



EPA ENFORCEMENT AFTER 20 YEARS:

Inspections, Investigations, Prosecutions Down by Half; 20-Year Decline Undermines Environmental Justice

On his first day in office, President Biden signed an Executive Order pledging to, “hold polluters accountable, including those who disproportionately harm communities of color and low-income communities.”¹ To keep that promise, the Biden Administration will have to rebuild an EPA enforcement program battered by budget cuts, worn down by the polluter-friendly policies of the last Administration, and undermined by “states’ rights” advocates hostile to federal enforcement of federal environmental laws. Not surprisingly, these relentless attacks have taken a toll over the last two decades.

Annual reports from the U.S. EPA’s Office of Enforcement and Compliance Assurance show that between the 2018 and 2021 fiscal years, the number of inspections, criminal investigations, and civil and criminal prosecutions fell to about half the average yearly totals between 2002 and 2017. The amounts paid by polluters also hit new lows. Adjusted for inflation and comparing average annual results, civil penalties in 2018-2021 were at least 28% lower than during 2002-2017, while criminal fines declined 49%. These figures exclude billions of dollars in penalties that BP, Volkswagen, and four other companies paid in a few historically big enforcement actions (see Table 3). When these “outliers” are included, civil and criminal penalties declined 36% and 83%, respectively, in 2018-2021 compared to 2002-2017.

EPA’s annual reports also estimate the total amount defendants were expected to spend under civil consent decrees to remedy their violations, e.g., by installing pollution controls or paying for the repair of natural resources. Adjusted for inflation, the dollar value of these remedies averaged \$9.9 billion a year from 2002-2017 and \$5 billion between 2018-2021, a 49% decline. The value of court-ordered environmental projects in criminal cases fell from an average \$135 million between 2004 and 2017 to less than \$2 million between 2018-2021. Again, these comparisons exclude the extraordinarily large amounts that BP, Volkswagen, and two other defendants were expected to spend cleaning up their violations under the consent decrees and plea agreements that apply to those cases (see Table 3).

Superfund cleanups were supposed to be a priority for the previous Administration,² but the inflation-adjusted cleanup costs EPA recovered from parties responsible for contaminating abandoned dumpsites dropped by more than a third over the same period.

FY 2021 Results: There are some encouraging signs among the results reported for the latest fiscal year, which ended on September 30, 2021. Civil penalties (\$160 million) and injunctive relief (\$8.47 billion) were closer to the norm for that year when adjusted for inflation and Volkswagen and the other outlier cases in Table 3 are excluded. But the 98 cases referred to the Justice Department for civil prosecutions remained less than half the annual average between 2002-2017 while the 1,603 civil cases that were successfully concluded fell to the lowest level during the 20-year period analyzed here. The number of criminal cases opened (123) and polluters charged (105) were at their second lowest levels in the past two decades, while fines and years of incarceration were at their lowest.

All of the data obtained were drawn from the annual results announced by the Office of Enforcement and Compliance Assurance (OECA) for each fiscal year. All dollar amounts below are adjusted to 2021 values to account for inflation.

Table I: EPA Enforcement Performance Measures 2002-2017 vs. 2018-2021

Category	2002-2017 Annual Average	2018-2021 Annual Average	% Change
Civil/Criminal Actions			
Civil Inspections	18,755	10,110	-46%
Criminal Investigations	326	167	-49%
Civil Cases Referred to Justice Dept.	237	102	-57%
Civil Judicial/Administrative Case Conclusions	3,392	1,673	-51%
Criminal Defendants Charged	240	110	-54%
Civil/Criminal Enforcement Results (in millions of dollars)			
Civil Penalties	750	480	-36%
<i>Civil Penalties, outliers removed</i>	188	135	-28%
Civil Supplemental Environmental Projects	51.5	20	-61%
Injunctive Relief (civil cases)	11,675	5,020	-57%
<i>Injunctive Relief (civil cases), outliers removed</i>	9,910	5,020	-49%
Superfund Cleanup (funds recovered)	1,759	1,163	-34%
Criminal Fines and Restitutions	407	70	-83%
<i>Criminal Fines and Restitutions, outliers removed</i>	138	70	-49%
Court Ordered Environmental Projects (2004-2017)	601	2	-100%
<i>Court Ordered Environmental Projects (2004-2017), outliers removed</i>	135	2	-99%

Source: Annual enforcement reports published by the USEPA every fiscal year. All dollar amounts have been inflation adjusted to 2021 dollars.

While it is not unusual for results to vary from one year to the next, the long-term decline in almost every measure of enforcement outputs is troubling. It should not be surprising, however, given that EPA has lost nearly 700 enforcement staff over the past decade, about 22% of its workforce. The Biden Administration requested a modest increase in staff levels for fiscal year 2022, but a Congress limping from one continuing resolution to the next may not approve it. David Uhlmann, nominated to lead EPA's enforcement program on June 22, 2021, is still awaiting confirmation from a gridlocked Senate eight months later.

At least in some regions, the Agency is increasingly reluctant to enforce the law (and protect the vulnerable communities the Biden has pledged to serve) without first obtaining permission from states where EPA enforcement is not always welcome. While it makes sense for federal and state agencies to work together whenever possible to bring violators to justice, Congress gave EPA the power to take unilateral enforcement action when needed. Cooperative federalism is a sensible concept but can be misused to shield polluters from EPA rather than protect public health or the environment from polluters.

Whatever the reason, EPA enforcement's decline makes it easier for polluters to violate federal environmental laws without fearing the consequences. The evidence suggests that too often, even the most serious, repeated violations do not get the kind of "timely and appropriate" enforcement response expected under the policies that EPA has negotiated with states. For example, EPA's "Enforcement and Compliance History Online" database identifies "high priority" violations of the Clean Air Act have continued for at least the past three years at 344 facilities for which no formal enforcement actions by either EPA or states can be found within the past five years.³ These statistics do not include serious violations that remain unidentified because neither EPA nor states have the resources to find them.

Civil and Criminal Enforcement Actions:

Average Yearly Results 2018-2021 vs. 2002-2017

Congress gave EPA the authority to pursue civil enforcement action against polluters and criminal prosecutions for violations that result from intentional misconduct. Table 1 above and the discussion below compare the average yearly number of civil inspections, criminal investigations, and civil and criminal cases initiated and concluded from 2018-2021 to yearly averages between 2002 and 2017.

- **EPA Inspections: Down 46%**, from an average 18,755 per year between 2002 and 2017 to 10,110 per year from 2018 through 2021. During the 2020 fiscal year, EPA inspections fell to their lowest level in more than two decades. But inspections had already fallen to their second and third lowest levels during the two years predating the pandemic, indicating that covid shutdowns had a relatively small impact on the downward trend;
- **Criminal Investigations: Down 49%**, from a yearly average of 326 in 2002-2017 to 167 in 2018-2021;

- **Cases Referred for Civil Prosecution: Down 57%**, from an average 237 per year between 2002 and 2017 to 102 per year from 2018-2021;
- **Civil Cases Concluded: Down more than 50%**, averaging 3,392 per year from 2002 through 2017 but only 1,674 between 2018-2021;
- **Criminal Defendants Charged: Down 54%**, from a yearly average of 240 in 2002-2017 to 110 from 2018-2021.

Civil and Criminal Case Outcomes:

2018-2021 vs. 2002-2017

As the number of inspections, investigations, and civil and criminal cases has declined, so have the total amounts recovered from polluters in civil penalties, criminal fines, and cleanup costs, and the amount of jail time for criminal defendants. **Please note that because comparisons are based on 20 years of data, all monetary values are inflation-adjusted to 2021 dollars.**

Civil and criminal cases involving six defendants – BP, Transocean, Duke Energy, Volkswagen, Toyota and Fiat Chrysler – netted a combined total of nearly \$12.5 billion in penalties and \$31.5 billion for cleanup costs (see Table 3). These enforcement actions represent some of the best work EPA and the Justice Department have done in the past decade. But given their outsized impact, we include a comparison of long-term trends that does not count the penalties and injunctive relief values from these six “outlier” cases.

- **Civil Penalties: Down 28%** Adjusted for inflation to reflect 2021 dollars and excluding the outliers discussed above, civil penalties declined from an average \$188 million per year between 2002-2017 to \$135 million from 2018-2021. When the outliers from BP, Volkswagen, and other cases in Table 3 are included, annual civil penalties slid 36%, from an average of \$750 million in 2002-2017 to \$450 million between 2018-2021.
- **Supplemental Environmental Projects: Down more than 60%**. Enforcement settlements secured an average \$51.5 million a year for community-based environmental projects between 2002 and 2017 but only \$20 million per year from 2018-2021;
- **Injunctive Relief: Down 49%**. Even after excluding the BP and Volkswagen results, polluters shelled out an inflation-adjusted \$9.9 billion per year from 2002-2017 to install pollution controls or take other actions to get back into compliance, compared to an average \$5 billion per year from 2018-2021. When BP and Volkswagen are included in totals, injunctive relief averaged \$11.68 billion between 2002-2017, declining 57% to the \$5 billion average for 2018-2021.

- **Superfund Cleanup: Down 34%.** EPA recovered an average \$1.76 billion per year (in 2021 dollars) from polluters to pay for the cleanup of abandoned hazardous waste dumps between 2002 and 2017, but only \$1.165 billion per year from 2018-2021. The Trump Administration promised to make Superfund cleanups a priority: Whatever that meant, the parties who dumped hazardous waste at these contaminated dumpsites paid a lot less for cleanup over the last four years.
- **Criminal Fines & Restitution: Down 48%,** even after removing unusually large criminal penalties in the BP, Transocean, and Volkswagen cases (see Table 3). With these outliers removed, inflation-adjusted criminal penalties averaged \$138 million per year from 2002-2017, compared to \$70 million between 2018-2021. When payments for fines and restitution from BP, Transocean, and Volkswagen are included and inflation-adjusted, criminal penalties averaged more than \$400 million per year in 2002-2017.
- **Court-Ordered Environmental Projects:** EPA began measuring anticipated expenditures from cleanup costs or other remedial actions resulting from plea agreements in 2004. Between 2004 and 2017, the value of these court-ordered environmental agreements averaged \$135 million a year, compared to a negligible \$2 million a year between 2018 and 2021. The decline is much greater if the \$3.4 billion set aside for cleanup of coal ash contamination at Duke Energy sites is included (see Table 3).
- **Jail Time: Down by more than half,** with prosecutions resulting in an average annual total of 120 years of incarceration between 2002-2017 versus 59 years from 2018-2021. Congress recognized that the threat of jail time for intentional misconduct, which can have dangerous consequences, would act as a powerful deterrent to corporate misbehavior. That deterrent effect has waned in recent years.

While the last four years saw new lows, EPA enforcement actions began to drop off during the second term of the Obama Administration when the budget ax fell hard on EPA (see Table 2). EPA's enforcement program has a lot of moving parts, so it is unsurprising to see some performance indicators fall and others rise from one year to the next. For example, a handful of large cases might prove to be unusually complex and take longer than expected to conclude.

But from a longer-term perspective based on twenty years of data, almost every measure of performance – inspections, criminal investigations, civil cases referred to or concluded by the Justice Department, criminal defendants charged, civil penalties or criminal fines paid, cleanup costs recovered from polluters – points to a serious decline in EPA's capacity to enforce our environmental laws. That is a wake-up call the Biden Administration needs to answer before it is too late.

Table 2 breaks out the average annual results for each four-year period between 2002 and 2005 to allow for a closer look at how enforcement actions and results have varied over the past twenty years. Year-by-year results that include nominal and inflation-adjusted values for penalties and injunctive relief are [available here](#).

Table 2. Annual Enforcement Measures: 4-year averages

Category	4-Year Annual Averages				
	2002 - 2005	2006 - 2009	2010 - 2013	2014 - 2017	2018 - 2021
Enforcement FTE	-	3,231	3,170	2,808	2,508
Civil/Criminal Actions					
Civil Inspections	19,637	21,299	19,790	14,295	10,110
Criminal Investigations	438	338	334	192	167
Civil Cases Referred to Justice Dept.	269	309	222	146	102
Civil Judicial/Administrative Case Conclusions	4,040	4,322	2,990	2,216	1,673
Criminal Defendants Charged	296	226	262	174	110
Civil/Criminal Enforcement Results (in millions of dollars)					
Civil Penalties	177	135	498	2,188	480
<i>Civil Penalties, outliers removed</i>	177	135	208	233	135
Civil Supplemental Environmental Projects	82	61	34	29	20
Injunctive Relief (civil cases)	7,766	10,367	14,293	14,276	5,017
<i>Injunctive Relief (civil cases), outliers removed</i>	7,766	10,367	14,293	7,028	5,017
Superfund Cleanup (funds recovered)	1,274	1,853	2,270	1,640	1,163
Criminal Fines and Restitutions	101	83	485	958	70
<i>Criminal Fines and Restitutions, outliers removed</i>	101	83	153	216	70
Court Ordered Environmental Projects	-	60	903	1,128	2
<i>Court Ordered Environmental Projects, outliers removed</i>	-	60	174	227	2

Source: Annual enforcement reports published by the USEPA every fiscal year. All have been inflation adjusted to 2021 dollars.

Why Enforcement Has Declined

Budget Cuts

EPA has lost a quarter of its enforcement staff over the past four years compared to the size of its workforce between 2006 and 2013. EPA's enforcement program averaged 2,508 full-time employees (FTEs) from 2018-2021 versus 3,201 from 2006-2013,⁴ an eight-year period spanning both Republican and Democratic Administrations. The recent exodus of senior staff with decades of experience has further diminished EPA's capacity to hold polluters accountable for their violations. The decline in enforcement capacity has largely continued since Democrats recaptured the U.S. House in 2018 and won the White House and Senate in 2020. For example, EPA filed 2,431 enforcement positions in 2019, its lowest level in at least 20 years, and only 2,439 in 2020.⁵ With the federal government limping through a series of continuing resolutions that fund the government for only a few weeks at a time, it is hard to imagine the situation improving in 2022.

The low staff totals may reflect delays in filling available positions in recent years caused by internal red tape or foot-dragging by the Trump Administration. And EPA managers will need to adjust to new budget realities by, for example, taking advantage of new technologies that make it easier to identify serious violations and streamlining the internal reviews needed to approve cases for prosecution and move them across the finish line. But there is a limit to what EPA can do to offset deep cuts in an enforcement staff that even in better times was always hard pressed to respond to thousands of environmental violations – many of which continue for years – that accumulate in a country as large, diverse, and complicated as our own. President Biden's promise to hold polluters accountable and deliver environmental justice will ring hollow if nothing is done to restore the enforcement program's capacity to keep those commitments.

EPA Deference to States

With certain exceptions, EPA is also increasingly reluctant to exercise its enforcement power without at least the tacit support of state agencies that have been authorized to implement and enforce certain federal requirements subject to continued EPA oversight. Given their shared jurisdiction, EPA and its state counterparts will of course need to communicate regularly and coordinate their actions whenever possible. But that process should not be used to derail or unreasonably delay enforcement actions. Significantly, Congress made crystal clear that EPA retained its full authority to enforce the Clean Air Act, the Clean Water Act, and other federal statutes even after states assumed responsibility for day-to-day implementation of certain requirements.⁶

“Cooperative Federalism” Misused to Shield Polluters

It makes good sense for federal and state agencies to work together as much as possible to monitor compliance and bring environmental violators to justice. But the hard reality is that

some states instinctively resist the exercise of EPA's enforcement power within their jurisdiction. EPA's misplaced deference to state authorities in the face of clear violations of federal law left the residents of Flint, Michigan, exposed to drinking water for years before cleanup finally got underway. Unfortunately, Flint is not the only community that has been left exposed to dangerous pollution by lax enforcement.

For example, the Environmental Integrity Project shared information with EPA in 2019 demonstrating that five large boilers at the BP Whiting Refinery's steam plant were violating fine particle emission limits year after year. Fine particle pollution significantly increases the risk of heart and lung diseases that lead to premature death. The EPA began investigating these claims in the summer of 2019 but dropped its investigation in response to a request from the state of Indiana. EIP then filed a Clean Air Act citizen suit in federal court on behalf of the Sierra Club, and Judge Philip Simon granted a partial motion for summary judgment April 14, 2021, finding that the evidence indisputably showed that three boilers had violated the emission limits. On the same day the state of Indiana revised BP Whiting's permit to eliminate the emission requirements the company had violated and replaced them with more lenient standards that will be much harder to enforce.⁷

More than 2,000 people live within a mile of the refinery, according to EPA's ECHO database, while nearly 60% are Latino or African-American and about 40% live in low-income households. If EPA's decision to drop its investigation of BP Whiting's refinery at Indiana's request is an example of cooperative federalism, that concept isn't doing much for people living downwind of this major emissions source.

Data and Context

To its credit, every year the EPA's Office of Enforcement and Compliance Assurance releases a report that tallies up annual enforcement outputs such as inspections or cases referred for prosecution, as well as outcomes such as the amounts violators pay in penalties or cleanup costs. Our compilation is based on the data shared by OECA in these reports, and you can view the year-by-year numbers [here](#). To focus on long-term trends over the past two decades, we compare the average annual results from 2018-2021 to averages for 2002-2017.

The 2018-2021 period comes closest to tracking the Trump Administration's track record. While President Biden took office in the middle of the 2021 fiscal year, most of the big enforcement cases that wrapped up before the year ended on September 30 would have been initiated by the prior Administration. Similarly, the criminal plea agreement and the last of three consent decrees in the Volkswagen case were announced and then lodged in federal court by the Biden Administration, although they were not formally approved by the judge until the spring of 2017.

We have adjusted the annual expenditures for penalties or cleanup costs to 2021 dollars to account for inflation, e.g., the value of a million-dollar penalty paid in 2002 would be

equivalent to \$1.63 million last year (the charts include both the actual expenditures and inflation-adjusted values). Occasionally, an unusually large case such as the 2010 blowout of BP’s oil well in the Gulf of Mexico or Volkswagen’s disabling of emission controls for 11 million vehicles can yield hundreds of millions or even billions of dollars in civil or criminal penalties. We compare results both with and without these outlier cases to provide a clearer picture of long-term trends.

Table 3. “Outlier” Cases

Fiscal Year	Defendant	Date Resolved	Enforcement Action	Penalty (millions of \$)	Clean Up Costs (millions of \$)*
FY 2013	BP Exploration and Production Inc.	11/15/2012	Criminal	1,250	2,750
FY 2013	Transocean (BP)	1/3/2013	Civil	1,000	
FY 2015	Duke Energy	5/14/2015	Criminal		3,400
FY 2016	BP Exploration and Production Inc.	10/5/2015	Civil	5,500	9,400
FY 2017	Volkswagen	10/21/2016, 5/17/2017	Civil	1,450	15,900
FY 2017	Volkswagen	4/21/2017	Criminal	2,800	
FY 2019	Fiat Chrysler Automobiles	1/10/2019	Civil	305	
FY 2021	Toyota	1/14/2021	Civil	180	
FY 2021	Daimler AG and Mercedes-Benz USA, LLC	3/9/2021	Civil	875	

* Injunctive relief, natural resource damages, and court ordered environmental projects.

Our analysis does not include OECA’s estimate of the total amount of pollution that violators are required to “reduce, treat, or eliminate” through enforcement actions. These environmental and public health benefits are critically important but difficult to quantify in the aggregate and OECA’s methodology for cataloguing and assessing this information needs clearer explanation. OECA reports on the total number of “offsite compliance evaluations,” and these reviews of compliance records and other data are often pivotal to enforcement investigations. But EPA needs to establish or better explain the criteria it uses

to define and identify the compliance evaluations that are counted up in its enforcement reports.

¹ <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/>

² “Pruitt Has Made Superfund a Priority,” News Release from EPA Press Office (Jan. 3, 2018), at <https://archive.epa.gov/epa/newsreleases/pruitt-has-made-superfund-clean-ups-priority.html>

³ “Facility Search Results, Enforcement and Compliance History Online, US Environmental Protection Agency at <https://echo.epa.gov/facilities/facility-search/results>. Search results obtained on February 19, 2022.

⁴ Totals do include the Office of Environmental Justice (OEJ), where annual staff levels averaged about 30 FTE from 2002-2017 and 35 between 2018-2021. OEJ’s responsibilities are broader than enforcement. The Biden Administration has proposed adding more than 200 FTE’s to establish a new environmental justice program that would emphasize collaboration and partnerships. The budget justification for this increase does not mention enforcement.

⁵ While Congressional appropriations for EPA provide for 2,558 enforcement FTE’s, the number of positions filled are likely to fall below this level given past experience.

⁶ For example, after it has approved a state plan to implement certain Clean Air Act requirements, EPA retains the authority to bring an enforcement action for any violation of such requirements after providing both the defendant and the state with 30 days’ notice. 42 U.S.C. §7413(a)(1). Similarly, the Clean Water Act allows EPA to delegate responsibility for permitting to states, but makes clear that delegation does not limit EPA’s authority to enforce permit limits. 42 U.S.C. §1342(i).

⁷ The Sierra Club filed a petition asking BP to overturn the revised permit on the grounds that it undermined federal Clean Air Act requirements on July 22, 2021. The Sierra Club and its members who live in Whiting and are affected by BP’s illegal pollution are still waiting for a response.

