

# Less Enforcement: Communities at Risk

*Federal Data Show Decline in EPA Enforcement Leading to Public Health Hazards*



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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 CREDIT:

Cover photo of softball player in Houston near petrochemical plant by Karen Kasmauski/International League of Conservation Photographers (iLCP)

# Less Enforcement: Communities at Risk

## Federal Data Show Decline in EPA Enforcement Leading to Public Health Hazards

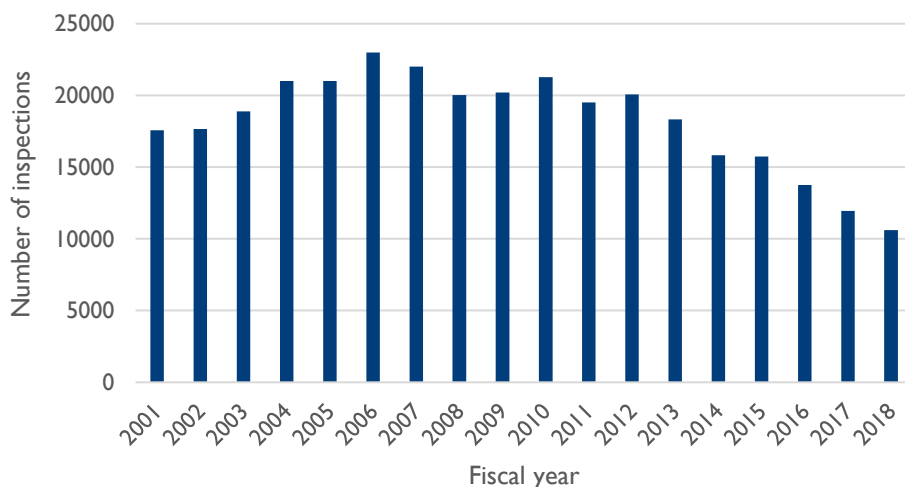
On February 8, the Environmental Protection Agency (EPA) released its annual summary of the actions it took in the 2018 fiscal year to enforce federal laws that protect public health and the quality of our air and water.<sup>1</sup> These annual reports measure the enforcement program's success in making polluters pay for violations of environmental laws and assume responsibility for cleanup. The latest release shows that in fiscal year 2018, the number of EPA enforcement actions and their environmental value declined to their lowest levels in many years. In some cases, these declines perpetuate a long-term trend driven in part by the enforcement program's shrinking budget.

The EPA report shows that enforcement actions fell sharply last fiscal year. The Environmental Integrity Project compared the federal data from last year<sup>2</sup> to two decades of past EPA reports, as well as federal court records and other documents, to reach several conclusions:

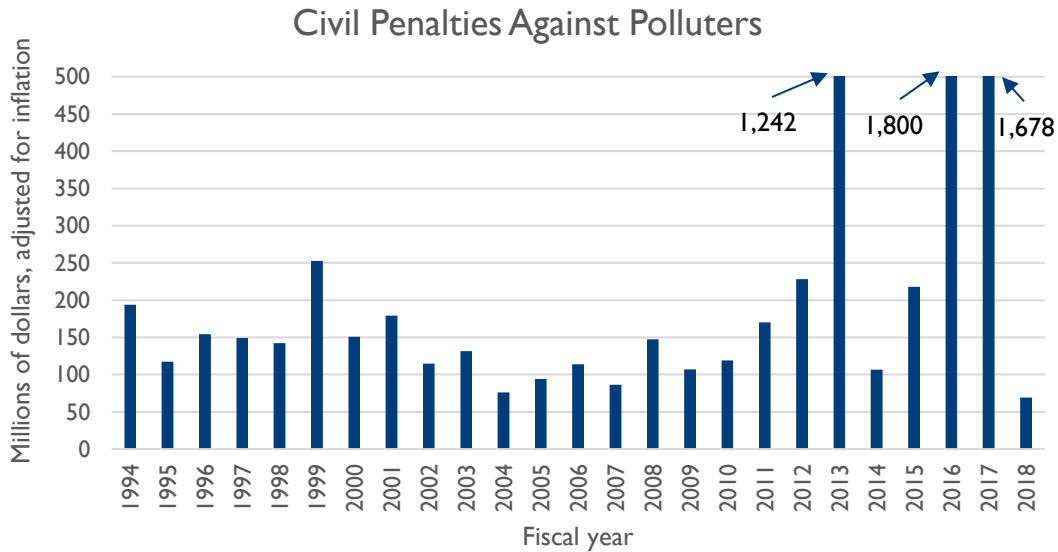
- EPA in 2018 completed 10,612 inspections or evaluations to determine compliance with environmental laws, less than 60 percent of the annual average since 2001.

- For the most part, EPA refers the worst violators to the U.S. Department of Justice for civil prosecution. EPA sent 123 such cases to the Justice Department in fiscal year 2018, up slightly from 2017 but far below prior years. For example, EPA referred an average of 304 cases annually to the Justice Department during the George W. Bush Administration and 211 during the Obama years.

Annual Inspections and Evaluations by EPA



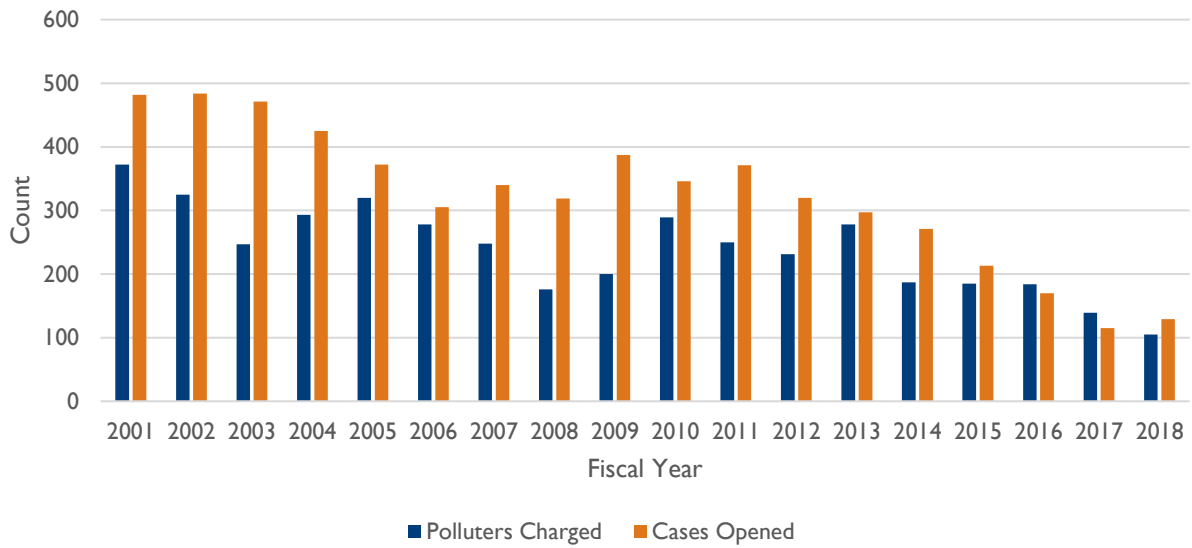
*Chart shows a decline in EPA inspections and evaluations by almost half over a decade, falling to 10,612 in fiscal 2018 from 20,030 in 2008. Fewer inspections means less information is gathered for environmental enforcement.*



*Civil judicial and administrative penalties against polluters, adjusted for inflation, with the \$69 million in fiscal 2018 the lowest in a quarter century. Not portrayed fully are the lines for 2013 (\$1.2 billion), 2016 (\$1.8 billion) or 2017 (\$1.7 billion), which would be off the chart.*

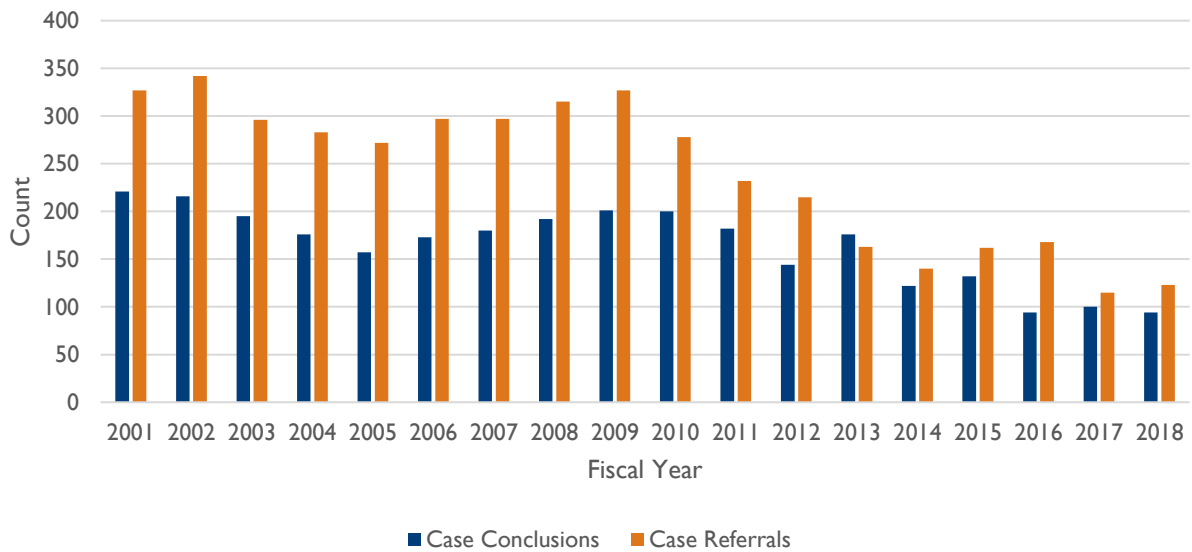
- Where a polluter’s violations appear intentional, EPA will work with the Justice Department or U.S. District Attorneys to bring criminal prosecution that can result in jail time or steep fines for the guilty parties. EPA reports opening 129 criminal cases in 2018. That was slightly more than the previous year, but only about a third of the levels reported between 2008 and 2013. The number of new criminal cases has declined sharply since 2013.
- EPA recovered \$69.5 million in total civil penalties in fiscal 2018, the lowest in both actual and inflation-adjusted dollars since at least 1994. EPA is expected to recover civil penalties or criminal fines to sanction the most serious violations, discourage future noncompliance, and recover any economic gains a violator might realize by avoiding spending on pollution controls.
- The agency secured \$86 million in criminal fines and restitution payments in 2018, significantly lower than recent years but comparable to amounts reported between 2008 and 2012. EPA also reported that the courts handed out sentences that, for all cases combined, will require a total of 73 years behind bars for defendants pleading guilty or convicted of environmental crimes. However, the number of criminal cases opened and the number of defendants charged dropped in 2017 and 2018 to their lowest levels in nearly two decades (see below).

## Criminal Environmental Cases Opened and Polluters Charged



*The number of criminal environmental enforcement cases that were opened (in orange), and the number of defendants who were charged (in blue), between FY 2000 and FY 2018, with a sharp decline after 2013. The number of cases opened last year was the lowest since at least 2001.*

## Civil Judicial Enforcement Case Referrals and Conclusions

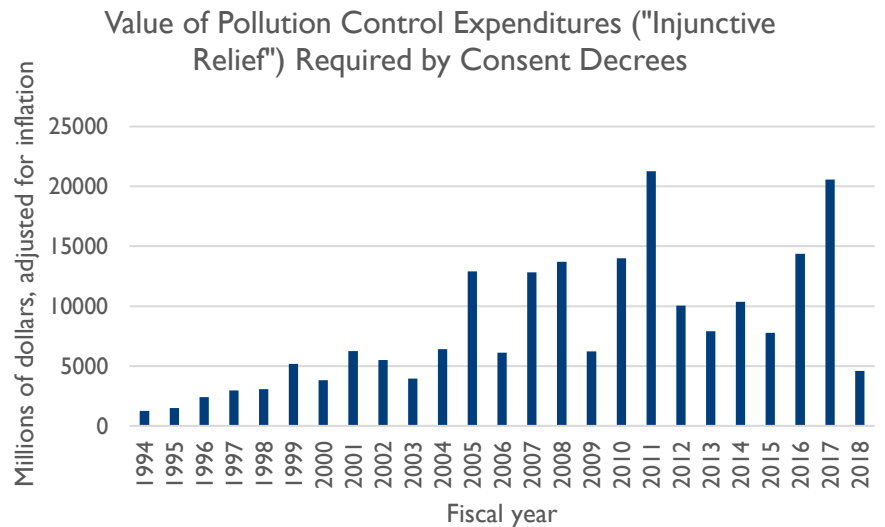


*Civil judicial environmental enforcement cases referred to (orange) and concluded by (blue) the Department of Justice (DOJ) dropped by over half between 2008 and 2018.*

## Value of Enforcement

EPA measures the environmental value of its cases in several ways. These include estimating how much illegal pollution its enforcement actions will eliminate, and the amount violators will have to spend on compliance and cleanup. The agency's latest release reports steep declines in both categories:

- 1) EPA estimates that violators will ultimately spend \$3.95 billion to comply with enforcement actions concluded in 2018. That's the lowest amount since 2003, after adjusting for inflation. These expenditures include investments in the pollution control equipment or operational changes needed to eliminate illegal emissions or wastewater discharges, prevent the risk of accidental releases, or clean up contaminated sites under the Superfund program.



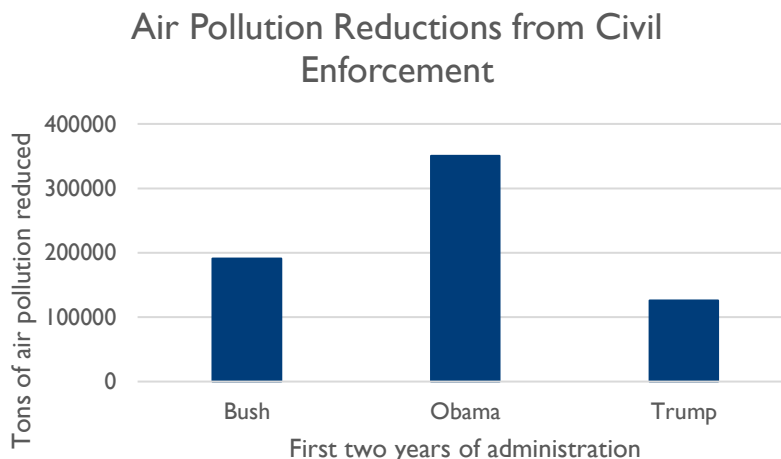
*Injunctive relief requires a regulated entity to invest in a cleanup project or perform some action to bring the entity into compliance with environmental laws. All prior FY dollar figures have been adjusted to reflect value in FY2018 dollars.*

- 2) EPA estimates that enforcement commitments will reduce, treat, or eliminate 268 million pounds of air, water and toxic pollution in 2018. That was slightly more than the amount reported in 2017 but less than half the results reported for each fiscal year from 2012 through 2016. EPA reports that results from before 2012 – which also show much higher amounts – cannot be used for comparison due to differences in the way the information was stored in EPA's database.

## Air Pollution Reductions by Recent Administrations

Another way of measuring pollution reductions is by looking at civil enforcement cases lodged in court against polluters. The Environmental Integrity Project examined the Federal Register for consent decrees lodged during the first two full years of the Trump Administration, and compared them to the first two years of the Obama and George W. Bush administrations. We found that the amount of air pollution reduced under Trump so far fell by 64 percent compared to the first two years of the Obama Administration, and was also 34 percent less than the amount during George W. Bush's first two years. During the first two years under Obama, from January 20, 2009, through the same date in 2011, the

U.S. Department of Justice and EPA reduced 350,662 tons of air pollution in 75 Clean Air Act civil case settlements lodged in the courts, compared to 125,747 tons of pollution reduced in 52 air violation cases during Trump’s first two years in office. Over Bush’s first two years, federal prosecutors reduced 191,079 tons of air pollution in 64 civil cases lodged from 2001 to 2003. (For lists of the largest pollution reduction cases during the first two years of the last three administrations, see Appendix A.)



*Air pollution reductions from civil judicial cases lodged during the first two full years of the last three administrations. The total fell 64 percent from 350,662 tons under Obama in 2009-2010 to 125,747 tons under Trump in 2017-2018.*

The EPA’s enforcement report for FY 2018 should be viewed with caution. Results will vary from one year to the next, and the best cases require several years of casework and litigation. The broad indicators used to measure performance do not always reflect the true value of enforcement work. For example, measuring the gross amount of pollution reduced in a year may not give enough weight to actions that eliminate relatively small amounts of toxins that are dangerous in minute concentrations. Furthermore, annual results can be disproportionately affected by a single case.

EPA announced a settlement with Fiat Chrysler on January 10 that includes a \$305 million civil penalty, which will significantly boost penalty totals for the current fiscal year. Occasionally, violators pay astronomical penalties because their violations are so outrageous. These “outliers,” which include the BP and Volkswagen cases mentioned earlier, can achieve spectacular results but cannot measure the effectiveness of a nationwide program that grapples with thousands of pollution sources. When those outliers are excluded, the data suggests that EPA’s enforcement program is losing strength due to multiple factors. These include budget cuts, loss of staffing, and the misguided belief that serious violations are no longer occurring.

## Cuts in EPA Enforcement Staff

On November 5, 2018, EPA’s Office of Inspector General informed Assistant Administrator Susan Bodine that it planned to begin, “preliminary research on the agency’s enforcement results from fiscal years 2006 to 2018.” This analysis will evaluate how the enforcement workforce and budget has evolved over the last twelve years.

- EPA had the equivalent of 1,919 full-time staff in FY 2006 working in civil enforcement and related compliance programs. By 2018, that number dropped to at least 1,641, a 14 percent decrease, and will likely decline even further based on spending levels approved by Congress last year.

EPA Enforcement Workforce (Full Time Equivalent Employees)			
Year	Criminal Enforcement	Civil Enforcement / Compliance Monitoring	Combined
2006	271	1919	2189
2007	259	1909	2168
2008	255	1903	2158
2009	292	1899	2191
2010	284	1896	2180
2011	300	1928	2228
2012	294	1884	2179
2013	279	1771	2051
2014	267	1717	1984
2015	252	1636	1888
2016	248	1653	1901
2017	238	1641	1879
FY 2018*	224	1618	1842
FY 2019 President's Budget	210	1338	1548

*Note: EIP estimated FTEs based on the funding approved by Congress for FY 2018. For FY 2006 through 2017, FTEs came from the Justification of Appropriation Estimates for the Committee on Appropriations for each year for EPA.*

- EPA’s criminal enforcement program had a workforce of more than 270 in 2006, but its budget left room for only 238 in 2017. As with civil enforcement, staffing levels will likely slip lower given the spending cuts imposed by Congress last year. (For a detailed breakdown of enforcement budget numbers over the last decade, see Appendix B.)

The Trump Administration proposed slashing the enforcement workforce by nearly 18 percent in its proposed budget for the 2019 fiscal year, which would have left it nearly 30 percent smaller than in 2006. The recent appropriations bill signed into law rejects these drastic cuts, but does not provide enough to avoid another small decline in staffing levels that have been shrinking every year.



## Federal vs. State Enforcement

Some argue that EPA can play a smaller role in enforcing federal environmental laws, either because state agencies can pick up the slack or because corporations are more environmentally aware and more conscientious about staying in compliance. States are critical partners when it comes to protecting the environment and, subject to EPA review, are already authorized to implement and enforce most federal environmental requirements. But for good reasons, EPA retains the full authority under our statutes (with very few exceptions) to enforce federal standards even after states assume responsibility for their implementation. That is especially important given limits on state authority and capacity to enforce. For example:

- State authority to recover penalties from environmental violators is much more limited than EPA's. For example, because federal penalties established long ago are periodically indexed for inflation, EPA can ask courts to impose civil penalties of up to nearly \$100,000 per day for each Clean Air Act violation that arises after January of 2015. In contrast, most state agencies can seek no more than \$25,000 per day for the same violations, as they are hamstrung by low penalty limits set long ago that are not indexed for inflation.
- Federal law allows EPA to ask Administrative Law Judges to rule on certain cases, which can speed the resolution of enforcement actions. Even when defendants occasionally exercise their right to appeal such decisions to federal courts, the administrative process saves time by establishing a factual record for judicial review. Many states do not have administrative law judges with the power to make decisions in environmental cases, which means even relatively minor enforcement actions must be referred to the state attorney general (often understaffed) and find space on the crowded dockets of state courts.
- Unlike the federal government, few states authorize the criminal prosecution of those who intentionally or recklessly violate federal environmental rules. Creative state or local prosecutors can sometimes charge the worst environmental violators under other statutes that prohibit fraud or other criminal acts, but even in those cases many lack trained staff to investigate environmental crimes. Notably, one of former EPA Administrator Scott Pruitt's first acts as Oklahoma's Attorney General was to disband the environmental crimes unit established by his predecessor.

State agencies weakened by years of budget cutting may also lack the capacity to maintain a strong enforcement program. It must be said that some states do not always find the will to bring enforcement actions against the largest polluters with strong ties to the political or economic establishment. While that problem is difficult to fit into discussions of "cooperative federalism," it is very real and well understood by anyone who has spent time bringing enforcement actions against coal plants, refineries, big mining operations, or agribusiness.

Most regulated sources – electric power stations, manufacturers, sewage treatment plants and other facilities – attempt to comply with environmental rules. But while self-policing is essential and should be encouraged, it will never be enough to prevent the serious violations that result from backsliding, carelessness, or the temptation to cut corners in a competitive marketplace. Nationwide, nearly a hundred thousand of the largest facilities hold federal permits that limit the amount of pollutants that can be released into the air or water. New industries that were not on the horizon when EPA was founded – like the fracking of shale deposits or the massing of livestock in large confinements – present new challenges today.

## Examples of Delay in Enforcing Environmental Laws

EPA investigators continue to uncover serious violations of pollutant releases into air and water far above amounts allowed by law – from leaking tanks, unlit flares, smokestacks, wastewater treatment plants, spills, and outright dumping. Much of this illegal pollution can be found at facilities run by some of the largest corporations in the U.S. (and in many cases, in the world). In other words, even a much larger enforcement program than the one at EPA today would never run out of work. In its present circumstances, hobbled by budget cuts and a Trump Administration that wants to reduce federal oversight, the agency is unable to keep pace.

To illustrate this, our report summarizes ten cases in which EPA investigators have found serious violations or pollution incidents involving the release of substantial quantities of pollutants that include carcinogens or deadly toxins, such as lead. Others involve the release of bacteria or toxic metals from wastewater treatment plants at slaughterhouses or refineries. These problems were identified anywhere from 17 months to more than four years ago, and EPA has yet to take enforcement action or require the responsible parties to pay the appropriate penalties. The summaries below are based on inspection report findings, notices of violation issued by EPA, or discharge monitoring reports found online in EPA's Enforcement and Compliance History Online (ECHO) database.

# Justice Delayed:

## Ten Examples of Major Violations Still Waiting for Enforcement



*This map shows the location of 10 significant, well-documented environmental violations or unpermitted pollution releases across the country – at an oil refinery, chemical plants, slaughterhouses, a lead smelter, and other locations – that have not resulted in any penalties or enforcement actions by the Trump Administration’s EPA.*

### Louisiana:

**Denka Performance Elastomer** plant in LaPlace, Louisiana. *Air pollution violations at least since 2017.*



This chemical plant, formerly owned by DuPont, manufactures neoprene, a high-strength rubber material synthesized from chloroprene, a compound that EPA has determined is likely to increase the risk of cancer at very low doses. More than 1,500 African Americans live within a mile of the plant, more than two thirds in households below the poverty line. Air monitors at two schools and a hospital downwind from the plant found the average annual concentration of chloroprene to be more

*The Denka chemical plant failed to meet standards designed to control hazardous pollutants, including chloroprene.*

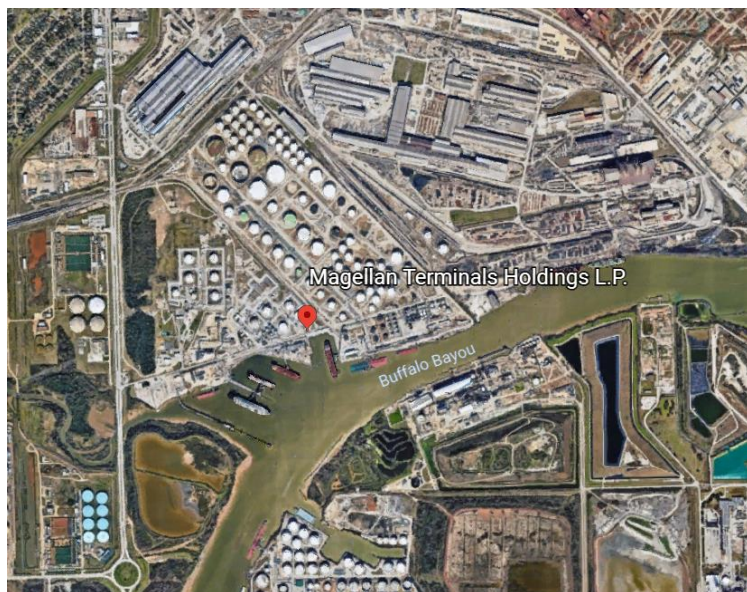
than 10 times the concentration that EPA considers unacceptable for cancer risk, although that represents a decline from even higher levels in earlier years. A recent survey found that cancer rates in the census tract where the plant is to be 39 percent higher than the U.S. average and 25 percent higher than the Louisiana average.<sup>3</sup> According to EPA, “The top 5 census tracts with the highest ... cancer risks nationally are in Louisiana due to Denka (formerly DuPont) chloroprene emissions.”<sup>4</sup>

On March 17, 2017, EPA notified Denka that federal inspectors visiting the plant had found “thousands of instances” where monitored pollutants failed to meet legal limits. EPA’s report alleges that DPE or DuPont failed to plug open lines that leak hazardous gases and calculated that chloroprene levels vaporizing from open wastewater drains could be up to 800 times higher than allowed by the federal Occupational Safety and Health Administration.

Although EPA’s enforcement program has made “cutting hazardous air pollutants” one of its top priorities, the federal agency has yet to take any other enforcement action against the company. Instead, Denka has agreed to a consent order with Louisiana – described in the state’s press release as “voluntary” – requiring the company to take certain actions to reduce chloroprene emissions.<sup>5</sup>

## Texas:

**Magellan Midstream Partners Galena Park.** *Major gasoline spill and air pollution in 2017.*



*The Magellan terminal on the Houston Ship Channel spilled nearly a half million gallons of gasoline and emitted smog-forming chemicals.*

When Hurricane Harvey flooded the Texas coast in August 2017, this petroleum transfer and storage facility east of Houston discharged massive amounts of water and air pollution. Storage tanks at the terminal failed and overflowed during the rain storm, releasing more than 460,000 gallons of gasoline into surrounding waters – the single largest petrochemical leak during the storm. Vapors with a strong odor of gasoline (volatile organic compounds) were reported in nearby residential neighborhoods, causing people to choke, cough and experience watery eyes. Many of the 11,000 residents of Galena Park inhaled

benzene, a well known carcinogen. But the people who live near the terminal received little or no information about the air pollution for days, because most of the air pollution monitors had been shut down during the storm. EPA waited for about a week – until the

monitors were back up and running – before issuing any statements about air quality. On Sept. 3, eight days after the storm, EPA issued a public statement that said in part: “local residents should not be concerned about air quality issues related to the effects of the storm.”<sup>6</sup>

However, this reassurance may have been premature, given the lack of air quality monitoring and Magellan’s own reports about emissions to the Texas Commission on Environmental Quality. The company reported to the state that its Galena Park terminal released 2.4 million pounds of unpermitted – and therefore illegal – volatile organic compound air pollution and 12,735 pounds of benzene between August 23 and September 30, 2017,<sup>7</sup> more than a month after the storm event. EPA has not imposed any penalties on the company for these releases or spills.

Although it is expected that storms will produce some uncontrolled pollution, the Houston area petrochemical industry had been warned for years before Harvey that its tanks and other facilities – built in low-lying and flood-prone areas – were poorly designed and ill prepared for the rain storms and flooding happening with increased intensity due to climate change.<sup>8</sup> At the Magellan Galena Park terminal, for example, two tanks failed and overflowed because they had floating roofs not designed to handle such large volumes of rain.<sup>9</sup> Federal rules require companies to follow good air pollution control practices and to take specific measures to avoid the accidental release of toxic gases. By imposing penalties on incidents like Magellan’s during Hurricane Harvey, EPA would send a message that these companies need to invest in more robust systems that can handle future storms without jeopardizing public health.

## California:

**Dow Chemical Company (Pittsburg, CA).** *EPA inspection report in 2016 found hazardous waste storage problems.*



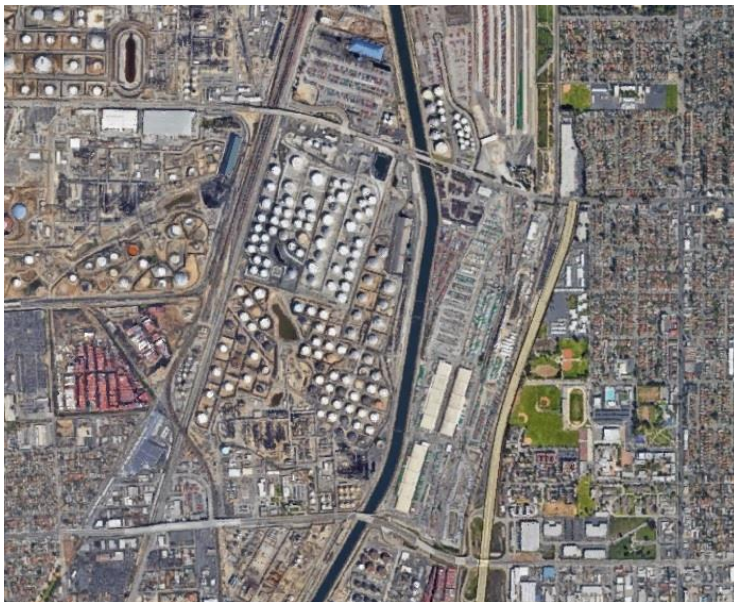
*The Dow Chemical plant northeast of San Francisco stored millions of gallons of hazardous waste without a permit.*

EPA’s National Enforcement Investigations Center (NEIC) and state inspectors inspected this chemical plant in April 2016 for compliance with hazardous waste laws. California asked NEIC to join the inspection because NEIC is well known for its expertise investigating petrochemical plants and other large manufacturing sites. The EPA investigators determined that Dow was storing millions of gallons of hazardous waste without a permit in 21 tanks. EPA concluded that Dow was aware that the contents of the tanks were hazardous and, although not noted in the EPA inspection report, a 2015 state inspection report

noted that Dow was periodically discharging to the local wastewater treatment plant, which is not equipped to treat or process hazardous waste. As a result, it is likely that some of the waste had passed (and may still be routed) through this public utility and discharged into waterways without any treatment.

Moreover, Dow, as part of its chemical operations, runs two furnaces that burn hazardous waste. EPA found multiple violations, including failure to follow rules that prevent dangerous hazardous wastes from being emitted into the air. EPA also determined that Dow's recordkeeping practices regarding these furnaces was so antiquated (operation records were kept as PDFs from microfiche) there was no way to determine whether these furnaces were being operated within regulatory limits. Dow is a well-known, large chemical manufacturing company that should have the expertise and data management capability to operate this facility using technology appropriate for the complex, potentially dangerous operations (i.e., burning hazardous waste). The Environmental Integrity Project sent EPA, the state, and several local, state, and federally elected officials a letter regarding these unaddressed violations in June 2018. To our knowledge, no action has been taken.

**Phillips 66 Los Angeles Refinery.** *Notice of hazardous waste violation in January of 2017.*



*The Phillips 66 Los Angeles refinery failed to control air and water emissions from hazardous waste tanks.*

This refinery consists of two plants connected via pipelines: the Wilmington Plant, which is the refinery, and the Carson Plant, which is a “cracker” that produces intermediates on the refining side (diesel distillates, naphtha distillates, etc.) EPA inspected the facility in August 2015 for compliance with federal hazardous waste management laws. In Jan. 2017, EPA issued a Notice of Violation, but neither EPA nor the state have followed up with any enforcement action. EPA's notice letter alleges that Phillips failed to control air emissions from hazardous waste tanks, failed to prevent hazardous waste from

spilling onto unprotected soils/surfaces, stored and disposed of hazardous waste without a permit, treated hazardous waste without a permit, or failed to determine when wastes were hazardous and required to be managed as such. All of these violations go to the core purpose of the federal Resource Conservation and Recovery Act (RCRA), which is to prevent hazardous waste from entering the environment and endangering public health. Of particular concern was a stream of liquid waste leaking from Phillips' Selenium Removal Unit and draining through the Los Angeles Sanitation District's Wastewater Treatment plant into the Pacific Ocean. As with Dow, LA's wastewater plant is not equipped to treat or remove hazardous waste from their industrial customers.

In both these cases, the State of California had routinely inspected these facilities and found only minor violations. EPA found major hazardous waste violations at both Dow (in 2016) and Phillips 66 (in 2015). It is unclear why no enforcement by EPA has ensued.

## Pennsylvania:

**Keystone Protein Co.** (Fredericksburg, PA). *Monitoring reports show water pollution violations at least since 2015.*



*The Keystone poultry processing plant northeast of Harrisburg, Pa., discharged excessive amounts of nitrogen water pollution.*

This poultry and fish oil processing plant had 62 water pollution permit violations between 2016 and 2018, discharging excessive amounts of nitrogen pollution into a tributary to the Susquehanna River and Chesapeake Bay, according to the EPA's Enforcement and Compliance Online (ECHO) database.

Keystone Protein failed to meet its monthly nitrogen limits every month since October 1 of 2015, discharging as much as three times what their permit allows. The company paid no more than \$1,030 in penalties to the state for

the violations so far, despite having violated discharge limits for nitrogen, phosphorus and dissolved oxygen for more than a thousand days since the beginning of 2016 at its plant in Fredericksburg, Pennsylvania.<sup>10</sup> Despite the repeat violations and lack of strong response by the state, EPA has imposed no penalties on the plant.

## Delaware:

**The Mountaire Farms** poultry processing plant in Sussex County. *Discharge monitoring reports show violations at least since 2016.*



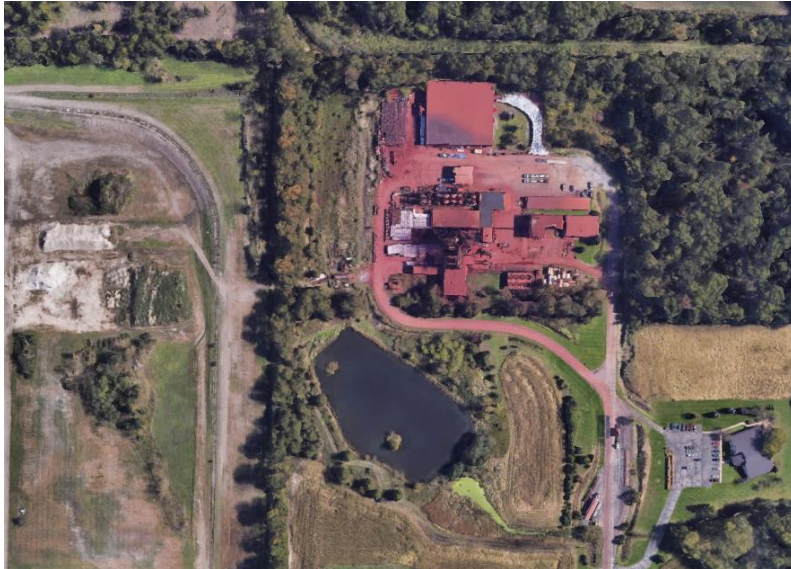
*The Mountaire slaughterhouse discharged wastewater with excessive amounts of bacteria, oil, grease, and waste solids.*

This chicken slaughterhouse at 55 Railroad Avenue in Selbyville has been in violation of the Clean Water Act every quarter from the first of half of 2016, according to EPA's online enforcement database. The plant's effluent discharged more than 14 times its permitted levels of enterococci bacteria in the third quarter of 2017, plus violations for oil and grease, and waste solids.<sup>11</sup>

Despite the repeat violations since 2016, neither EPA nor the state have imposed any penalties on the plant.

## Indiana:

**Magnetics International, Inc. and American Iron Oxide** in Burns Harbor. *EPA notice of violation in 2016.*



*The Magnetics International hydrochloric acid regeneration plant in Northern Indiana failed to meet emission limits or pollution control standards for hydrochloric acid and chlorine*

American Iron Oxide Co. and Magnetics 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.

On June 28, 2016, EPA notified American Iron Oxide and Magnetics International that both companies had violated Clean Air Act standards hundreds of times between 2006 and 2016 at their Portage and Burns Harbor

facilities in Indiana. The notice also alleges that both companies failed to comply with the emission control, testing, and reporting requirements of a 2006 consent decree meant to control hydrochloric acid and chlorine releases.

EPA’s 2016 notice letter alleges that American Iron Oxide and Magnetics International consistently failed to meet the operating parameters established by each company, indicating that their emissions of hazardous air pollutants were higher than allowed or reported. For example, between December 28, 2006, and May 28, 2014, Magnetics International’s “Roaster A” failed to establish the minimum temperature requirements for 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. As many as 23,000 people live within three miles of the plants, and about a quarter of these residents (mostly white) are below the poverty line, according to federal statistics.



## Minnesota:

**United Taconite** iron ore plant in Forbes, Minnesota. *Notice of air pollution violation in 2014.*



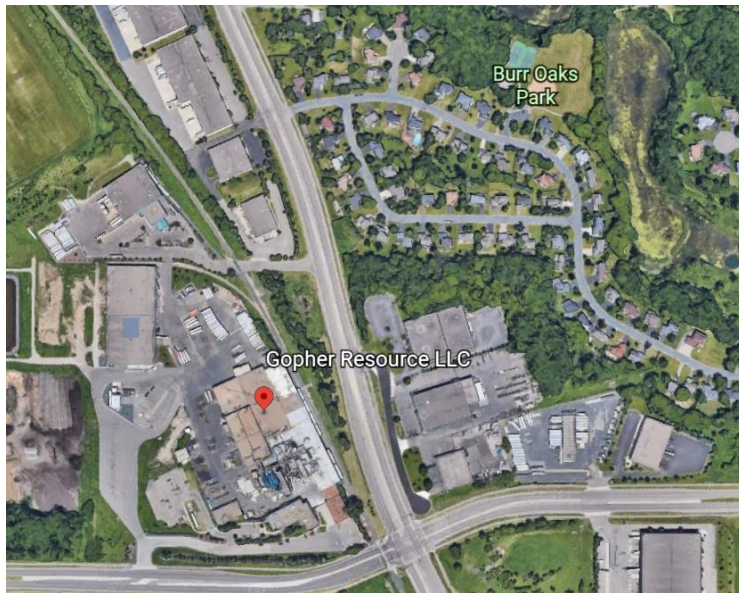
*The United Taconite iron ore plant in northern Minnesota failed to meet emission limits or pollution control standards for soot, nitrogen oxide air pollution, sulfur dioxide, and heavy metals.*

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 soot (also known as particulates, which can trigger asthma and heart attacks) directly to the atmosphere for nearly 600 hours, bypassing the pollution control systems (called baghouses) that ordinarily should be able to remove 90 percent of these pollutants. The plant 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 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. About 400 people live within three miles of the plant, and 23 percent of them are below the poverty line (the vast majority white), according to federal statistics. United Taconite agreed to pay a \$50,000 state fine for dust violations in June 2016.<sup>12</sup> (Note: The evening before EIP released its report, United Taconite's owner, Cleveland-Cliffs, called EIP to say that the company had agreed to pay EPA \$60,000 in civil penalties and complete \$150,000 in environmental projects to address the violations. However, the consent decree requiring this has not yet been lodged in the courts and the record to confirm this was not immediately available.)

**Gopher Resource** plant in Eagan, Minnesota. *Notice of air pollution violation in 2015.*



*The Gopher Resource lead processing plant south of St. Paul failed to meet emission limits or pollution control standards for lead air pollution and dioxins.*

Gopher Resource owns and operates a 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 like 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 percent of the time between January 6, 2014, and December 31, 2014.

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 percent of their operating time, making it likely that temperatures were too low to destroy these pollutants. About 38,000 people live within three miles of the plant, 84 percent of whom are white and 13 percent of whom live below the poverty line, according to federal statistics. EPA online records show this company has received multiple administrative orders over the past few years from EPA and the state agency for Clean Air Act violations.

## Ohio:

**Globe Metallurgical** plant in Waterford, Ohio. *Notice of air pollution violation in 2015.*



*The Globe Metallurgical metals manufacturing plant southeast of Columbus failed to meet emission limits or pollution control standards for soot (particulate air pollution).*

Globe Metallurgical operates a metals (ferroalloy) manufacturing plant in Washington County, Ohio, that includes several electric arc furnaces (EAF). A January 30, 2015, Notice of Violation from EPA 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 into 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.

## APPENDIX A:

### Largest Air Pollution Reduction Cases Under Three Administrations

Below are the 10 largest air pollution reduction civil cases lodged during the first two years of Trump, Obama and George W. Bush Administrations, as well as the 10 largest judicial penalties and injunctive relief cases during these time periods. It is worth noting that for the most recent case lodged during the Trump administration, Fiat Chrysler, EPA has yet to publish any pollution reduction estimates or injunctive relief value.

Top 10 Pollution Reduction Cases for Trump (1/23/2017 - 1/23/2019)			
Defendant	State	Final Order Lodged	Total Amount of Air Pollution Reduced (tpy)
Midwest Generation, LLC	IL	3/9/2018	52,257
Orion Engineered Carbons, LLC	LA, OH, TX	12/22/2017	11,663
Sid Richardson Carbon, LTD	LA, TX	12/22/2017	11,182
Exxon Mobil Corp.	LA, TX	10/31/2017	8,695
Columbian Chemical Company	KS, LA	12/22/2017	6,354
Derive Systems, Inc., et al.	N/A	9/24/2018	6,338
MFA, Inc. and MFA Enterprises, Inc.	MO	7/2/2018	4,386
Harcros Chemicals, Inc.	AL, KS, LA	7/31/2017	3,450
Alon USA, LP	TX	5/30/2017	2,932
Anchor Glass Container Corporations, Inc.	FL, GA, IN, MN, NY, OK	8/3/2018	2,800

**Top 10 Pollution Reduction Cases for Obama (1/21/2009 - 1/21/2011)**

Defendant	State	Final Order Lodged	Total Amount of Air Pollution Reduced (tpy)
Westar Energy, Inc.	KS	1/25/2010	78,600
Northern Indiana Public Service Co.	IN	1/13/2011	64,000
Cinergy Corporation, et al. (now Duke Energy Indiana)	IN	12/22/2009	37,198
Lafarge North America, Inc., et al.	AL, GA, IA, IL, KS, MI, MO, NY, OH, OK, PA, SC, WA	1/21/2010	35,900
American Municipal Power, Inc.	OH	5/18/2010	34,390
Kentucky Utilities Co.	KY	2/3/2009	32,599
Hoosier Energy Rural Electric Cooperative, Inc.	IN	7/23/2010	24,515
INVISTA, S.a.r.l.	DE, GA, NC, SC, TN, TX, VA	4/13/2009	9,934
Mosaic Fertilizer, LLC	LA	10/5/2009	7,617
Saint-Gobain Containers, Inc.	CA, IL, IN, LA, MA, MO, NJ, NC, OK, PA, TX, WA, WI	1/21/2010	5,912

**Top 10 Pollution Reduction Cases for Bush (1/22/2001 - 1/22/2003)**

Defendant	State	Final Order Lodged	Total Amount of Air Pollution Reduced (tpy)
Motiva, Equilon, and Shell	LA, TX	3/21/2001	58,850
PSEG Fossil, LLC	NJ	1/24/2002	54,000
12 Ethanol Cases*	MN	10/2/2002	48,960
Marathon Ashland Petroleum, Inc.	IL, KY, LA, MI, MN, OH, TX	5/11/2001	20,800
Conoco Inc.	CO, LA, MT, OK	12/20/2001	8,000
Premcor Refining Group, Inc. (formerly Clark Refining and Marketing)	IL	7/12/2001	5,600
Navajo Refining, Co., et al.	MT, NM	12/20/2001	2,800
Boise Cascade Corporation	LA, OR	3/13/2002	2,166
Natural Gas Pipeline Company	CO	2/1/2001	400
Chevron USA, Inc.	HI	2/19/2001	200

*Note: These 12 cases were all filed against ethanol plants in Minnesota by EPA on the same day. The pollution reduction number is a total of the 12 cases.*

## APPENDIX B: BUDGET OF EPA ENFORCEMENT OFFICES

EPA Enforcement Appropriations (millions of \$)					
Year	Actual Expenditures			Inflation Adjusted (2018 \$)	
	Criminal Enforcement (millions of \$)	Civil Enforcement / Compliance Monitoring	Combined Total	Combined Total	
2006	50	262	313	397	
2007	48	273	321	398	
2008	48	284	332	395	
2009	58	292	350	416	
2010	57	299	356	413	
2011	59	312	371	423	
2012	57	308	365	405	
2013	55	291	346	377	
2014	56	296	352	380	
2015	55	294	349	377	
2016	55	298	352	374	
2017	55	289	344	358	
FY 2018 Enacted	52	291	343	343	
FY 2019 President's Budget	48	242	291	291	

Appendix C. 10 Cases of Environmental Violations Lacking EPA Enforcement

Owner / Operator	City	State	Violations	Date Violation Identified	Population within 1 mile	Minority	Children / Seniors	Poverty
Magnetics International / American Iron Oxide	Burns Harbor / Portage	IN	Failed to meet emission limits or pollution control standards for: HCl and Chlorine	6/28/2016	2026 / 262	18% / 9%	9% (6%) / 9% (22%)	14% / 26%
United Taconite*	Forbes	MN	Failed to meet emission limits or pollution control standards for: Particulates, NOx, SO2, and heavy metals	2/21/2014	405	5%	3% / 18%	23%
Gopher Resource	Eagan	MN	Failed to meet emission limits or pollution control standards for: Lead, dioxins, and furans	11/25/2015	3780	23%	7% / 6%	8.9%
Globe Metallurgical*	Waterford	OH	Failed to meet emission limits or pollution control standards for: Particulates Extended capacity of electric arc furnace, resulting in higher emissions of: Particulates, SO2	1/30/2015	1050	2%	5% / 15%	45%
Denka Performance Elastomer	LaPlace	LA	Failed to meet emission limits or pollution control standards for: chloroprene	3/17/2017	1579	97%	6% / 14%	69%
Magellan Midstream Partners	Galena Park	TX	During Hurricane Harvey, Magellan released gasoline into the surrounding waters and emitted VOCs into the surrounding air.	8/23/2018	7300	92%	9% / 11%	53%
Dow Chemical Company*	Pittsburg	CA	Storing millions of gallons of hazardous waste without a permit, which were eventually discharged into the local wastewater treatment plant.	4/8/2016	61875	76%	8% / 9%	40%
Phillips 66 Refinery	Los Angeles	CA	Failure to control both air and water emissions from hazardous waste tanks	1/23/2017	9067	81%	8% / 9%	48%
Keystone Protein	Fredericksburg	PA	Discharging excess nitrogen pollution	1/1/2016	1043	5%	6% / 15%	16%
Mountaire Farms	Selbyville	DE	Plants effluent had concentrations of enterococci bacteria, oil, grease, and waste solids in violation of permit limits	9/29/2015	2033	47%	8% / 16%	48%

Reflects noncompliance identified through notices of violation, inspection reports, or discharge monitoring reports. In some cases, violations began much earlier.

\*These facilities had populations under 100 in the 1-mile radius, so data from the 3-mile radius were used.

## END NOTES:

<sup>1</sup> EPA report, “Fiscal Year 2018 Enforcement and Compliance Annual Results,” February 8, 2019. Link: <https://www.epa.gov/enforcement/enforcement-annual-results-fiscal-year-2018>

<sup>2</sup> Unless otherwise noted, in this report we are referring to the federal fiscal year. The 2018 federal fiscal year, for example, runs from October 1, 2017, through September 30, 2018.

<sup>3</sup> Louisiana Environmental Action Network, “Cancer Incidence Rates by Census Tract in St John the Baptist Parish, 2006-2014,” April 13, 2018. Link: <https://leanweb.org/public-health/cancer-incidence-rates-census-tract-st-john-baptist-parish-2006-2014/>

<sup>4</sup> EPA website, “EPA in Louisiana. LaPlace, Louisiana - Frequent Questions.” Link: <https://www.epa.gov/la/laplace-louisiana-frequent-questions>

<sup>5</sup> Louisiana Department of Environmental Quality, “LDEQ and Denka sign AOC designed to reduce chloroprene emissions at LaPlace facility,” January 10, 2017. Link: <https://deq.louisiana.gov/index.cfm?md=newsroom&tmp=detail&aid=ldeq-and-denka-sign-aoc-designed-to-reduce-chloroprene-emissions-at-laplace-facility>

<sup>6</sup> EPA Press Release, “Status of Water Systems in Areas Affected by Harvey,” September 3, 2017. Link: <https://www.epa.gov/newsreleases/status-water-systems-areas-affected-harvey>

<sup>7</sup> Environmental Integrity Project report, “Preparing for the Next Storm,” August 16, 2018. Link: <http://www.environmentalintegrity.org/wp-content/uploads/2018/08/Hurricane-Harvey-Report-Final.pdf>

<sup>8</sup> Matthew Brown, “Tank failures in Harvey reveal vulnerabilities in storm,” Associated Press, September 9, 2017. <https://apnews.com/0485b3c424be4ce3bb555cf16a88f3bd>

<sup>9</sup> Jordan Blum, “Failures of floating-roof oil tanks during Harvey raise concerns,” Houston Chronicle, October 11, 2017. Link: <https://www.houstonchronicle.com/business/energy/article/Failures-of-floating-roof-tanks-during-Harvey-12269513.php>

<sup>10</sup> Environmental Integrity Project, “Water Pollution from Slaughterhouses,” October 11, 2018. Link: <http://www.environmentalintegrity.org/reports/water-pollution-from-slaughterhouses/>

<sup>11</sup> Ibid.

<sup>12</sup> News Tribune, “United Taconite Cited for Dust Violations,” June 22, 2016. Link: <https://www.duluthnewtribune.com/business/energy-and-mining/4060285-united-taconite-cited-dust-violations>