynard Steel Casting Co.	3/1/2017	25		350	CAA
Woco Pep Oil, Inc.	8/28/2017	24		285	CWA, RCRA
Municipality of Santa Isabel	4/12/2017	20		13,204	RCRA
Black Tea Oil, LLC, et al.	11/6/2017	10		910	CWA
James F. Jerge, Jr.	5/17/2017				CWA
Port Stewart GmbH&Co. Kg of Germany	6/1/2017			550	OPA
Cleveland Heights v. State of Ohio	6/19/2017				CWA
Suez Shipping North America LLC and Hoegh LNG Fleet Management AS	6/28/2017			1,900	OPA
Bouchard Transportation Company, Inc., et al.	10/19/2017			16,800	OPA
Fukunaga Kaiun Co., Ltd.	1/9/2018			775	OPA

\*CWA: Clean Water Act, CAA: Clean Air Act, RCRA: Resource Conservation and Recovery Act, OPA: Oil Pollution Act

## NOTES:

<sup>1</sup> Jennifer A. Dlouhy and Jennifer Jacobs, “EPA’s Pruitt Denies He’s an Ally of Polluters, Vows to Get Tough,” Bloomberg News, October 25, 2017. Link: <https://www.bloomberg.com/news/articles/2017-10-25/epa-s-pruitt-denies-he-s-an-ally-of-polluters-vows-to-get-tough>

<sup>2</sup> EPA press release, “Under Agreement with U.S. and State of Texas, Vopak to Reduce Hazardous Air Pollution at Chemical Storage Facility in Deer Park, Texas,” May 17, 2017. Link: <https://www.epa.gov/enforcement/reference-news-release-under-agreement-us-and-state-texas-vopak-reduce-hazardous-air>

<sup>3</sup> Phillips 66 Wood River Refinery web page, link: <http://www.phillips66.com/refining/wood-river-refinery>

<sup>4</sup> Andeavor company, St. Paul Park Refinery Fact Sheet, link: [http://www.andeavor.com/media/1032/andv\\_stpaulpark\\_factsheet.pdf](http://www.andeavor.com/media/1032/andv_stpaulpark_factsheet.pdf)

<sup>5</sup> Mike Hughlett, “St. Paul Park Refinery Part of \$4.1B Sale to Tesoro,” Minneapolis Star Tribune, November 27, 2016. Link: <http://www.startribune.com/st-paul-park-refinery-part-of-4-1-billion-sale-to-tesoro/403080126/>

<sup>6</sup> U.S. Environmental Protection Agency, “Technical Support Document Estimating the Benefit per Ton of Reducing PM<sub>2.5</sub> Precursors from 17 Sectors,” January 2013. link: <https://www.epa.gov/sites/production/files/2014-10/documents/sourceapportionmentbpttsd.pdf>

<sup>7</sup> EPA, “Learn About Dioxin” available at <https://www.epa.gov/dioxin/learn-about-dioxin>, accessed 2/12/2018.

<sup>8</sup> The payments that defendants made to the “natural resource” damages trust fund in several oil spill cases were included in amounts reported as injunctive relief rather than as penalty.

<sup>9</sup> U.S. Environmental Protection Agency. Enforcement: Civil Cases and Settlements, link: <https://cfpub.epa.gov/enforcement/cases/>