



February 22, 2019

Testimony Before the Oversight and Investigations Subcommittee
Energy and Commerce Committee, House of Representatives
February 26, 2019

My name is Chris Sellers and I am a professor of environmental history and politics and director of the Center for the Study of Inequalities, Social Justice, and Policy at Stony Brook University in New York. I am here today as member of the Environmental Data and Governance Initiative (EDGI) a network of more than 170 academics and other professionals and volunteers that has been monitoring change at the U.S. Environmental Protection Agency (EPA) since the beginning of the Trump administration. I head up an EDGI research team interviewing recently retired and current EPA employees, whose early findings have already been published in major scholarly outlets such as the *American Journal of Public Health*. Over the last year, I have joined with EDGI colleagues Leif Fredrickson and Marianne Sullivan to study a most critical function of this agency which we learned to be threatened--enforcement.

Our research into EPA's own public data and records, supplemented by internal documents and testimony provided by our interviewees, has all pointed to the same conclusion: over the past two years EPA enforcement has declined significantly. The only question has been-- just how badly has enforcement nosedived? Fortunately, EPA's release of its FY2018 data has provided us and everyone else with clear answers--the decline in enforcement is dramatic and alarming, and by important measures, has brought the agency's performance to historic lows.

I'm enclosing with my testimony a set of charts and other analysis of EPA's enforcement data. They confirm the most troubling trends we reported in our November 2018, report *A Sheep in the Closet*. To summarize some highlights: among the worst measures are those for what's called civil judicial referrals. When environmental violations are bad enough, EPA sends cases to the justice department to prosecute in the courts. In both 2017 and 18, the Trump EPA referred fewer of these most egregious cases to the DOJ than in any the past forty years of the agency's history. To find a lower number you have to go back to 1976, not long after the EPA's birth. The overall total of civil cases EPA initiated in 2018 is only a little better; it is still lower than any year since the first Reagan administration in the early 1980s, back when the enforcement wing of the agency was actually broken up. Other measures by which EPA assesses its own enforcement don't run as far back, yet 2017 and 2018 still vie with the lowest years ever recorded. In 2017, EPA brought its second-lowest number of civil cases to a close, and in 2018 its lowest, since 1994. Similarly with the civil fines levied: when you adjust for inflation, FY 2018's total was the lowest since 1987. Criminal cases opened and defendants charged are the lowest in twenty-five years, and I could go on. By almost any measure, EPA is backing off from its long-standing role as the nation's top environmental cop.

What's even more troubling is that the current EPA has been curbing its ability not just to punish but to find violators. Ever since the agency's founding, inspections have been the front end of the enforcement pipeline, providing unfiltered, firsthand information about whether or not facilities are violating our environmental laws. In 2017, EPA conducted its second-lowest number of inspections, and in 2018 the lowest, in the last 25 years. Drops in inspections over the past two years strongly suggest that the decline in EPA enforcement has not yet hit bottom, and that FY2019 will bring another round of historic lows.

What EPA employees have told us in the course of our interviewing project confirms the picture suggested by EPA's enforcement numbers. Of the hundred confidential interviews we've conducted with recently retired and current EPA staff, a quarter of these have been with eighteen people with direct experience in enforcement, both in headquarters and in several of the regions. Strikingly, not just those working in the enforcement division but many other interviewees spoke of problems with enforcement—only six of our 24 most recent interviews did not mention it. They report on the many pressures applied by the agency's political leadership that they see as contributing to the downturn, among other ways by explicitly urging EPA employees to go easier on industry. Administrator Pruitt, for example, when shepherding around trade association representatives, publicly chided some career staff for “not listening” to them. Reportedly, EPA's routine inspection initiatives as well as judicial referrals now have to be approved by political leadership before they can proceed. The Trump administration has proposed massive budget and staff cuts, which would harm enforcement efforts still further. The challenges faced by these wings of the agency have driven an exodus of staff, seventy-three of them from OECA alone. Taking institutional and expert knowledge with them, their unfilled posts have made enforcement still more difficult.

At the same time, interviewees report that under the Trump administration, more of the regulated community has become emboldened to challenge EPA enforcement and compliance efforts. We've heard stories about members of the regulated community threatening inspectors about reaching out to their bosses. An EPA housing inspector for lead paint, known to damage children's brains, found landlords turning more aggressive on phone calls, vocally complaining about EPA intrusiveness or just hanging up.

EPA staff also remain deeply skeptical of the “cooperative federalism,” touted by the political leadership as justifying less federal enforcement, though curiously not when defending its FY2018 enforcement data. In their view what it means on the ground is simply abandoning long-established ways EPA has backed up as well as overseen state environmental enforcement. For instance, state agencies have long relied on EPA for expertise in overseeing large, complex facilities like oil refineries and chemical plants and for expensive monitoring tools like infrared cameras. Moreover, with so many state environmental agencies reeling from state-level budget crises, and with the Trump administration proposing to slash hundreds of millions of cuts in state environmental funding, they wonder whether the current leadership really wants the states to take up the enforcement that EPA is progressively abandoning. EPA's effective retreat from its oversight and back-up role for state regulators is likely to make our nation's environmental protection increasingly unequal.

Despite all that is stake, EPA's own publicity seek to whitewash the story its data tells. With such dismal tallies for its enforcement actions, it seeks to emphasize environmental benefits, while side-stepping comparisons with earlier years that make even these tallies look less rosy. At best, as with the millions of pounds of waste it has handled, the results for FY2017 and FY2018 are historically mediocre. But comparing its record of commitments to pollution

reduction with years back to 2002 yields a more troubling, if familiar pattern: EPA's totals for 2017 and 2018 were the lowest and third lowest in the last sixteen years. Agency publicity also ignores data showing benefits that have fallen off dramatically, such as the number of people protected by EPA enforcement of the Safe Drinking Water Act. In 2005, for instance, enforcement actions by the Bush EPA protected the drinking water of over eight million people, sixteen times more than in this past year under Trump.

All the evidence we've gathered about EPA enforcement from the agency's own data and employees adds up to a convincing picture of where it has been headed: downward. This is not just a bureaucratic re-shuffle; less enforcement will have real consequences for many Americans, especially those nearest to potential environmental threats. Dwindling enforcement of the SDWA could mean another Flint. Less enforcement under the Clean Air Act means that Americans may breathe less healthy air putting them at increased risk of respiratory illness and premature mortality. Less enforcement under our hazardous waste laws could mean more exposure to toxic substances such as arsenic or mercury in our communities.

We are confronted with a sad truth: EPA is extracting its own teeth. Thereby, it is corroding the federal commitment to protecting human health and the environment and weakening the ability of states to do the same. Unless it faces up to its growing inadequacies soon, the most vulnerable of Americans will pay the steepest price. Indeed, the declines already registering in enforcement, which show little sign of stopping, have all but ensured significant deterioration of our nation's public health and environment in the years ahead.

Testimony prepared by Chris Sellers with assistance from Leif Frederickson, Marianne Sullivan, Sara Wylie and Kelsey Breseman.



Appendix to Chris Sellers' Testimony Before the Oversight and Investigations Subcommittee
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EPA Enforcement Numbers in Fiscal Year 2018 in Historical Perspective

General Method and Purpose

- This analysis compares FY 2018 enforcement metrics to long-term data on EPA enforcement, giving a better perspective on how the EPA's enforcement program under the current administration compares to previous administrations
- The data used in the comparison are the final, end-of-year enforcement numbers published by the EPA. The sources for this data are listed at the end of the report. They are all available online and are easily verifiable.
- This analysis carefully attends to changes in data collection over time, through methodological notes listed with each metric.
- The analysis takes a robust and comprehensive approach to evaluating FY 2018 (and 2017) to previous years. It looks at a variety of metrics. It compares FY 2018 to averages, medians and ranges from previous years.
- In order to more clearly compare the EPA's current practices to previous administrations, the analysis uses FY 2016 as the endpoint for averages, medians and ranges. In other words, these calculations exclude FY 2017 and 2018, better to compare these years with previous administrations. When ranking FY 2018 over against other years, however, we use 2018 as the endpoint.
- The starting point for date ranges is determined in many cases by when the EPA began collecting the data in question. In cases where a longer range of data was available, we mostly used 1989, the beginning of the George H. Bush administration, as the initial year. For civil case initiations, we went back to 1975, when civil enforcement

was emerging from its infancy, and for criminal data, we went back to 1984, when criminal enforcement was just acquiring its modern shape.

Key Findings

- **Taken as a whole**, the major enforcement metrics for FY 2018 – inspections, civil cases, criminal cases, defendants, sentencing, fines, compliance costs – are some of the lowest recorded in decades, which **indicates weak enforcement**. Nor do estimated environmental benefits suggest strong enforcement.
- Of the major enforcement indicators, **EPA's most positive result for FY 2018 is its total criminal fines**. However, this number stands out not because it is so historically high but because it is not exceptionally low. Compared to the past three decades, it is **below average and slightly above median**. It's about the ninth lowest in the past 23 years.
- **Other major enforcement measures are some of the lowest in decades, and in some cases the lowest on record.**
- Inspections are the lowest since 1994, as far back as the record goes. They are about half of the average and median for 1994 – 2016.
- Civil case initiations are the lowest since 1982. The most important civil case initiations, civil judicial referrals to DOJ, are the lowest since 1976.
- Civil case conclusions, measured since 1994, were the lowest on record in FY 2018. The total is about half the average and median for 1994 – 2016.
- Criminal cases opened and criminal defendants charged are the lowest in more than 25 years.
- Years sentenced for criminal cases are the fourth lowest since 1990, and 62% of the average from 1984 – 2016.
- Civil fines are at the lowest since 1987 – over 30 years. FY 2018 fines were just 17% of the average, and 47% of the median, for the years 1989 – 2016.
- Compliance costs (injunctive relief) were the lowest in 15 years. FY 2018 compliance costs were 51% of the average, and 63% of the median, of annual costs from 1994 – 2016.
- Measurements of environmental benefits also suggest a weak enforcement program. Pollution reduction is about a quarter of the average from 2002 to 2016 and 30% of the median for that period. The number of people protected by enforcement of the Safe Drinking Water Act is the third lowest since 2002 and just 9% of the average (22% of the median) number of people protected from 2002 – 2016.

Inspections/Evaluations (Comparison and Graph)

Definition: Inspections and Evaluations are used to determine compliance and initiate enforcement actions.

FY 2018: 10,612

Comparison:

Average for FY 1994 – 2016 was 1,900. FY 2018 is 55% of that.

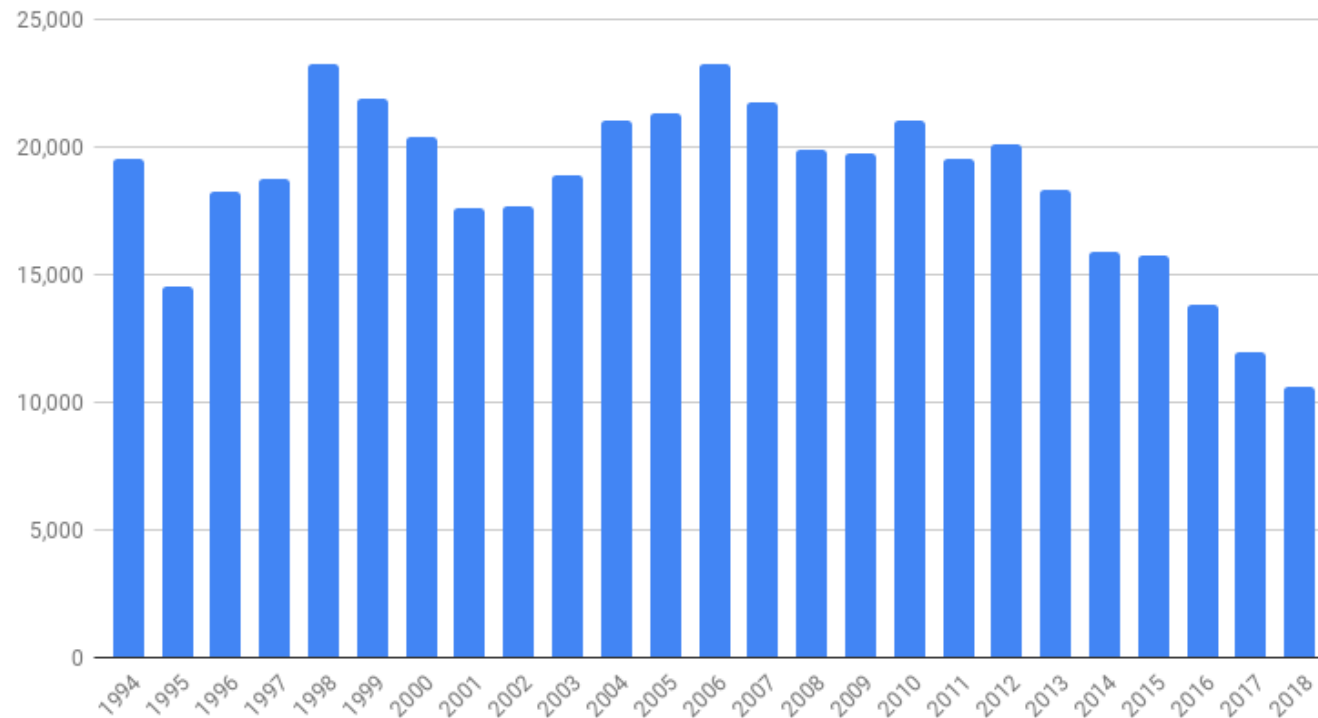
Median for FY 1994 – 2016 was 1,954. FY 2018 is 54% of that.

Range for FY 1994 – 2016 was 13,761 (min) to 23,231 (max). FY 2018 is out (below) that range.

Rank: FY 2018 ranks as the lowest year since 1994, or the lowest year on record.

Methodological note: 1994 appears to be the first year the EPA published total tabulations of inspections.

EPA Inspections/Evaluations, 1994-2018



Inspections/Evaluations (Table and Sources)

FY	Inspections/ Evaluations	Source
1994	19,542	National Enforcement Trends Report
1995	14,529	National Enforcement Trends Report
1996	18,211	National Enforcement Trends Report
1997	18,706	National Enforcement Trends Report
1998	23,191	National Enforcement Trends Report
1999	21,847	National Enforcement Trends Report
2000	20,337	National Enforcement Trends Report
2001	17,560	National Enforcement Trends Report
2002	17,668	National Enforcement Trends Report
2003	18,880	National Enforcement Trends Report
2004	21,031	National Enforcement Trends Report
2005	21,282	National Enforcement Trends Report
2006	23,231	National Enforcement Trends Report
2007	21,721	National Enforcement Trends Report
2008	19,883	National Enforcement Trends Report
2009	19,724	National Enforcement Trends Report
2010	21,012	National Enforcement Trends Report
2011	19,520	E&C Annual Report 2018
2012	20,077	E&C Annual Report 2018
2013	18,323	E&C Annual Report 2018
2014	15,832	E&C Annual Report 2018
2015	15,731	E&C Annual Report 2018
2016	13,761	E&C Annual Report 2018
2017	11,941	E&C Annual Report 2018
2018	10,612	E&C Annual Report 2018

Voluntary Disclosure Programs (Comparison and Graph)

Definition: This program allows companies finding they are out of compliance to voluntarily disclose that to EPA and, if certain conditions are met, become eligible for reduced or completely waived penalties. EPA counts the number of entities (companies) and the number of facilities (many of which may belong to the same entity, as part of a large disclosure).

FY 2018:

- Facilities: 1,561. Companies: 565.

Comparison:

Average for FY 1997 – 2010, and 2014 – 2016

- Facilities: 1,122. FY 2018 is 139% of that. Companies: 433. FY 2018 is 130% of that.

Median for FY 1997 – 2010, and 2014 – 2016

- Facilities: 1,021. FY 2018 is 153% of that. Companies: 448. FY 2018 is 126% of that.

Range for FY 1997 – 2010, and 2014 – 2016

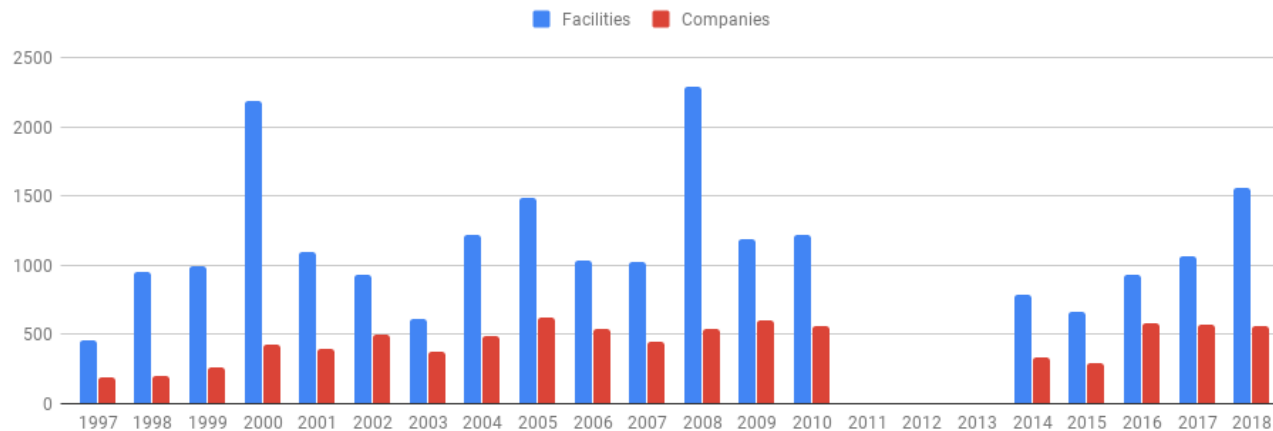
- Facilities: 457 (min) to 2,294 (max). FY 2018 is within, but at the upper end of that range.
- Companies: 185 (min) to 627 (max). FY 2018 is within, but at the upper end of that range.

Rank:

- Facilities: FY 2018 ranks as the third highest year for the years 1997 – 2010 and 2014 – 2018.
- Companies: FY 2018 ranks as the fifth highest year for the years 1997 – 2010 and 2014 – 2018.

Methodological note: We have not been able to find data for 2011 – 2013. Data on company disclosure include the eDisclosure program.

Voluntary Disclosures from Facilities and Companies to EPA, 1997-2010 and 2014-2018



Voluntary Disclosure Programs (Table and Sources)

FY	Facilities	Companies	Sources
1997	457	185	National Enforcement Trends Report
1998	954	200	National Enforcement Trends Report
1999	990	260	National Enforcement Trends Report
2000	2,190	429	National Enforcement Trends Report
2001	1,095	397	National Enforcement Trends Report
2002	927	500	National Enforcement Trends Report
2003	614	379	National Enforcement Trends Report
2004	1,223	491	National Enforcement Trends Report
2005	1,487	627	National Enforcement Trends Report
2006	1,032	541	National Enforcement Trends Report
2007	1,021	448	National Enforcement Trends Report
2008	2,294	538	National Enforcement Trends Report
2009	1,187	606	National Enforcement Trends Report
2010	1,218	561	National Enforcement Trends Report
2011	No data	No data	
2012	No data	No data	
2013	No data	No data	
2014	784	332	E&C Annual Report 2018
2015	666	289	E&C Annual Report 2018
2016	931	585	E&C Annual Report 2018
2017	1,062	575	E&C Annual Report 2018
2018	1,561	565	E&C Annual Report 2018

Civil Judicial Referrals to the DOJ (Comparison and Graph)

Definition: Lawsuits filed in court. Civil judicial cases are more serious, and less common, than administrative cases. EPA refers civil judicial cases to the DOJ. Referrals to DOJ are counted, along with administrative case initiations, in EPA's total civil case initiations.

FY 2018: 110

Comparison:

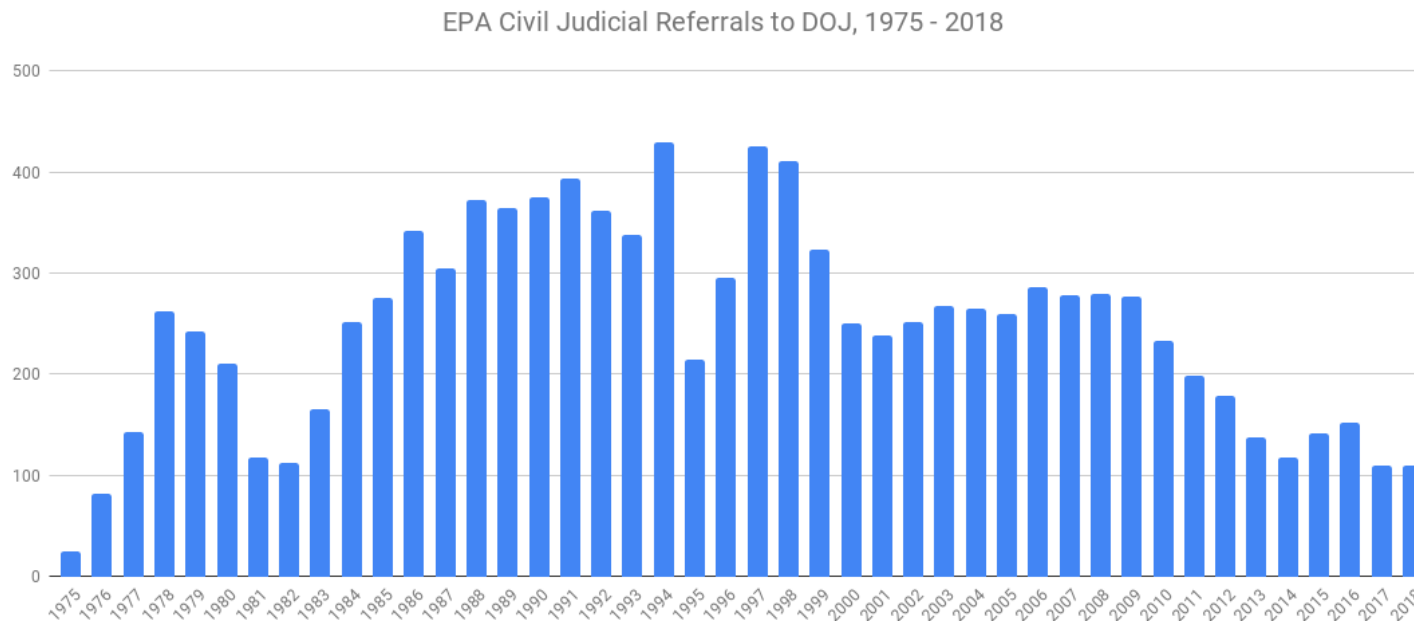
Average for FY 1975 – 2016 was 254. FY 2018 is 43% of that.

Median for FY 1975 – 2016 was 261. FY 2018 is 42% of that.

Range for FY 1975 – 2016 was 25 (min) to 430 (max).

Rank: FY 2018 ranks, along with FY 2017, as the lowest since 1976.

Methodological note: From 1991 to 2002, EPA gave “extra credits” to some civil case initiations (National Enforcement Trends Report, August 2011, E-2). Civil judicial referrals for 1999 to 2002 were adjusted in the NET Report to remove these extra credits. However, the extra credits remain for years 1991 to 1998. The average and median therefore will be slightly higher due to the inflation from extra credits for years 1991 to 1998. Nevertheless, this inflation does not change the fact that FY 2017 and FY 2018 civil judicial referral numbers are extremely low by historical standards.



Civil Judicial Referrals to the DOJ (Table and Sources)

FY	Civil Judicial Referrals to DOJ	Source
1975	25	National Enforcement Trends Report
1976	82	National Enforcement Trends Report
1977	143	National Enforcement Trends Report
1978	262	National Enforcement Trends Report
1979	242	National Enforcement Trends Report
1980	210	National Enforcement Trends Report
1981	118	National Enforcement Trends Report
1982	112	National Enforcement Trends Report
1983	165	National Enforcement Trends Report
1984	251	National Enforcement Trends Report
1985	276	National Enforcement Trends Report
1986	342	National Enforcement Trends Report
1987	304	National Enforcement Trends Report
1988	372	National Enforcement Trends Report
1989	364	National Enforcement Trends Report
1990	375	National Enforcement Trends Report
1991	393	National Enforcement Trends Report
1992	361	National Enforcement Trends Report
1993	338	National Enforcement Trends Report
1994	430	National Enforcement Trends Report
1995	214	National Enforcement Trends Report
1996	295	National Enforcement Trends Report

1997	426	National Enforcement Trends Report
1998	411	National Enforcement Trends Report
1999	323	National Enforcement Trends Report
2000	250	National Enforcement Trends Report
2001	238	National Enforcement Trends Report
2002	252	National Enforcement Trends Report
2003	268	National Enforcement Trends Report
2004	265	National Enforcement Trends Report
2005	259	National Enforcement Trends Report
2006	286	National Enforcement Trends Report
2007	278	National Enforcement Trends Report
2008	280	National Enforcement Trends Report
2009	277	National Enforcement Trends Report
2010	233	National Enforcement Trends Report
2011	199	E&C Annual Report 2011
2012	179	E&C Annual Report 2012
2013	138	E&C Annual Report 2013
2014	118	E&C Annual Report 2014
2015	141	E&C Annual Report 2015
2016	152	E&C Annual Report 2016
2017	110	E&C Annual Report 2017
2018	110	E&C Annual Report 2018

Civil Case Initiations (Comparison and Graph)

Definition: Civil case initiations are the total civil enforcement cases started. They include both administrative cases and civil judicial cases.

FY 2018: 1,838

Comparison:

Average for FY 1975 – 2016 was 3,261. FY 2018 is 56% of that.

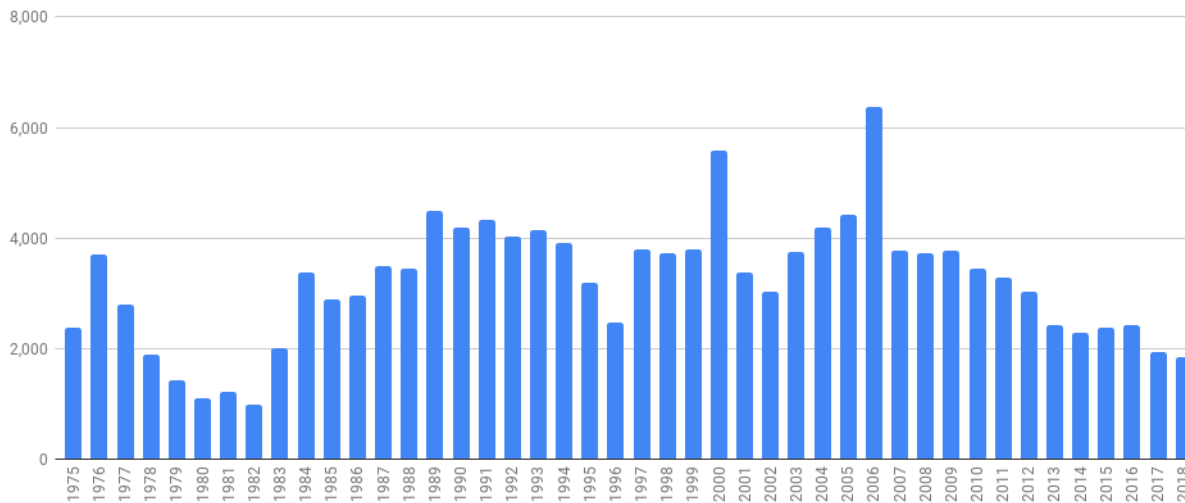
Median for FY 1975 – 2016 was 3,406. FY 2018 is 54% of that.

Range for FY 1975 – 2016 was 976 (min) to 6,371 (max).

Rank: FY 2018 ranks as the lowest year since 1982.

Methodological notes: 1) Civil case initiations are the sum of civil judicial referrals, administrative penalty order complaints (APOCs), and administrative compliance orders (ACOs). Before 1994, APOCs and ACOs were lumped together as “Administrative Actions.” The sources listed in the table are for data for administrative. 2) From 1996 to 2003, EPA often counted RCRA “Field Citations” separate from APOCs. Field Citations have been added to APOCs in this period as necessary to make them consistent with post-2003 data. (National Enforcement Trends Report, E-6) 3) From 1991 to 2002, EPA gave “extra credits” to some civil case initiations (National Enforcement Trends Report, E-2). Civil judicial referrals for 1999 to 2002, and administrative cases for 2001 to 2002, were adjusted in the NET Report to remove these extra credits. However, the extra credits remain for the other years, slightly inflating the total civil case initiations for those years as well as the overall average and median. Nevertheless, this inflation does not change the fact that FY 2018 civil case initiations are extremely low by historical standards.

EPA Civil Case Initiations, 1975 - 2018



Civil Case Initiations (Table and Sources)

FY	Civil Initiations	Source
1975	2,377	E&C Annual Report 1999
1976	3,695	E&C Annual Report 1999
1977	2,787	E&C Annual Report 1999
1978	1,884	E&C Annual Report 1999
1979	1,427	E&C Annual Report 1999
1980	1,111	E&C Annual Report 1999
1981	1,225	E&C Annual Report 1999
1982	976	E&C Annual Report 1999
1983	2,013	E&C Annual Report 1999
1984	3,375	E&C Annual Report 1999
1985	2,885	E&C Annual Report 1999
1986	2,968	E&C Annual Report 1999
1987	3,498	E&C Annual Report 1999
1988	3,457	E&C Annual Report 1999
1989	4,500	E&C Annual Report 1999
1990	4,179	E&C Annual Report 1999
1991	4,318	E&C Annual Report 1999
1992	4,028	E&C Annual Report 1999
1993	4,146	E&C Annual Report 1999
1994	3,920	National Enforcement Trends Report
1995	3,183	National Enforcement Trends Report
1996	2,466	National Enforcement Trends Report

1997	3,797	National Enforcement Trends Report
1998	3,726	National Enforcement Trends Report
1999	3,804	National Enforcement Trends Report
2000	5,593	National Enforcement Trends Report
2001	3,374	National Enforcement Trends Report
2002	3,035	National Enforcement Trends Report
2003	3,738	National Enforcement Trends Report
2004	4,194	National Enforcement Trends Report
2005	4,424	National Enforcement Trends Report
2006	6,371	National Enforcement Trends Report
2007	3,762	National Enforcement Trends Report
2008	3,726	E&C Annual Report 2017
2009	3,779	E&C Annual Report 2017
2010	3,436	E&C Annual Report 2017
2011	3,283	E&C Annual Report 2017
2012	3,027	E&C Annual Report 2017
2013	2,418	E&C Annual Report 2017
2014	2,278	E&C Annual Report 2017
2015	2,378	E&C Annual Report 2017
2016	2,414	E&C Annual Report 2017
2017	1,938	E&C Annual Report 2017
2018	1,838	E&C Annual Report 2018

Civil Case Conclusions (Comparison and Graph)

Definition: Civil case conclusions are civil enforcement cases that are brought to an end. They may conclude with an administrative order, or a court order, a settlement, or a consent decree.

FY 2018: 1,817

Comparison:

Average for FY 1994 – 2016 was 3,446. FY 2018 is 53% of that.

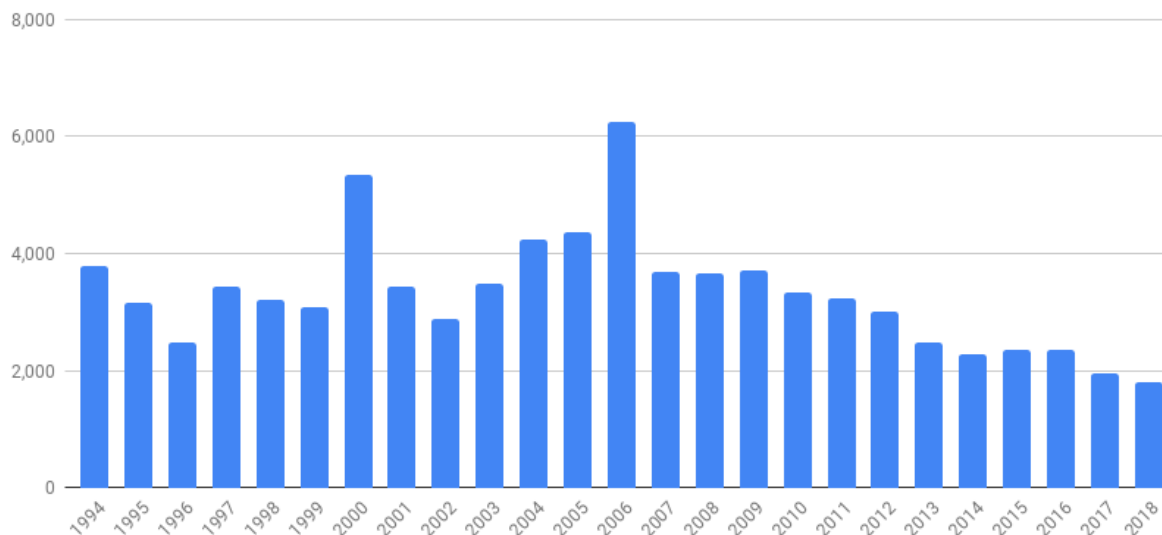
Median for FY 1994 – 2016 was 3,332. FY 2018 is 55% of that.

Range for FY 1994 – 2016 was 2,286 (min) to 6,235 (max). FY 2018 is out of (below) that range.

Rank: FY 2018 ranks as the lowest year since 1994, or the lowest year on record.

Methodological notes: 1) Civil case conclusions are the sum of civil judicial conclusions, final administrative penalty orders, and administrative compliance orders. Before 1994, EPA did not track civil judicial case conclusions. 2) From 1994 to 2002, EPA gave “extra credits” to Administrative Compliance Orders (National Enforcement Trends Report, E-4). ACOs for 2001 to 2002 were adjusted in the NET Report to remove these extra credits. However, the extra credits remain for the other years, slightly inflating the total civil case initiations for those years as well as the overall average and median. Nevertheless, this inflation does not change the fact that FY 2018 civil case initiations are extremely low by historical standards.

EPA Civil Case Conclusions, 1994 - 2018



Civil Case Conclusions (Table and Sources)

FY	Civil Conclusions	Source
1994	3,778	National Enforcement Trends Report
1995	3,157	National Enforcement Trends Report
1996	2,482	National Enforcement Trends Report
1997	3,442	National Enforcement Trends Report
1998	3,219	National Enforcement Trends Report
1999	3,089	National Enforcement Trends Report
2000	5,337	National Enforcement Trends Report
2001	3,431	National Enforcement Trends Report
2002	2,883	National Enforcement Trends Report
2003	3,484	National Enforcement Trends Report
2004	4,231	National Enforcement Trends Report
2005	4,366	National Enforcement Trends Report
2006	6,235	National Enforcement Trends Report
2007	3,683	E&C Annual Report 2017
2008	3,666	E&C Annual Report 2017
2009	3,705	E&C Annual Report 2017
2010	3,332	E&C Annual Report 2017
2011	3,241	E&C Annual Report 2017
2012	3,012	E&C Annual Report 2017
2013	2,489	E&C Annual Report 2017
2014	2,286	E&C Annual Report 2017
2015	2,361	E&C Annual Report 2017
2016	2,359	E&C Annual Report 2017
2017	1,964	E&C Annual Report 2017
2018	1,817	E&C Annual Report 2018

Criminal Cases Opened, Defendants Charged, Sentences (Comparison)

Definition:

- “Cases opened” means cases started.
- “Defendants charged” means the number of individuals charged.
- “Sentences” means the total years of incarceration to which those convicted are sentenced.

FY 2018:

- Cases opened: 129
- Defendants charged: 105
- Sentences (years): 73

Comparison:

Average for FY 1984 – 2016:

- Cases opened (308; FY 2018 is 42% of that).
- Defendants charged (242; FY 2018 is 43% of that).
- Sentences (118; FY 2018 is 62% of that).

Median for FY 1984 – 2016:

- Cases opened (278; FY 2018 is 46% of that).
- Defendants charged (234; FY 2018 is 45% of that).
- Sentences (90; FY 2018 is 81% of that).

Rank:

- Cases opened in FY 2018 were the second lowest (after FY 2017) since 1992 (over 25 years).
- Defendants charged were the lowest since 1991 (over 25 years).
- Sentences were the fourth lowest since 1990.

Criminal Cases Opened, Defendants Charged, Sentences (Table and Sources)

FY	Cases Opened	Defendants Charged	Sentences (Years)	Source
1984	31	36	1	E&C Annual Report 1999
1985	40	40	7	E&C Annual Report 1999
1986	41	98	23	E&C Annual Report 1999
1987	41	66	38	E&C Annual Report 1999
1988	59	97	23	E&C Annual Report 1999
1989	60	95	27	E&C Annual Report 1999
1990	65	100	62	E&C Annual Report 1999
1991	83	104	80	E&C Annual Report 1999
1992	107	150	95	E&C Annual Report 1999
1993	140	161	74	E&C Annual Report 1999
1994	220	250	99	E&C Annual Report 1999
1995	256	245	74	E&C Annual Report 1999
1996	262	221	93	E&C Annual Report 1999
1997	278	322	196	E&C Annual Report 1999
1998	636	350	173	National Enforcement Trends Report
1999	471	324	208	National Enforcement Trends Report
2000	477	360	146	National Enforcement Trends Report

2001	482	372	212	National Enforcement Trends Report
2002	484	325	215	National Enforcement Trends Report
2003	471	247	146	National Enforcement Trends Report
2004	425	293	77	National Enforcement Trends Report
2005	372	320	186	National Enforcement Trends Report
2006	305	278	154	National Enforcement Trends Report
2007	340	248	64	National Enforcement Trends Report
2008	319	176	57	National Enforcement Trends Report
2009	387	200	76	National Enforcement Trends Report
2010	346	289	72	National Enforcement Trends Report
2011	371	258	90	E&C Annual Report 2017
2012	320	234	79	E&C Annual Report 2017
2013	297	287	155	E&C Annual Report 2017
2014	270	192	160	E&C Annual Report 2017
2015	213	193	130	E&C Annual Report 2017
2016	170	188	95	E&C Annual Report 2017
2017	115	139	153	E&C Annual Report 2017
2018	129	105	73	E&C Annual Report 2018

Civil Fines (Comparison and Graph)

Definition: Penalties imposed as a result of civil judicial cases or administrative cases, in dollars.

FY 2018: \$69,474,000

Comparison (using real 2018 dollars):

Average for FY 1989 – 2016 was \$401,796,593. FY 2018 is 17% of that.

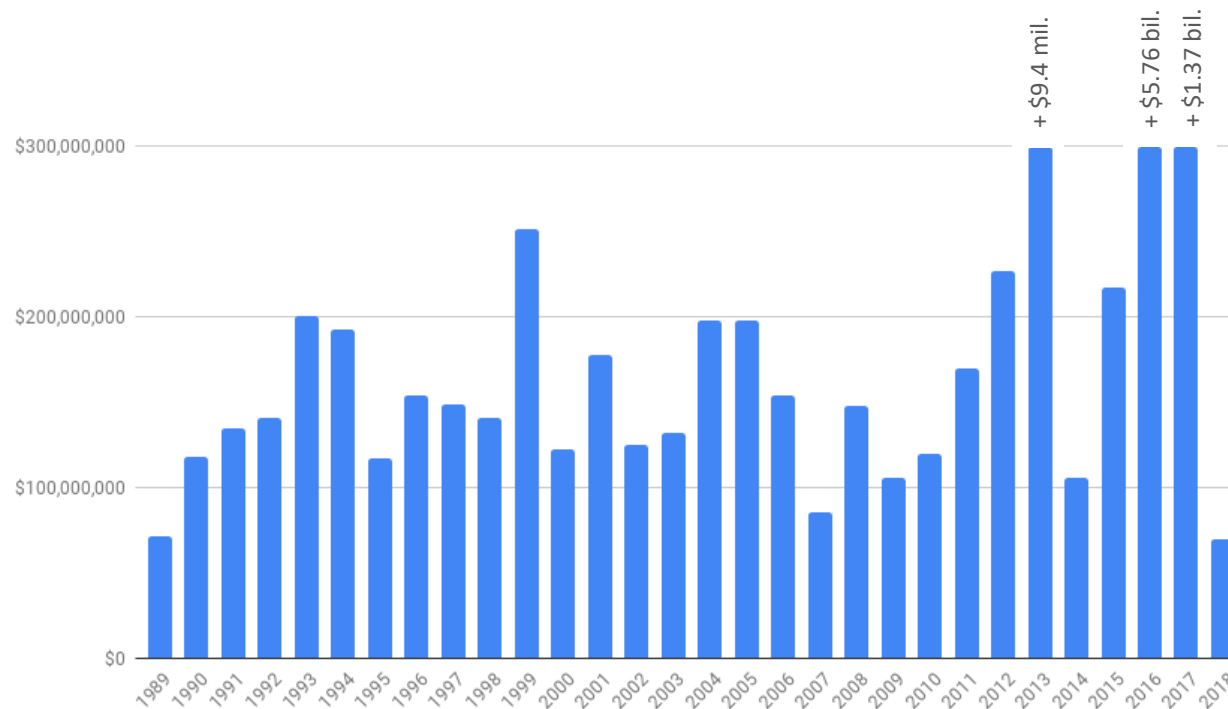
Median for FY 1989 – 2016 was \$148,227,984. FY 2018 is 47% of that.

Range for FY 1989 – 2016 was \$71,387,181 (min) to \$6,057,779,690 (max).

Rank: FY 2018 ranks as the lowest year since 1987 (over 30 years).

Methodological notes: These penalties sum up the fines from both civil judicial cases and administrative cases. Following EPA's FY 2018 report, we used the CPI to deflate prices and made 2018 the base year. CPI deflator table and source listed at the end of this document.

EPA Civil Fines (2018 Dollars), 1989 - 2018



Civil Fines (Table and Sources)

FY	Civil (Nominal)	Civil (Real 2018 \$)	Source
1988	\$36,909,521	\$78,345,216	National Enforcement Trends Report
1989	\$35,251,946	\$71,387,181	National Enforcement Trends Report
1990	\$61,289,667	\$117,752,597	National Enforcement Trends Report
1991	\$73,104,128	\$134,779,429	National Enforcement Trends Report
1992	\$78,733,331	\$140,915,827	National Enforcement Trends Report
1993	\$115,133,414	\$200,074,783	National Enforcement Trends Report
1994	\$113,656,871	\$192,577,840	National Enforcement Trends Report
1995	\$70,859,328	\$116,753,762	National Enforcement Trends Report
1996	\$96,250,929	\$154,042,588	National Enforcement Trends Report
1997	\$95,145,101	\$148,857,326	National Enforcement Trends Report
1998	\$91,573,293	\$141,071,748	National Enforcement Trends Report
1999	\$166,721,578	\$251,290,248	National Enforcement Trends Report
2000	\$84,110,267	\$122,652,014	National Enforcement Trends Report
2001	\$125,465,421	\$177,895,231	National Enforcement Trends Report
2002	\$89,675,575	\$125,170,454	National Enforcement Trends Report

2003	\$96,634,431	\$131,878,163	National Enforcement Trends Report
2004	\$148,850,404	\$197,868,599	National Enforcement Trends Report
2005	\$153,937,047	\$197,924,578	National Enforcement Trends Report
2006	\$123,814,786	\$154,220,037	National Enforcement Trends Report
2007	\$70,467,492	\$85,341,516	National Enforcement Trends Report
2008	\$126,553,343	\$147,598,641	National Enforcement Trends Report
2009	\$90,105,246	\$105,464,596	National Enforcement Trends Report
2010	\$103,607,965	\$119,311,944	National Enforcement Trends Report
2011	\$152,271,601	\$169,985,929	E&C Annual Report 2011
2012	\$207,561,881	\$227,010,467	E&C Annual Report 2012
2013	\$1,148,000,000	\$1,237,442,258	E&C Annual Report 2013
2014	\$100,000,000	\$106,070,475	E&C Annual Report 2014
2015	\$205,000,000	\$217,186,679	E&C Annual Report 2015
2016	\$5,790,000,000	\$6,057,779,690	E&C Annual Report 2016
2017	\$1,632,000,000	\$1,671,861,227	E&C Annual Report 2017
2018	\$69,474,000	\$69,474,000	E&C Annual Report 2018

Criminal Fines (Comparison and Graph)

Definition: Penalties imposed as a result of criminal cases, in dollars.

FY 2018: \$86,294,000

Comparison (using real 2018 dollars):

Average for FY 1989 – 2016 was \$150,018,465. FY 2018 is 58% of that.

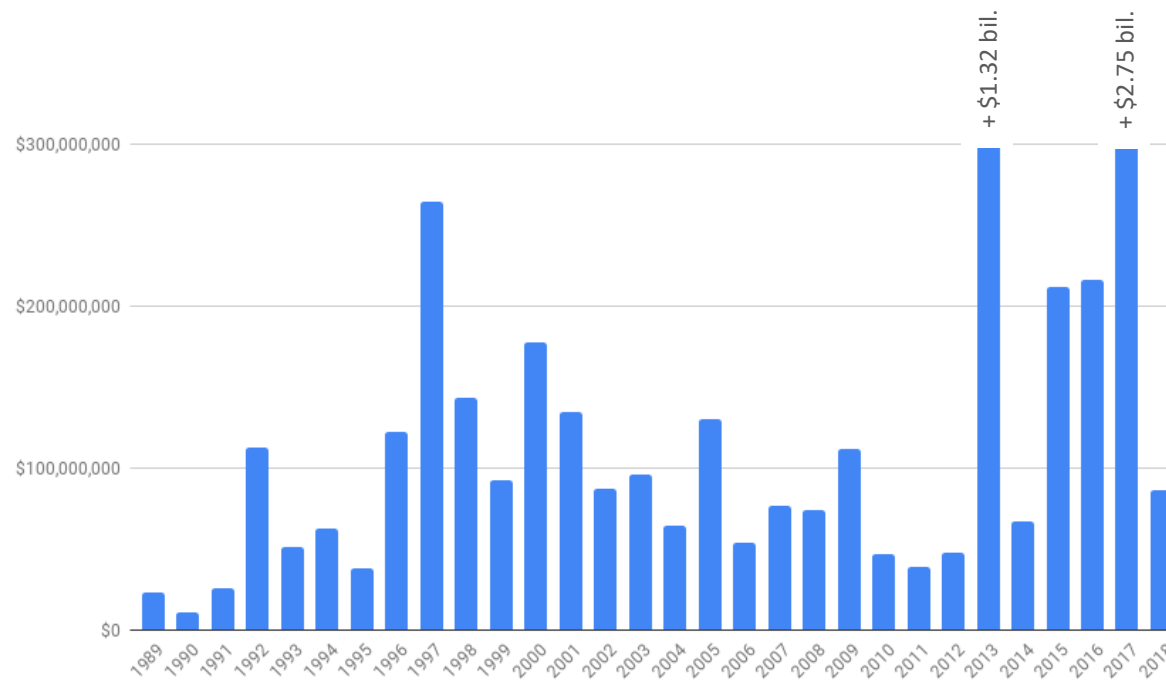
Median for FY 1989 – 2016 was \$81,803,663. FY 2018 is 105% of that.

Range for FY 1989 – 2016 was \$10,592,446 (min) to \$1,616,867,061 (max).

Rank: FY 2018 ranks as the ninth lowest since 1995 (23 years) – in other words, it is close to the middle of the distribution.

Methodological notes: Following EPA's FY 2018 report, we used the CPI to deflate prices and made 2018 the base year. CPI deflator table and source listed at the end of this document.

EPA Criminal Fines (2018 Dollars), 1989 - 2018



Criminal Fines (Table and Sources)

FY	Criminal Fines (Nominal)	Criminal Fines (Real 2018 \$)	Source
1989	11,601,241	\$23,493,168	National Enforcement Trends Report
1990	5,513,318	\$10,592,446	National Enforcement Trends Report
1991	14,120,387	\$26,033,245	National Enforcement Trends Report
1992	62,895,400	\$112,569,317	National Enforcement Trends Report
1993	29,700,000	\$51,611,612	National Enforcement Trends Report
1994	36,812,000	\$62,373,488	National Enforcement Trends Report
1995	23,221,100	\$38,261,029	National Enforcement Trends Report
1996	76,660,900	\$122,690,176	National Enforcement Trends Report
1997	169,282,896	\$264,848,101	National Enforcement Trends Report
1998	92,800,711	\$142,962,627	National Enforcement Trends Report
1999	61,552,874	\$92,775,255	National Enforcement Trends Report
2000	121,974,488	\$177,866,712	National Enforcement Trends Report
2001	94,726,283	\$134,310,744	National Enforcement Trends Report
2002	62,252,318	\$86,892,678	National Enforcement Trends Report
2003	70,425,447	\$96,110,450	National Enforcement Trends Report

2004	48,437,486	\$64,388,522	National Enforcement Trends Report
2005	101,286,651	\$130,229,324	National Enforcement Trends Report
2006	43,159,168	\$53,757,784	National Enforcement Trends Report
2007	63,344,186	\$76,714,648	National Enforcement Trends Report
2008	63,416,697	\$73,962,632	National Enforcement Trends Report
2009	95,654,145	\$111,959,361	National Enforcement Trends Report
2010	40,609,607	\$46,764,852	National Enforcement Trends Report
2011	35,000,000	\$39,071,682	E&C Annual Report 2011
2012	44,000,000	\$48,122,808	E&C Annual Report 2012
2013	1,500,000,000	\$1,616,867,061	E&C Annual Report 2013
2014	63,000,000	\$66,824,399	E&C Annual Report 2014
2015	200,000,000	\$211,889,443	E&C Annual Report 2015
2016	207,000,000	\$216,573,471	E&C Annual Report 2016
2017	2,977,000,000	\$3,049,712,545	E&C Annual Report 2017
2018	86,294,000	\$86,294,000	E&C Annual Report 2018

Compliance Costs (Comparison and Graph)

Definition: Also known as injunctive relief. The estimated costs for a violator to come into compliance as a result of civil enforcement actions, in dollars.

FY 2018: \$3,948,336,000

Comparison (using real 2018 dollars):

Average for FY 1994 – 2016 was \$7,735,031,245. FY 2018 is 51% of that.

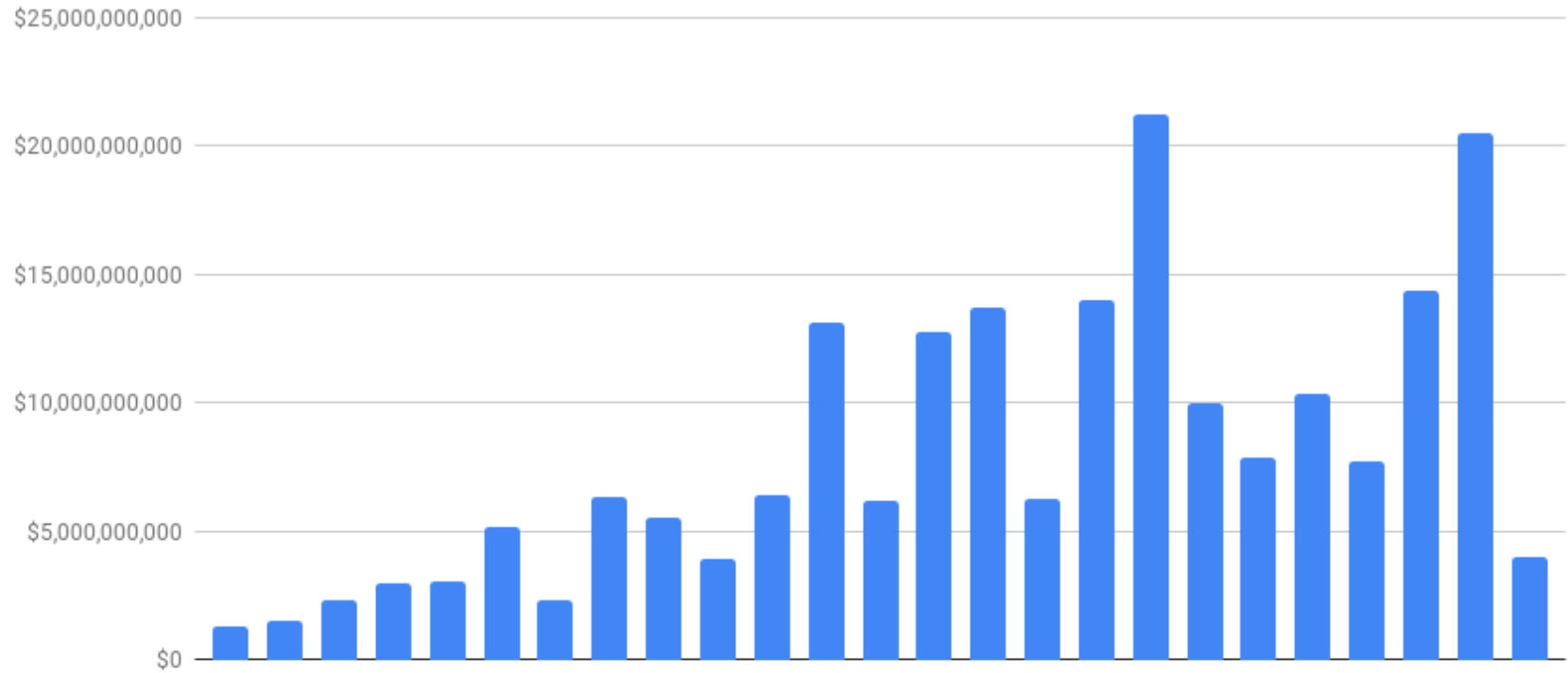
Median for FY 1994 – 2016 was \$6,345,194,240. FY 2018 is 63% of that.

Range for FY 1994 – 2016 was \$1,253,840,621 (min) to \$21,210,341,470 (max).

Rank: FY 2018 was the lowest since 2003 (15 years), and the third lowest since 1999 (20 years).

Methodological notes: Following EPA's FY 2018 report, we used the CPI to deflate prices and made 2018 the base year. CPI deflator table and source listed at the end of this document.

EPA Compliance Costs (Injunctive Relief), 1994 - 2018



Compliance Costs (Table and Sources)

FY	Compliance (Nominal)	Compliance (Real 2018 \$)	Source
1994	\$740,000,000	\$1,253,840,621	E&C Annual Report 1994
1995	\$906,637,052	\$1,493,851,117	E&C Annual Report 1995
1996	\$1,429,849,730	\$2,288,370,148	National Enforcement Trends Report
1997	\$1,893,323,837	\$2,962,161,176	National Enforcement Trends Report
1998	\$1,976,759,053	\$3,045,264,022	National Enforcement Trends Report
1999	\$3,424,223,733	\$5,161,143,751	National Enforcement Trends Report
2000	\$1,562,824,364	\$2,278,955,503	National Enforcement Trends Report
2001	\$4,453,961,458	\$6,315,194,240	National Enforcement Trends Report
2002	\$3,936,692,345	\$5,494,891,632	National Enforcement Trends Report
2003	\$2,878,746,764	\$3,928,660,129	National Enforcement Trends Report
2004	\$4,792,778,206	\$6,371,096,649	National Enforcement Trends Report
2005	\$10,169,667,426	\$13,075,651,195	National Enforcement Trends Report
2006	\$4,929,926,719	\$6,140,570,975	National Enforcement Trends Report
2007	\$10,548,091,429	\$12,774,544,446	National Enforcement Trends Report
2008	\$11,719,063,597	\$13,667,895,490	National Enforcement Trends Report
2009	\$5,320,414,755	\$6,227,333,224	National Enforcement Trends Report
2010	\$12,121,647,725	\$13,958,939,884	National Enforcement Trends Report
2011	\$19,000,000,000	\$21,210,341,470	E&C Annual Report 2011
2012	\$9,135,543,769	\$9,991,545,899	E&C Annual Report 2012
2013	\$7,300,000,000	\$7,868,753,032	E&C Annual Report 2013
2014	\$9,738,000,000	\$10,329,142,868	E&C Annual Report 2014
2015	\$7,300,000,000	\$7,733,964,652	E&C Annual Report 2015
2016	\$13,700,000,000	\$14,333,606,520	E&C Annual Report 2016
2017	\$20,000,000,000	\$20,488,495,431	E&C Annual Report 2017
2018	\$3,948,336,000	\$3,948,336,000	E&C Annual Report 2018

Estimated Pollution Reduction (Comparison and Graph)

Definition: Estimated benefits from enforcement actions in 2018. Commitments to reduce, treat, or eliminate pollution (air, toxics, and water).

FY 2018: 268 million pounds

Comparison:

Average

- FY 2002 – 2016 was 1,158 million pounds. FY 2018 is 23% of that.
- FY 2012 – 2016 was 969 million pounds. FY 2018 is 28% of that.

Median

- FY 2002 – 2016 was 890 million pounds. FY 2018 is 30%.
- FY 2012 – 2016 was 533 million pounds. FY 2018 is 50% of that.

Range

- FY 2002 – 2016 was 260 million pounds (min) to 3,931 million pounds (max).
- FY 2012 – 2016 was 324 million pounds (min) to 2,195 million pounds (max)

Rank: FY 2018 was the third lowest since 2002 (2017 was the lowest), and the second lowest since 2012 (2017 was the lowest).

Methodological notes: EPA began collecting data on pollution in the 1990s, but its current method for calculating pollution reduction extends back only to 2002 (“[Fiscal Year 2012 EPA Enforcement & Compliance Annual Results](#),” December 17, 2012, page 3). EPA’s “Fiscal Year 2018 EPA Enforcement and Compliance Annual Results” document states that “Starting in FY 2012, EPA changed the way it stores environmental benefit information in the ICIS data system. Therefore, data are not comparable for years prior to FY 2012.” However, this data problem has not been noted in any previous annual report. The FY 2017 report from OECA compares numbers back to 2008. As noted above, the report from FY 2012 does not state that a new method of storing data has been initiated, but that the method current in 2012 was consistent back to 2002. In this analysis, we have included analysis from 2002 – 2016 (in addition to 2012 – 2016), just as previous EPA reports have done. Note also that FY 2012 pollution reduction is listed as 751.56 million pounds in the FY 2018 report. However, every annual report before this has listed this year as having a pollution reduction of about 2,195 million pounds. We have corrected this apparent error in our data.

Estimated Hazardous Waste Reduction (Comparison)

Definition: Estimated benefits from enforcement actions in 2018. Hazardous waste (and starting in 2016 non-hazardous waste) treated, minimized, or properly disposed.

FY 2018: 541 million pounds

Comparison:

Average

- FY 2008 – 2016 was 10,033 million pounds. FY 2018 is 5% of that.
- FY 2012 – 2016 was 13,532 million pounds. FY 2018 is 4% of that.

Median

- FY 2008 – 2016 was 3,563 million pounds. FY 2018 is 15% of that.
- FY 2012 – 2016 was 711 million pounds. FY 2018 is 76% of that.

Range

- FY 2008 – 2016 was 148 million pounds (min) to 61,900 million pounds (max).
- FY 2012 – 2016 was 148 million pounds (min) to 61,900 million pounds (max)

Rank: FY 2018 was the fourth lowest since both 2008 and since 2012. (2017 was the second lowest).

Methodological notes: EPA began collecting data on hazardous waste reduction in 2008. EPA's "Fiscal Year 2018 EPA Enforcement and Compliance Annual Results" document states that "Starting in FY 2012, EPA changed the way it stores environmental benefit information in the ICIS data system. Therefore, data are not comparable for years prior to FY 2012." However, this data problem has not been noted in any previous annual report. The FY 2017 report from OECA compares numbers back to 2008. The only specified change in data collection, noted in the FY 2018 report, is that, in 2016, EPA began including non-hazardous waste in its estimates. Thus, numbers for 2016 – 2018 may be inflated compared to previous years. In this analysis, we have included analysis from 2008 – 2016 (in addition to 2012 – 2016), just as previous EPA reports have done.

Estimated Pollution & Hazardous Waste Reductions (Comparison)

Definition: See above.

FY 2018: 809 million pounds

Comparison:

Average

- FY 2008 – 2016 was 11,438 million pounds. FY 2018 is 7% of that.
- FY 2012 – 2016 was 14,501 million pounds. FY 2018 is 6% of that.

Median

- FY 2008 – 2016 was 5,395 million pounds. FY 2018 is 15% of that.
- FY 2012 – 2016 was 1,424 million pounds. FY 2018 is 57% of that.

Range

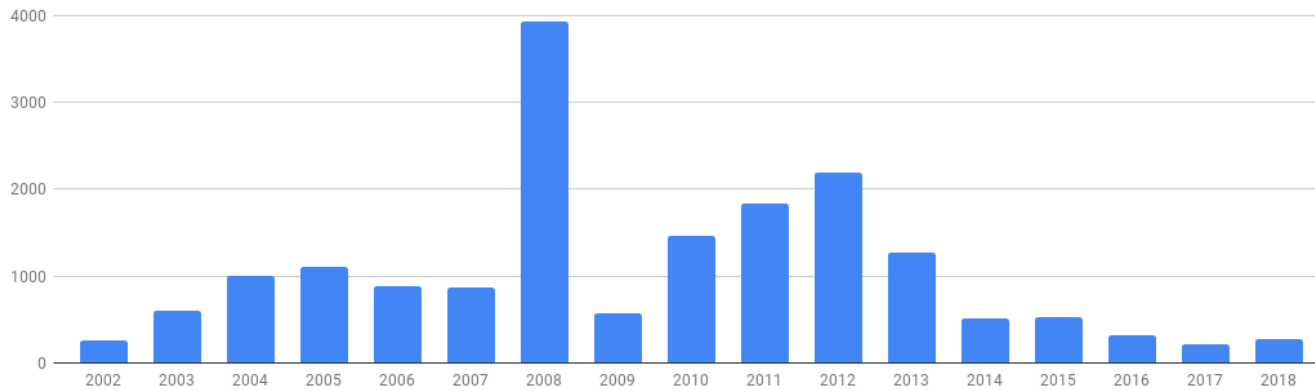
- FY 2008 – 2016 was 1,068 million pounds (min) to 62,224 million pounds (max).
- FY 2012 – 2016 was 1,068 million pounds (min) to 62,224 million pounds (max).

Rank: FY 2018 was the second lowest (FY 2017 was the lowest) since 2008, or the second lowest on record.

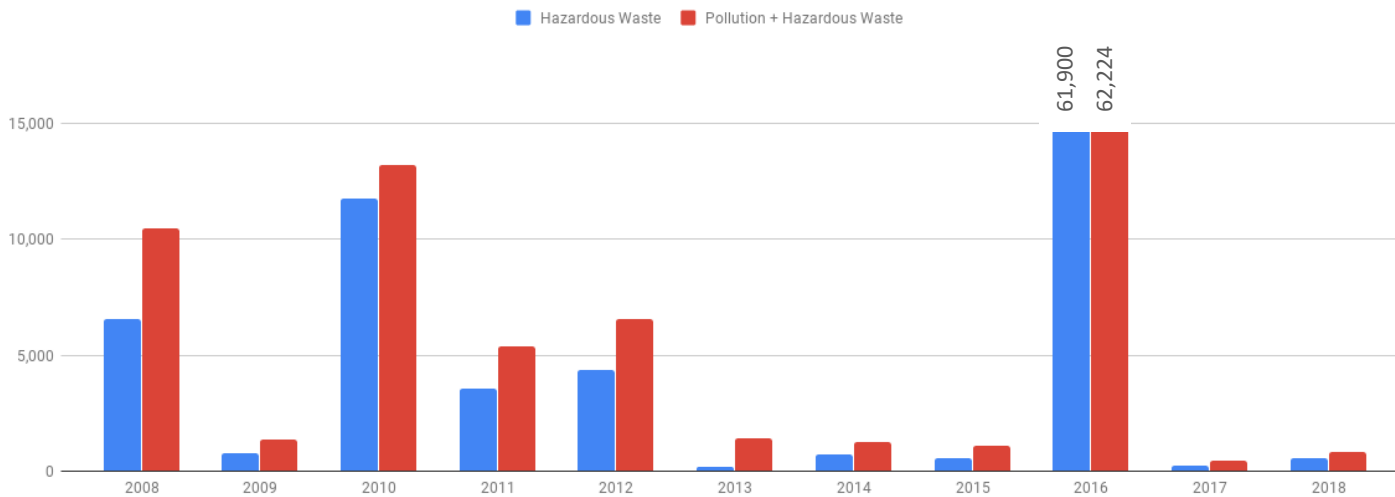
Methodological notes: EPA has recently combined pollution and hazardous waste reduction numbers in reports, press releases, hearings and comments to the press. We have therefore also analyzed these numbers together. See above for methodological notes about these measures.

Pollution & Hazardous Waste Reduction (Graphs)

EPA Estimated Pollution Reduction from Enforcement Actions, 2002-2018



Estimated Reduction of Hazardous Waste and Hazardous Waste + Pollution from EPA Enforcement Actions, 2008-2018



Estimated Pollution and Hazardous Waste Reduction (Tables and Sources)

FY	Pollution (Millions of Pounds)	Hazardous Waste (Millions of Pounds)	Pollution + Hazardous Waste (Millions of Pounds)	Sources
2002	260			E&C Annual Report 2003
2003	600			E&C Annual Report 2003
2004	1,000			E&C Annual Report 2008
2005	1,100			E&C Annual Report 2008
2006	890			E&C Annual Report 2008
2007	871			E&C Annual Report 2017
2008	3,931	6,542	10,473	E&C Annual Report 2017
2009	574	779	1,353	E&C Annual Report 2017
2010	1,466	11,751	13,217	E&C Annual Report 2017
2011	1,832	3,563	5,395	E&C Annual Report 2017
2012	2,195	4,368	6,563	E&C Annual Report 2017
2013	1,276	148	1,424	E&C Annual Report 2017
2014	515	711	1,226	E&C Annual Report 2017
2015	533	535	1,068	E&C Annual Report 2017
2016	324	61,900	62,224	E&C Annual Report 2017
2017	217	245	462	E&C Annual Report 2017
2018	268	541	809	E&C Annual Report 2018

Clean-ups of Contaminated Soil & Water (Comparison)

Definition: These are the estimated benefits from enforcement actions taken in 2018. Volume of contaminated soil and water to be cleaned up.

FY 2018: Soil: 27,496 cubic yards. Water: 217,088 cubic yards.

Comparison:

Average

- Soil: FY 2012 – 2016 was 55,000 cubic yards. FY 2018 is 50% of that.
- Water: FY 2012 – 2016 was 404,200 cubic yards. FY 2018 is 54% of that.

Median

- Soil: FY 2012 – 2016 was 37,000 cubic yards. FY 2018 is 74% of that.
- Water: FY 2012 – 2016 was 277,000 cubic yards. FY 2018 is 78% of that.

Range

- Soil: FY 2012 – 2016 was 15,000 cubic yards (min) to 140,000 cubic yards (max).
- Water: FY 2012 – 2016 was 29,000 cubic yards (min) to 855,000 cubic yards (max)

Rank: Both soil and water cleanup are in the middle of the distribution since 2012.

Methodological notes: EPA's "Fiscal Year 2018 EPA Enforcement and Compliance Annual Results" document states that "Starting in FY 2012, EPA changed the way it stores environmental benefit information in the ICIS data system. Therefore, data are not comparable for years prior to FY 2012." Previous reports have not claimed this problem, but in the interest of space we have confined our analysis to the 2012-2016 period, while including the full data back to 2004 in our table.

Clean-ups of Contaminated Soil & Water (Table and Sources)

FY	Soil - Contaminated	Water - Contaminated	Sources
2004	3,400	9,500	National Enforcement Trends Report
2005	28,200	1,600,000	National Enforcement Trends Report
2006	15,000	1,300,000	National Enforcement Trends Report
2007	79,000	1,400,000	National Enforcement Trends Report
2008	100,000	255,000	National Enforcement Trends Report
2009	28,700	431,000	National Enforcement Trends Report
2010	9,000	107,000	National Enforcement Trends Report
2011	33,000	900,000	E&C Annual Report 2011
2012	140,000	277,000	E&C Annual Report 2017
2013	66,000	686,000	E&C Annual Report 2017
2014	15,000	855,000	E&C Annual Report 2017
2015	37,000	29,000	E&C Annual Report 2017
2016	17,000	174,000	E&C Annual Report 2017
2017	21,000	412,000	E&C Annual Report 2017
2018	27,496	217,088	E&C Annual Report 2018

Drinking Water Protection by Population (Comparison)

Definition: These are the estimated benefits from enforcement actions taken in 2018. People protected by Safe Drinking Water Act Enforcement.

FY 2018: 505,000 people.

Comparison:

Average

- FY 2002 – 2016 was 5,716,000. FY 2018 is 9% of that of that.
- FY 2012 – 2016 was 8,627,000. FY 2018 is 6% of that.

Median

- FY 2002 – 2016 was 2,300,000. FY 2018 is 22% of that.
- FY 2012 – 2016 was 1,000,000. FY 2018 is 51% of that.

Range

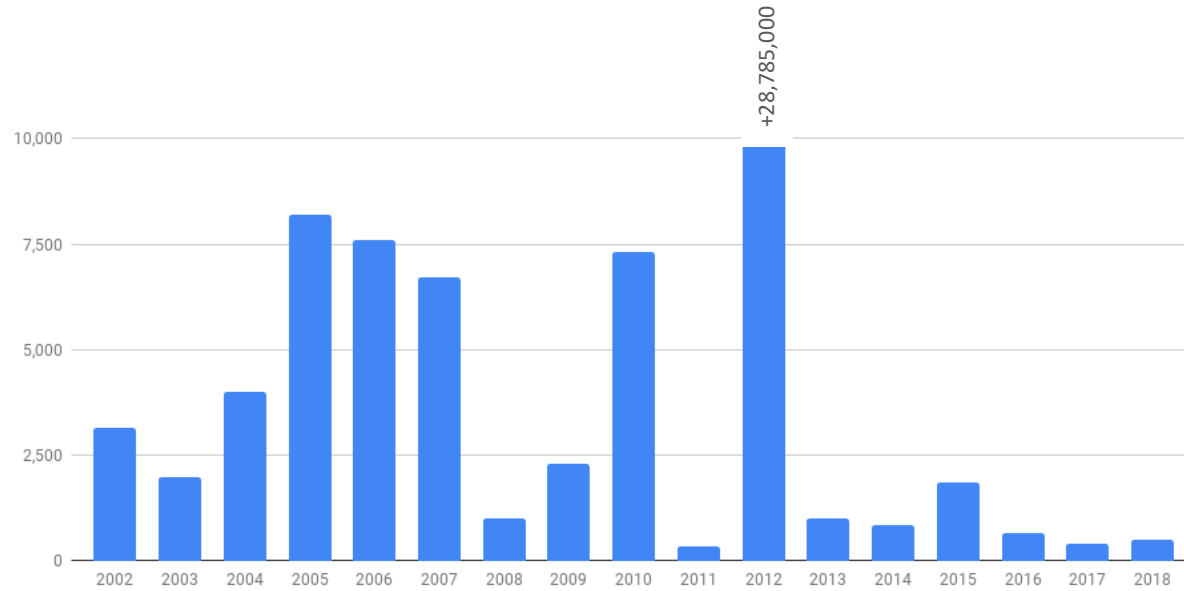
- FY 2002 – 2016 was 350,000 (min) to 38,785,000 (max).
- FY 2012 – 2016 was 650,000 (min) to 38,785,000 (max)

Rank: FY 2018 was the second lowest, after FY 2017, since 2012. It was the third lowest (FY 2017 the second lowest) since 2002.

Methodological notes: EPA began collecting data on drinking water protection in 2002. EPA's "Fiscal Year 2018 EPA Enforcement and Compliance Annual Results" document states that "Starting in FY 2012, EPA changed the way it stores environmental benefit information in the ICIS data system. Therefore, data are not comparable for years prior to FY 2012." However, this data problem has not been noted in any previous annual report. In this analysis, we have included analysis from 2008 – 2016 (in addition to 2012 – 2016).

Drinking Water Protection by Population (Graph, Table and Sources)

People Protected by EPA's Safe Drinking Water Enforcement, 2002-2018



FY	People Protected by SDWA	Sources
2002	3,150,000	E&C Annual Report 2002
2003	2,000,000	National Enforcement Trends Report
2004	4,000,000	National Enforcement Trends Report
2005	8,200,000	National Enforcement Trends Report
2006	7,600,000	National Enforcement Trends Report
2007	6,700,000	National Enforcement Trends Report
2008	1,000,000	National Enforcement Trends Report
2009	2,300,000	National Enforcement Trends Report

2010	7,300,000	National Enforcement Trends Report
2011	350,000	E&C Annual Report 2011
2012	10,000,000	E&C Annual Report 2012
2013	1,000,000	E&C Annual Report 2013
2014	839,000	E&C Annual Report 2014
2015	1,860,000	E&C Annual Report 2015
2016	650,000	E&C Annual Report 2016
2017	416,000	E&C Annual Report 2017
2018	505,000	E&C Annual Report 2018

Consumer Price Index (Table, Sources, Methods)

Source: Bureau of Labor Statistics, “Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, all items, by month,” available at: <https://www.bls.gov/cpi/tables/supplemental-files/historical-cpi-u-201812.pdf>.

Method: Prices were deflated, then multiplied by the 2018 deflator to convert prices into 2018 terms.

Year	CPI Deflator	Year	CPI Deflator
1980	0.824	2000	1.722
1981	0.909	2001	1.771
1982	0.965	2002	1.799
1983	0.996	2003	1.84
1984	1.039	2004	1.889
1985	1.076	2005	1.953
1986	1.096	2006	2.016
1987	1.136	2007	2.07342
1988	1.183	2008	2.15303
1989	1.24	2009	2.14537
1990	1.307	2010	2.18056
1991	1.362	2011	2.24939
1992	1.403	2012	2.29594
1993	1.445	2013	2.32957
1994	1.482	2014	2.36736
1995	1.524	2015	2.37017
1996	1.569	2016	2.40007
1997	1.605	2017	2.4512
1998	1.63	2018	2.51107
1999	1.666		

Sources

All reports authored by EPA's Office of Enforcement and Compliance Assurance (OECA).

All documents accessible on the web as of February 22, 2019.

Annual reports for enforcement and compliance are listed as "E&C Annual Report XXXX" in the tables above. The actual report titles vary from year to year, so these are also given below.

- "National Enforcement Trends (NETs) Report," (August 2011), available at <https://web.archive.org/web/20120619023221/http://www.epa.gov/compliance/resources/reports/nets/nets.pdf>.
- (This document contains long-term trends as well as metadata on EPA's data collection).
- E&C Annual Report 2018 ("Enforcement Annual Results for Fiscal Year 2018"), available at <https://www.epa.gov/enforcement/enforcement-annual-results-fiscal-year-2018>.
- E&C Annual Report 2017 ("Enforcement Annual Results for Fiscal Year 2017"), available at <https://www.epa.gov/enforcement/enforcement-annual-results-fiscal-year-2017>.
- E&C Annual Report 2016 ("Enforcement Annual Results for Fiscal Year 2016"), available at <https://archive.epa.gov/epa/enforcement/enforcement-annual-results-fiscal-year-2016.html>.
- E&C Annual Report 2015 ("Enforcement Annual Results for Fiscal Year (FY) 2015"), available at https://archive.epa.gov/epa/sites/production/files/2017-01/documents/enforcement_annual_results_for_fiscal_year_fy_2015.pdf.
- E&C Annual Report 2014 ("Enforcement Annual Results for Fiscal Year (FY) 2014"), available at <https://archive.epa.gov/enforcement/annual-results/web/pdf/EnforcementAnnualResultsforFiscalYear2014EnforcementUSEPA.pdf>.
- E&C Annual Report 2013 ("Enforcement Annual Results for Fiscal Year (FY) 2013"), available at <https://archive.epa.gov/enforcement/annual-results/web/pdf/eoy2013.pdf>.
- E&C Annual Report 2012 ("Enforcement Annual Results for Fiscal Year 2012"), available at <https://archive.epa.gov/enforcement/annual-results/web/pdf/eoy2012.pdf>.
- E&C Annual Report 2011 ("Compliance and Enforcement Annual Results 2011 Fiscal Year"), available at <https://archive.epa.gov/enforcement/annual-results/web/pdf/eoy2011.pdf>.
- E&C Annual Report 2008 ("Compliance and Enforcement Annual Results FY2008"), available at <https://archive.epa.gov/enforcement/annual-results/web/pdf/eoy2008.pdf>.
- E&C Annual Report 2003 ("Compliance and Enforcement Annual Results – FY2003"), available at <https://archive.epa.gov/enforcement/annual-results/web/pdf/eoy2003.pdf>.
- E&C Annual Report 2002 ("Compliance and Enforcement Annual Results – FY2002"), available at <https://archive.epa.gov/enforcement/annual-results/web/pdf/eoy2002.pdf>.
- E&C Annual Report 1999 ("Compliance and Enforcement Annual Results – FY1999"), available at <https://archive.epa.gov/enforcement/annual-results/web/pdf/eoy1999.pdf>.
- E&C Annual Report 1995 ("Enforcement and Compliance Assurance Accomplishments Report, FY 1995"), available at <https://nepis.epa.gov/Exe/ZyPDF.cgi/500007JK.PDF?Dockey=500007JK.PDF>.
- E&C Annual Report 1994 ("Enforcement and Compliance Assurance Accomplishments Report: FY 1994"), available at <https://nepis.epa.gov/Exe/ZyPDF.cgi/500006TW.PDF?Dockey=500006TW.PDF>.