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## The EPA at Fifty Symposium: Keynote Address

Andrew Wheeler

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## THE EPA AT FIFTY SYMPOSIUM: KEYNOTE ADDRESS

*Andrew Wheeler*<sup>†</sup>

Good afternoon, it is a pleasure to be with you today. Thank you to Professor Jonathan Adler for the introduction. We have known each other for at least twenty years. I also want to thank the University for hosting me. It is great to be back at Case Western. I graduated with my undergraduate degree here in 1987. I almost went to law school here. As I was making my decision, my car was stolen for the second time from just outside my dorm. The campus has changed a lot since the 1980s; it is a lot safer. But when it was stolen for the second time, I decided I wanted to be in a different city, and I went to Washington University in St. Louis. I know I would have had a great time if I would have come here for law school, though.

Next year, the Environmental Protection Agency (EPA) turns fifty, and that is why we are here. To borrow from the old Henny Youngman joke, you know you're fifty when you are warned to slow down by your doctor instead of the police.<sup>1</sup> The Agency has matured, but we are not slowing down anytime soon. We have a lot of important work to do. For my remarks today, I would like to focus on two EPAs: The EPA of the past forty-nine years, and the EPA of the next fifty.

I do not think there is any question that our nation has made tremendous environmental progress over the past forty-nine years. From 1970 to 2018, the combined emissions of the main six air pollutants dropped 74%, while the U.S. economy grew by 275%. Emissions of all these pollutants have continued to decline under President Trump.<sup>2</sup> In the 1970s, more than 40% of our nation's drinking-water systems failed to meet even the most basic health standards.<sup>3</sup> Today, over 92% of community water systems meet all health-based standards, all the time.<sup>4</sup> That is not to say the other 8% fail to meet the criteria all of the time;<sup>5</sup> they may have a day here and

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† Administrator, Environmental Protection Agency.

1. ED FISCHER & JANE THOMAS NOLAND, WHAT'S SO FUNNY ABOUT GETTING OLD? 58 (rev. ed. 2014).
2. *Our Nation's Air*, EPA, <https://gispub.epa.gov/air/trendsreport/2019/> [<https://perma.cc/76CZ-F83Y>] (reporting the decrease in emissions of the main six air pollutants through 2018) (last visited June 11, 2020).
3. *EPA at 50: Progress in Providing Safe Drinking Water*, EPA (Feb. 18, 2020), <https://www.epa.gov/newsreleases/epa-50-progress-providing-safe-drinking-water> [<https://perma.cc/3CQA-QU4B>].
4. *Id.*
5. Maura Allaire et al., *National Trends in Drinking Water Quality Violations*, 115 PROCEEDINGS NAT. ACAD. SCI. U.S. 2078, 2078 (2017) (“[I]n a given

there that they do not, but we are working with those communities. Today, the United States has the cleanest air on record, and we are ranked number one in the world for access to clean drinking water.<sup>6</sup> My point here is not to gloss over our challenges, but to demonstrate that the efforts started in the 1970s to clean up our air, land, and water have been largely effective. We all know that there is still much more work to be done. We face significant challenges—some that have plagued the Agency for forty-nine years. But to properly understand and address these challenges we must go back to our founding.

The EPA is the child of a large executive branch re-organization. President Nixon transferred fifteen existing units from four government agencies into a new independent agency.<sup>7</sup> Air, Solid Waste, Radiological Health, Water Hygiene, and Pesticide Tolerance were transferred from the Department of Health, Education, and Welfare;<sup>8</sup> Water Quality and Pesticide Label Review came from the Interior Department;<sup>9</sup> Radiation Protection Standards came from the Atomic Energy Commission and the Federal Radiation Council;<sup>10</sup> and Pesticide Registration came from the Department of Agriculture.<sup>11</sup> All these incoming employees had to learn new policies and protocols—not to mention keeping pace with the slew of new environmental laws passed in the 1970s.<sup>12</sup> One result of piecing the Agency together in this fashion is that we tend to have a very siloed mentality. And that has continued throughout the last forty-nine years. The air office operates in its silo; the water office in its silo; and so forth. This is a mentality we have struggled with for the past forty-nine years. And it impacts our rulemakings and how well we

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year, about 7–8% of [community water systems] report at least one health-based violation. While this rate is relatively low, improved compliance is needed to ensure safe drinking water nationwide.”).

6. *Our Nation's Air*, *supra* note 2 (showing the lowest aggregate emissions since 1970); *see also* ENVTL. PERFORMANCE INDEX, WATER AND SANITATION 5 fig.6-2 (2018) (ranking as first the North American and European region in terms of the percentage of the region's population that has access to water-sanitation services), *available at* <https://epi.envirocenter.yale.edu/2018-epi-report/water-and-sanitation> [<https://perma.cc/5JZN-G9MS>].
7. Reorganization Plan No. 3 of 1970, 35 Fed. Reg. 15,623 (Oct. 6, 1970), *reprinted as amended in* 5 U.S.C. app. at 202–07 (2006).
8. *Id.*
9. *Id.*
10. *Id.*
11. *Id.*
12. *See* Salvatore Cardoni, *Top 5 Pieces of Environmental Legislation*, ABC NEWS (July 1, 2010, 3:58 PM), <https://abcnews.go.com/Technology/top-pieces-environmental-legislation/story?id=11067662> [<https://perma.cc/KUS4-FDHA>].

interact with states and the regulated community. We have to break down those silos, and that is what we've been working on.

I think our best effort in this regard has been the PFAS Action Plan.<sup>13</sup> The Action Plan is the first time we utilized every single one of our program offices to put together a multi-media, national-research and risk-communication plan to address an emerging chemical of concern.<sup>14</sup> That had never happened in the forty-nine years of the Agency. We issued that plan this past February, and we are looking at all of our statutes and we are moving forward to protect the public from PFAS.<sup>15</sup> PFAS get into the drinking water and it is an extremely difficult environmental issue to grapple with. And we are using all of our statutes to try to address it.<sup>16</sup> PFAS bioaccumulate.<sup>17</sup> They have an impact on internal organs, including your liver and kidneys.<sup>18</sup> There are over 5,000 different PFAS: 602 have been in commerce over the last ten years in the United States, and 1200 overall have been approved in the United States in commerce over the last ten to twenty years. And they are hard to detect; you cannot use the same detection method for all the PFAS and you cannot use the same clean-up methods for all of them.<sup>19</sup>

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13. EPA, EPA'S PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) ACTION PLAN (2019), available at [https://www.epa.gov/sites/production/files/2019-02/documents/pfas\\_action\\_plan\\_021319\\_508compliant\\_1.pdf](https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf) [<https://perma.cc/X8CA-V5LY>].
  14. *EPA and Partners Describe a Chemical Category Prioritization Approach to Select 75 PFAS for Testing Using New Approach Methods*, EPA (Feb. 26, 2019), <https://www.epa.gov/sciencematters/epa-and-partners-describe-chemical-category-prioritization-approach-select-75-pfas> [<https://perma.cc/9VJS-AWTZ>].
  15. See EPA, *supra* note 13, at 28.
  16. See *id.* at 13–15.
  17. *PFAS: What You Need to Know*, EPA, [https://www.epa.gov/sites/production/files/2018-03/documents/pfasv15\\_2pg\\_0.pdf](https://www.epa.gov/sites/production/files/2018-03/documents/pfasv15_2pg_0.pdf) [<https://perma.cc/NL8P-XS9A>] (last visited June 11, 2020).
  18. *Id.*
  19. *Per and Polyfluoroalkyl Substances (PFAS)*, FOOD & DRUG ADMIN., <https://www.fda.gov/food/chemicals/and-polyfluoroalkyl-substances-pfas> [<https://perma.cc/5XJU-MLJP>] (counting 5,000 types of PFAS) (last updated Dec. 20, 2019); EPA, NATIONAL PRIORITIES: RESEARCH ON PFAS IMPACTS IN RURAL COMMUNITIES AND AGRICULTURAL OPERATIONS 5 (2019) (reporting 602 active PFAS during a ten-year period), available at [https://www.epa.gov/sites/production/files/2019-11/documents/rfa\\_-\\_national\\_priorities\\_pfas-ag\\_to\\_ogc\\_ogdbsb\\_ll\\_4\\_0.pdf](https://www.epa.gov/sites/production/files/2019-11/documents/rfa_-_national_priorities_pfas-ag_to_ogc_ogdbsb_ll_4_0.pdf) [<https://perma.cc/7X46-5N85>]; EPA, EPA PFAS ACTION PLAN: PROGRAM UPDATE 5–6 (2020) (depicting the different testing methods for types of PFAS), available at [https://www.epa.gov/sites/production/files/2020-01/documents/pfas\\_action\\_plan\\_feb2020.pdf](https://www.epa.gov/sites/production/files/2020-01/documents/pfas_action_plan_feb2020.pdf) [<https://perma.cc/Q4R3-BGMP>].

We are moving forward with the process to develop a national drinking-water standard for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonate (PFOS).<sup>20</sup> We have begun the regulatory-development process for listing PFOA and PFOS as hazardous substances under the Superfund statute.<sup>21</sup> And in April, we released for public review and comment the interim groundwater-cleanup recommendations for sites contaminated with PFOA and PFOS.<sup>22</sup> All these actions required coordination across program offices, and I am very proud of the progress we are making in this respect.

While the Agency has been slow to change in some respects, in other respects, certain changes have been an important and necessary part of the Agency's maturation. Forty to fifty years ago, the EPA was the primary enforcer of our nation's environmental laws. The Clean Water Act, the Clean Air Act, and our other core environmental laws always envisioned a major role for the states, but it took states time to build up their programs.

And early on, the EPA had to throw its weight around to prove its authorities were legitimate. Here is what William Ruckelshaus, the first EPA Administrator said during his confirmation hearing: "As far as I view the mission of this Agency and my mission as its proposed Administrator, it is to be as forceful as the laws that Congress has provided, and to present firm support for enforcement by the States."<sup>23</sup> He meant what he said. In its first year alone, the EPA referred 152 pollution-related cases to the Department of Justice for prosecution.<sup>24</sup> And only a week after becoming the first Administrator, Ruckelshaus announced that the EPA was serving the cities of Atlanta, Detroit, and Cleveland with 180-day notices that directed them to stop violating federally sponsored state-water-quality standards.<sup>25</sup> In

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20. *Drinking Water Health Advisories for PFOA and PFOS*, EPA, <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos> [<https://perma.cc/6DMQ-SV4S>] (last updated Feb. 13, 2019).
  21. *PFAS Laws and Regulations*, EPA, <https://www.epa.gov/pfas/pfas-laws-and-regulations> [<https://perma.cc/SZ62-347M>] (last updated July 30, 2018).
  22. *Interim Recommendations for Addressing Groundwater Contaminated with PFOA and PFOS*, EPA, <https://www.epa.gov/pfas/interim-recommendations-addressing-groundwater-contaminated-pfoa-and-pfos> [<https://perma.cc/9FDD-86LU>] (last updated Dec. 20, 2019).
  23. *The Guardian: Origins of the EPA*, EPA, <https://archive.epa.gov/epa/aboutepa/guardian-origins-epa.html> [<https://perma.cc/78C4-JA3V>] (last updated Sept. 6, 2016).
  24. *The Guardian: EPA's Formative Years, 1970-1973*, EPA, <https://archive.epa.gov/epa/aboutepa/guardian-epas-formative-years-1970-1973.html> [<https://perma.cc/8FS2-2M2X>] (last updated Sept. 6, 2016).
  25. *Id.*

response, Cleveland Mayor Carl Stokes accused Ruckelshaus of making a politically motivated assault on Democrat-controlled cities.<sup>26</sup>

This sounds vaguely familiar to the response of a certain state out West to some of our recent actions. Contrary to what some may think, our actions are not unprecedented. The EPA has been doing this since week one of its existence. And in many cases, we are acting where other administrations have failed to. For the past decade, New York City has failed to comply with Safe Drinking Water Act requirements that keep its drinking water safe from harmful bacteria and viruses, even when it was under an order to do so.<sup>27</sup> In March of this year, we compelled the city to comply by covering and protecting its Hillview water reservoir.<sup>28</sup> Implementing the consent decree will cost the city almost \$3 billion.<sup>29</sup> That is costly, but New York City is not exempt from the law. No state or city is exempt from the law.

The difference today is that, over time, states have assumed their delegable authorities under federal law. In fact, states have assumed 96% of those authorities.<sup>30</sup> We have delegated the Clean Air Act permitting programs to forty-eight states.<sup>31</sup> We have authorized Clean Water Act permitting programs in forty-seven states.<sup>32</sup> And we have authorized forty-nine states to act as the primary enforcement authority under the Safe Drinking Water Act.<sup>33</sup> In most cases, the states are now the front line for enforcement and inspection. Federal enforcement is now a smaller part of assuring compliance with environmental laws. Forty to fifty years ago we did it all; now the states play a major role. We need to recognize that change. Much of our enforcement role today has transitioned to ensuring states uphold their obligations while also working with them to handle very complex enforcement actions.

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26. *Id.*

27. *City of New York to Comply with the Federal Safe Drinking Water Act and Prevent Contamination of the City's Drinking Water Supply*, EPA (Mar. 18, 2019), <https://www.epa.gov/newsreleases/city-new-york-comply-federal-safe-drinking-water-act-and-prevent-contamination-citys> [<https://perma.cc/73PJ-YMWV>].

28. *Id.*

29. *Id.*

30. EPA, WORKING TOGETHER: FY 2018–2022 U.S. EPA STRATEGIC PLAN 27 (2019).

31. *See* Modernizing the Administrative Exhaustion Requirement for Permitting Decisions and Streamlining Procedures for Permit Appeals, 84 Fed. Reg. 66,084, 66,086 (Dec. 3, 2019) (to be codified at 40 C.F.R. pts. 1, 22, 23, 49, 52, 55, 71, 78, 124, and 222).

32. *See NPDES Permits Around the Nation*, EPA, <https://www.epa.gov/npdes-permits> [<https://perma.cc/KS27-TCA9>] (last updated Dec. 30, 2019).

33. MARY TIEMANN, CONG. RESEARCH SERV., RL31243, SAFE DRINKING WATER ACT (SDWA): A SUMMARY OF THE ACT AND ITS MAJOR REQUIREMENTS 1 (2017).

Case in point: In January of this year, the EPA and the Department of Justice announced a \$490 million settlement with Fiat Chrysler for cheating U.S. emissions standards.<sup>34</sup> For three years, Fiat Chrysler told us that their vehicles were compliant.<sup>35</sup> Yet, it was the EPA's engineers in our Ann Arbor lab that caught them cheating.<sup>36</sup> Then, they proved how they were cheating. And that was no easy task. Defeat devices hidden in vehicle software can have more than 100 million lines of code.<sup>37</sup> To give you an idea of what the EPA's staff had to deal with, an F-22 fighter jet has less than 2 million lines of code, and a Boeing 787 has around 14 million lines of code.<sup>38</sup> Of course, this is not the first time that a vehicle manufacturer has purposefully installed hidden software that defeats emission controls. Volkswagen installed similar defeat devices in over 500,000 vehicles.<sup>39</sup> These examples illustrate how we see our role moving forward over the next fifty years, taking on these large complex cases that the states do not have the resources to litigate. To do this successfully will require us to work more closely with the states, which has been a primary objective of President Trump.

In Anne Gorsuch Burford's memoir about her time at the EPA, she writes that the Reagan Administration inherited a backlog of nearly

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34. Consent Decree at 19, *United States v. Fiat Chrysler Automobiles US LLC*, No. 3:17-md-02777 (N.D. Cal. Jan. 10, 2019), ECF No. 484-1; see also *Fiat Chrysler Automobiles Clean Air Act Civil Settlement Information Sheet*, EPA, <https://www.epa.gov/enforcement/fiat-chrysler-automobiles-clean-air-act-civil-settlement-information-sheet> [<https://perma.cc/M8A6-X5NA>] (last updated Jan. 14, 2020).
  35. See Sam Thielman, *Fiat Chrysler Used Software to Cheat Diesel Emissions Testing, EPA Alleges*, THE GUARDIAN (Jan. 12, 2017, 12:16 PM), <https://www.theguardian.com/business/2017/jan/12/fiat-chrysler-diesel-emission-cheating-software-epa> [<https://perma.cc/23F2-NKLR>].
  36. *In Civil Settlements with the United States and California, Fiat Chrysler to Settle Allegations of Cheating on Federal and State Vehicle Emissions Tests*, EPA (Jan. 10, 2019), <https://www.epa.gov/newsreleases/civil-settlements-united-states-and-california-fiat-chrysler-settle-allegations> [<https://perma.cc/U9FA-LWBP>]; see also *About the National Vehicle and Fuel Emissions Laboratory (NVFEL)*, EPA, <https://www.epa.gov/aboutepa/about-national-vehicle-and-fuel-emissions-laboratory-nvfel> [<https://perma.cc/DFT5-V777>] (last updated Aug. 7, 2019).
  37. See Leah McGrath Goodman, *Why Volkswagen Cheated*, NEWSWEEK (Dec. 15, 2015, 1:01 AM), <https://www.newsweek.com/2015/12/25/why-volkswagen-cheated-404891.html> [<https://perma.cc/V8LL-RCKF>].
  38. *How Much Code? Planes*, CODE INST., <https://codeinstitute.net/blog/how-many-lines-of-code-787/> [<https://perma.cc/C8CK-GBPE>] (last visited June 11, 2020).
  39. Robinson Meyer, *Volkswagen's Game of Make-Believe*, THE ATLANTIC (Sept. 18, 2015), <https://www.theatlantic.com/technology/archive/2015/09/volkswagens-game-of-make-belief/406159/> [<https://perma.cc/65NF-ZN4P>].

2,000 state implementation plans (SIPs).<sup>40</sup> These are the plans that states submit to comply with our nation's air-quality standards. Reading her memoir, I could not help but notice the similarities with the current administration: we inherited a backlog of over 700 SIPs from the previous administration.<sup>41</sup>

Since the fall of 2017, we have re-designated nineteen areas around the country, moving them into attainment with the National Ambient Air Quality Standards and lifting major regulatory burdens off local businesses.<sup>42</sup> To give you an idea of our change in approach, the previous administration imposed more than fifty federal implementation plans (FIPs) on states—that is about ten times the number of FIPs imposed by the three previous administrations combined.<sup>43</sup> We are working hard to convert these FIPs back to SIPs; working cooperatively with the states we are averaging almost one FIP-to-SIP per month since March 2017. We are also aggressively tackling the backlog of SIPs that I mentioned earlier. Of the more than 700 SIPs we inherited, we have taken action on over 400. We are down to less than 300 in the backlog. We are also keeping pace with the SIPs submitted each year by the states.

For the EPA to be successful over the next fifty years, we must work closely with our state and local partners. This is one of the reasons we realigned our regional offices with our headquarters. Our regions are often the first line of interaction with the Agency. It did not make sense to have an air office at headquarters, but not in the regional offices; that only created confusion. We had two regions that did not have an air office. So we mirrored our regional offices with headquarters, and now we have a much more integrated and streamlined line of communication from the local level all the way up to Washington.

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40. ANNE M. BURFORD & JOHN GREENYA, ARE YOU TOUGH ENOUGH? 66 (1986).
41. *Presidential Memo on Implementation of Air Quality Standards Showcases EPA Progress on Promoting Domestic Manufacturing and Job Creation*, EPA, <https://archive.epa.gov/epa/newsreleases/presidential-memo-implementation-air-quality-standards-showcases-epa-progress-promoting.html> [<https://perma.cc/X4QT-32RF>] (last updated Feb. 21, 2020).
42. *EPA Releases 2019 Year in Review Highlighting Agency Accomplishments and Environmental Progress under President Trump & Administrator Andrew Wheeler*, EPA (Feb. 6, 2020), <https://www.epa.gov/newsreleases/epa-releases-2019-year-review-highlighting-agency-accomplishments-and-environmental> [<https://perma.cc/Z8JW-XTL8>]; see also EPA, *Ohio: Columbus is Nation's First Non-Attainment Area to Meet Ozone Air Quality Standard*, EPA (Aug. 21, 2019), <https://www.epa.gov/newsreleases/epa-ohio-columbus-nations-first-non-attainment-area-meet-ozone-air-quality-standard> [<https://perma.cc/L8XH-B62B>].
43. *Presidential Memo on Implementation of Air Quality Standards Showcases EPA Progress on Promoting Domestic Manufacturing and Job Creation*, *supra* note 41.



In each of the examples I mentioned, it is easy to see that we are asking a lot of our staff, and that we expect a lot from them. One reason for that is that we know how talented and dedicated our staff are. Another reason is necessity. At its peak, the Agency had over 18,000 full-time employees in 1999.<sup>44</sup> Under Presidents Clinton and George W. Bush, the Agency consistently hovered around 17,000.<sup>45</sup> Today, we are down to Reagan-era levels—about 14,000. We must act and plan as if we will not reach those previous levels again. This also requires us to recognize that the broader workplace culture in America is shifting. Fifty years ago, people went to work for one employer, and it was not uncommon for them to work most of their lives at that place. In fact, today we still have ten charter employees that have been at the Agency since day one.

We cannot expect that anymore. Today, 40% of our workforce is eligible to retire in the next five years. Millennials are a different generation. They expect to work multiple jobs throughout their life. So we need to adapt as an agency. We need to do a better job attracting and retaining good talent.

We have hired a new human-resources director this year. We had an acting director for many years. I actually interviewed the new human-resources director before hiring her. I was told that is unusual—as the director is two to three staff levels below me—but I wanted her to know that I understand this is a priority for the Agency. We need to do a better job of attracting new people. In the past, we would hire people, train them, and expect them to be in the position for twenty to thirty years. We cannot do that anymore. We also need to do a better job as people retire, that we don't lose that historical knowledge as people leave.

I have visited all ten of our regional offices. I do all-hands meetings and I take questions from the employees everywhere I go. I was in Region Seven in Kansas City and one of the human-resources employees there developed a database, and as people retired she would enter all the information they had to pass to the people hired to replace them. She went away on a detail for two years, and when she returned, the region had redesigned its computer systems and her database had been wiped out.

I told our human-resources director that we need something like that across the entire Agency. As we start to lose this 40% of our employees who are eligible to retire, we need to make sure we are not losing the historical knowledge that they have. This is so important to our agency. And when that talent leaves, we need to ensure their institutional knowledge is preserved and passed along. We are also taking the initiative to develop creative ways to attract and retain top

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44. *EPA's Budget and Spending*, EPA, <https://www.epa.gov/planandbudget/budget> [<https://perma.cc/3JUN-HLQD>] (last updated Dec. 16, 2019).

45. *Id.*

talent. In order to implement the updated Toxic Substances Control Act (TSCA) and more efficiently perform risk assessments, we have been focused on recruiting highly trained scientists.

We focused our human resources last year on trying to hire new risk assessment scientists to the agency for the TSCA program. It takes a lot of time to hire a federal employee. Our goal from start to finish is ninety days, which is fairly long—but nothing like the private sector—and that is if we are moving quickly. So we put a lot of resources in 2018 to hire new risk assessors. We were able to hire thirty new risk assessors for the TSCA program, which is an incredible achievement from the human resources department. At the same time, thirty researchers retired from that program in 2018.

So, we put a lot of time and resources in and we are barely treading water on trying to get new talent in. One of the things we are looking at now is looking at a risk-assessment office at our research-triangle office in North Carolina since there are so many researchers graduating and many want to stay in that area. We are trying to be creative with where we place our scientists so we can attract and retain as many quality scientists as we can.

As any executive of a large organization knows, when you have ample staff, you do not have to be as efficient. We, on the other hand, are learning to do more with less. We need to be more efficient—and we found that out very quickly. Prior to this administration, the Agency was not tracking some of its most important obligations. For example, at the beginning of this administration, President Trump knew he wanted all of his federal permitting done within two years.<sup>46</sup> My predecessor set a goal for the EPA to get permits done within six months.<sup>47</sup> We quickly discovered that the Agency was not tracking how long it took to issue a permit. You cannot improve if you do not track how long a process takes. You cannot improve a process if you do not measure it. That is why we implemented the “lean management system across the Agency.”<sup>48</sup>

Gina McCarthy actually launched it as a pilot program in a few offices, and when our administration came in, we began deploying it across all the programs and regions.<sup>49</sup> Lean management is also called

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46. Exec. Order No. 13,807, 82 Fed. Reg. 40,463 (Aug. 24, 2017).

47. Ernest Scheyder & Bryan Sims, *U.S. EPA to Shrink Response Time for Permit Requests: Pruitt*, REUTERS (Oct. 19, 2017, 8:23 PM), <https://www.reuters.com/article/us-epa-pruitt/u-s-epa-to-shrink-response-time-for-permit-requests-pruitt-idUSKBN1CP00R> [<https://perma.cc/ES5E-3QFW>].

48. EPA, EPA LEAN MANAGEMENT (ELMS): FACT SHEET (2019).

49. See Timothy Cama, *EPA Head Slams GOP Budget Cuts*, THE HILL (July 7, 2015, 1:07 PM), <https://thehill.com/policy/energy-environment/247064-epa-head-slams-gop-budget-cuts> [<https://perma.cc/PD76-9GRE>]; EPA, LEAN GOVERNMENT IMPLEMENTATION GUIDE 1 (2017).

“the Toyota system.”<sup>50</sup> When I worked at the EPA (my first job out of law school was at the EPA in 1991), we tried to introduce total quality management (TQM) into the Agency and it did not really work.<sup>51</sup> TQM is a bottom-up approach. Lean management is both bottom-up and top-down at the same time. We have had tremendous success so far on the lean management system.

On the permit side, we reduced our backlogs over the past year by 54%. We also have our large enforcement laboratory in Lakewood, Colorado. They did multi-media inspections around the country. It was taking them over 180 days to issue an inspection report. We implemented the lean management system there last year, and now over 90% of those inspection reports are issues within thirty days—which is incredible if you think about it. That was 180 days where the facility did not know what was going on or if there they were doing anything wrong, and it was also 180 days where no environmental improvements were taking place, because they were not issuing any inspection reports to the facilities.

I would like to highlight a little bit on superfund and brownfields. We cannot be everywhere at all times and that is not how Congress envisioned our role. But we do have some very important, fundamental responsibilities that the Agency has not consistently upheld throughout its forty-nine-year history. A prime example would be the Superfund program.

I think it is fair to say that the Agency did not anticipate the magnitude of the challenges it would be take on when the Superfund program was created. The crisis at Love Canal awakened the nation to the reality of the problem.<sup>52</sup> But it soon became clear that the Resource Conservation and Recovery Act (RCRA) and the Clean Water Act were not enough to address the problem. So, in 1980, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was passed and the Superfund program was created.<sup>53</sup> By 1983, preliminary assessments were conducted at 7,300 of the 17,000 sites

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50. See, e.g., Tom Relihan, *Setting the Record Straight on Lean*, MASS. INST. TECH. (Apr. 10, 2019), <https://mitsloan.mit.edu/ideas-made-to-matter/setting-record-straight-lean> [<https://perma.cc/Q4KC-SPUE>] (describing the lean-management system’s inception at Toyota).
  51. See EPA, 400 R-92-004, TOTAL QUALITY MANAGEMENT: MAKING IT RELEVANT 1 (1992).
  52. Alice Mah, *Lessons from Love Canal: Toxic Expertise and Environmental Justice*, OPENDEMOCRACY (Aug. 7, 2013), <https://www.opendemocracy.net/en/lessons-from-love-canal-toxic-expertise-and-environmental-justice/> [<https://perma.cc/4WL4-M3R7>].
  53. *Superfund: CERCLA Overview*, EPA, <https://www.epa.gov/superfund/superfund-cercla-overview> [<https://perma.cc/4NUT-3FQN>] (last updated June 4, 2018).

already identified, and 546 were placed on the National Priorities List (NPL). It was not long before the NPL grew to over 1,000 sites.<sup>54</sup>

Most of these sites are incredibly complex and require a lot of time and financial resources. Thus, it was not unusual for a site to sit on the Superfund NPL for decades. A perfect example was the West Lake Landfill in Missouri, home to radioactive waste from the Manhattan Project, which has been on the NPL for nearly two decades. We believe that the Agency must do better. We believe that a site on the NPL should be just that: a national priority. And our actions demonstrate that belief.

This past year we reached an agreement with all the potentially responsible parties (PRPs) and the local residents around the West Lake landfill, and we are moving forward on getting that cleaned up for the first time in over two decades.<sup>55</sup> In the 2018 fiscal year, the EPA deleted all or part of twenty-two sites from the NPL, the largest number of deletions in one year since 2005.<sup>56</sup> I am very pleased to report that in the 2019 fiscal year, the EPA removed all or part of twenty-seven sites from the NPL, the largest number of deletions since 2001.<sup>57</sup> This is an exceptional and important achievement carried out by the EPA's career staff. These accomplishments are the result of detailed plans to refocus and re-energize the Superfund program.

We launched the Superfund Task Force and created the Administrator's Emphasis List to help get sites on the edge of completion across the finish line. Our success in the Superfund program exemplifies the tremendous potential of the Agency. More often than not, the residents living near Superfund sites are low-income or under-served communities.

Our work is breathing new life into these communities and transforming frustration and despair into hope and opportunity. This ensures our vision for the EPA's next fifty years: an agency that is agile and responsive to the needs of the public; an agency that works seamlessly with its state and local partners; an agency that attracts and

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54. Phil Wisman, *EPA History (1970–1985)*, EPA, <https://archive.epa.gov/epa/aboutepa/epa-history-1970-1985.html> [<https://perma.cc/E4XQ-XD35>] (last visited June 11, 2020); Jessica Morris, *Polluted Sites Linger Under U.S. Cleanup Program*, CHEMICAL & ENGINEERING NEWS (Apr. 3, 2017), <https://cen.acs.org/articles/95/i14/Polluted-sites-linger-under-US-cleanup-program.html> [<https://perma.cc/FE8H-J79U>].
55. Bryce Gray, *EPA Reaches Cleanup Decision for Radioactive West Lake Landfill Superfund Site*, ST. LOUIS DISPATCH (Sept. 27, 2018), [https://www.stltoday.com/business/local/epa-reaches-cleanup-decision-for-radioactive-west-lake-landfill-superfund/article\\_70796e6f-d975-5122-8670-16a67154b442.html](https://www.stltoday.com/business/local/epa-reaches-cleanup-decision-for-radioactive-west-lake-landfill-superfund/article_70796e6f-d975-5122-8670-16a67154b442.html) [<https://perma.cc/V5TP-QTYM>].
56. *Number of NPL Site Actions and Milestones by Fiscal Year*, EPA, <https://www.epa.gov/superfund/number-npl-site-actions-and-milestones-fiscal-year> [<https://perma.cc/VM3F-BNQM>] (last updated June 4, 2018).
57. *Id.*

retains world-class talent—talent that reflects the diverse society we serve; and an agency that is a global leader in science and research.

Of course, these goals will soon slip out of my control. I may have a say over the next five years, but not the next fifty years, which is why we are implementing things like the lean management system. In fact, what we did this year with the senior executive service, the most senior career officials at the agency, we put an end to their performance-evaluation system. So, one of the measures they are judged on today is implementing only a lean-management project or program within their offices. We believe things like this, along with the reorganization of the regional offices and the hiring and trying to cut across our silos to create more comprehensive management plans for environmental issues—where we do not look at things in the clean-air silo or the clean-water silo, but across the board using all of our offices—will make the EPA a much more nimble organization and will protect the environment and public health of Americans for the next fifty years.