

IMPROVING FUTURE MANAGEMENT OF THE SUPERFUND PROGRAM

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

ONE HUNDRED NINETEENTH CONGRESS

FIRST SESSION

APRIL 9, 2025

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COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ONE HUNDRED NINETEENTH CONGRESS

FIRST SESSION

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IMPROVING FUTURE MANAGEMENT OF THE SUPERFUND PROGRAM

WEDNESDAY, APRIL 9, 2025

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The committee met, pursuant to notice, at 10:03 a.m. in room 406, Dirksen Senate Office Building, Hon. Shelley Moore Capito (chairman of the committee) presiding.

Present: Senators Capito, Whitehouse, Lummis, Boozman, Husted, Merkley, Kelly, Schiff, Blunt Rochester.

OPENING STATEMENT OF HON. SHELLEY MOORE CAPITO, U.S. SENATOR FROM THE STATE OF WEST VIRGINIA

Senator CAPITO. Thank you all for being patient with us. We are starting this hearing; I note that there are several other committees that have votes going on, one of which is one of my committees, which is Commerce. I am going to make my opening statement and go over there quickly. Senator Whitehouse has very kindly stepped up to the plate here to move the hearing forward.

Good morning. I am going to be in a good mood all day, all day. Hold me to that.

Today we will discuss challenges facing the EPA's Superfund program and solutions to ensure it can live up to its full potential. Since I have become chairman, I have stressed that EPA must refocus the agency's work on the core environmental missions to deliver the cleanups and environmental solutions that most benefit the environment and America's health and welfare.

The Superfund program, as enacted, is one of the best examples of the EPA executing that core mission. Cleaning up our Nation's most contaminated sites directly improves public health and can revitalize struggling communities. I have certainly seen that in my own State.

Congress established Superfund in 1980 in response to several high profile environmental disasters. The law was designed to promptly cleanup heavily contaminated sites and to make polluters responsible for the cleanup. These are important goals, but the EPA's management of the Superfund program has not delivered as intended. Communities now expect the Superfund cleanup to take more than a decade, I have already heard that from our witnesses in our informal conversations. That prolonged timeline sends conflicting messages to communities with a site nearby. You live near one of the most hazardous places in the Country, but EPA will let it sit there for years before they allow it to be fully cleaned up.

Despite the lengthy cleanup timeline, the Superfund program has achieved some critical environmental and public health victories and restored thousands of contaminated sites across the Country. The reason for delays that robbed Superfund of its full potential is that EPA's implementation of the law prioritizes process over results.

The complexity of the law has made it one of the most difficult environmental programs to administer. In practice, the main winners in managing Superfund cleanups are the lawyers who profit from endless litigation while communities wait for promised relief.

To manage a law this complex, the EPA has built an entangled web of bureaucracy, workgroups, task forces and committees that too often slow progress instead of delivering results. Cleaning up Superfund sites is naturally a costly endeavor.

The problems with Superfund cannot be blamed on funding alone. To better help communities get the most out of limited taxpayer funding, Congress and the EPA must identify efficiencies to accelerate the cleanups. This is particularly important when considering the overall costs of Superfund cleanups.

Superfund price tag is not just about the complexity of environmental cleanup. This is what I call the Superfund premium, the concept where the same environmental cleanup becomes more expensive and time consuming under Superfund compared to a State-led or a voluntary cleanup program.

Whether managed under Superfund authority or through a State program, remediation is likely to involve the same core work, removing contaminated soil, treating groundwater, and restoring the land. Yet because of the Superfund premium, we often see costs just balloon and timelines stretch once a site is listed. It is not because the environmental standards are higher, but rather because the program's process has replaced the law's cleanup mission.

The program's complex bureaucracy generates enormous transaction costs that have nothing to do with actual environmental cleanup. Instead of removing contaminants, limited time and financial resources are squandered on endless meetings, redundant studies, and excessive overhead costs completely unrelated to remediation. There is no shortage of responsible parties that are ready and willing to remediate the site. Even good Samaritans, well-intentioned individuals and organizations, are often deterred from cleaning up sites because of liability risks and financial barriers.

Our laws should encourage, not prevent, volunteer efforts to address legacy pollution. Accelerating the pace of Superfund cleanups does not mean cutting corners or sacrificing health protections. It means defining an end goal with a clear plan that gets it to a safe, productive end State as efficiently as possible.

The ensuing cleanup is driven by that goal, to the benefit of communities and the environment. Right now, the priority is enforcement first, cleanup second, and leaving communities to wait far too long. That needs to change.

I look forward to hearing from today's expert panel on how to improve the Superfund program's efficiency and accountability.

I now recognize Senator Whitehouse for his opening statement.

**OPENING STATEMENT OF HON. SHELDON WHITEHOUSE,
U.S. SENATOR FROM THE STATE OF RHODE ISLAND**

Senator WHITEHOUSE. [Presiding.] Let me start by thanking Chair Capito for this hearing, and our witnesses for appearing. We are here today to talk about improving the EPA's Superfund program, which is one of the best tools for holding polluters accountable for contamination at our Country's most polluted sites.

These sites exist in every State in our Nation. They are complex. Cleanups can be laborious and long to complete. Rhode Island has a long history with this program. Senator John Chaffee, former chairman of this committee, authored the Superfund program in 1980. His son and my predecessor, Lincoln Chaffee, chaired the Superfund subcommittee and championed bipartisan legislation to support the program, including authorization of the Brownfields program.

I am happy here today to continue that support and address bottlenecks to the cleanup process. However, speed must not come at the cost of efficacy. Scientists, engineers and project managers ensure that cleanups are done right. Investigators and lawyers identify responsible parties and hold them accountable. EPA employees in these roles often have specialized experience with specific sites and communities, institutional knowledge and relationships that, once lost, are hard to rebuild.

Budget, staff, and speed are interrelated. As we will hear from Mr. Gómez, when annual appropriations declined from roughly \$2 billion to \$1.1 billion, spending on remediation fell, unsurprisingly, by roughly half.

The average project completion time increased from 2.6 to 4 years. Significant delays affected one-third of long-term projects. When budgets are cut, work often slows down.

At his confirmation hearing before this committee, Administrator Zeldin appeared before us and committed to following the law. Slashing 65 percent of EPA's appropriated budget and pushing out agency staff until there is no one left to execute the law violates those promises that Administrator Zeldin made. It will do immeasurable damage to American families.

He said he would defer to the professional scientists at EPA, then turned around and plans to remove EPA's independent scientific research office. Without such expertise, how do we make sure our Country's most polluted sites are safe?

For Superfund, this mess will delay cleanups and prolong communities' exposure to harmful pollution. Let's be clear: the winners from slashing EPA's budget and staffing and kneecapping the Superfund program are the planet's biggest polluters. They are behind this.

Administrator Zeldin sat in this room and said climate change was real and must be addressed with urgency. Now he mockingly refers to the climate change "religion" and applauds himself for "driving a dagger" straight into its heart.

Climate change will compromise the safety of Superfund sites. According to GAO, 60 percent of EPA's Superfund sites are located in areas prone to flooding, storm surge and/or wildfire. EPA has therefore been integrating climate change resilience into its Superfund efforts.

We need to plan for severe storms occurring more frequently, coastal communities flooding more severely, and wildfires scorching areas they have not before. Superfund staff looked ahead at all that when conducting 5-year reviews to see what amelioration or containment efforts need adjusting.

To be good stewards of taxpayer dollars, we must ensure that climate risk remains part of the Superfund site evaluation process. Otherwise, severe weather events will wreak havoc on sites that were previously considered safe.

There are changes that can be made to improve the Superfund program, and I am glad we are here today to discuss them. However, if the Trump-Musk administration slash and burn approach continues, it would not matter what improvements we propose here today.

Senator WHITEHOUSE. [Presiding.] With that, let me turn to our witnesses for their opening remarks. Our first witness is Mr. Robert Fox, Senior Partner at the law firm Manko Gold Katcher Fox. He is a national Superfund expert known for litigating high profile cases like Gowanus Canal, and advising on CERCLA compliance liability and brownfields redevelopment.

Mr. Fox has previously testified before this committee on the Superfund program. Welcome back to the committee, Mr. Fox, and I recognize you for your opening statement. You have 5 minutes. Your full statement will be made a matter of record.

**STATEMENT OF ROBERT D. FOX, ESQUIRE, SENIOR PARTNER,
MANKO GOLD KATCHER FOX, LLP**

Mr. FOX. Thank you. Chairman Capito, Ranking Member Whitehouse and members of the Environment and Public Works Committee, thank you for the opportunity to testify.

My name is Robert Fox. After graduating from Harvard Law School, I have practiced environmental law for 40 years. I have taught Superfund as an adjunct professor for 27 years at Penn Carey Law School.

My clients on Superfund matters range across all industry sectors and municipalities, including the city of New York. My testimony identifies common sense approaches to achieve Superfund's primary goals. For the past 45 years, courts and Superfund's legislative history make clear that Superfund has two primary goals. First, incentivizing the prompt, voluntary cleanup of the Nation's most contaminated sites; and second, ensuring that polluters pay for those cleanups.

Undoubtedly, there have been significant accomplishments under Superfund. It is equally clear that the Superfund program has strayed from meeting those goals. However, solutions exist within Superfund's existing statutory language, its existing policies and with minor regulatory adjustments to realign Superfund with its primary goals.

First, let's start with promptness. Superfund cleanups take too long and that increases costs. I am aware of Superfund sites listed on the National Priorities List in the early 2000's with no remedy selected to date. I am also aware of Superfund sites where private parties submitted remedial investigation reports to EPA and did not receive comments for years and years.

Here is a proposed solution. EPA requires that private parties adhere to strict deadlines for submitting required cleanup reports, with penalties for non-compliance. Yet, EPA has no timeframe for its own report reviews.

Many States administered cleanup programs that for years experienced similar cleanup delays, but then adopted mandatory agency review times. That cleared the backlog. EPA should adopt a policy to do the same.

Second, incentivizing private parties to perform the cleanup and making the polluter pay are two sides of the same coin. To create proper incentives for private parties to perform cleanups, their share of cleanup costs must be fair. Otherwise, you do not get polluter pays, you get polluter overpays.

EPA has relied upon joint and several liability under Superfund to require the same deep pocketed parties at site after site to pay for 100 percent of the cleanup costs, leaving those parties to pursue tens and often hundreds of other responsible parties through costly and time consuming litigation. That approach is both unfair and inefficient and dissuades private parties from coming forward to perform cleanups.

The solutions to this problem already exist within the Superfund statute and EPA's policies. EPA just has to use them. For example, section 122(b)(1) of Superfund describes what is known as "mixed funding" for cleanups. This takes the form of either EPA pre-authorizing the Superfund to reimburse parties performing the cleanup for a portion of the costs not attributable to those parties, or EPA agreeing to perform a portion of the cleanup itself, with the remainder performed by the private parties.

In either case, EPA pursues other parties to recover EPA's costs. That saves tremendous transaction costs for the parties performing the cleanup.

EPA acknowledges that mixed funding promotes expeditious cleanups rather than protracted litigation. Despite this clear statutory authority, the Superfund program rarely uses mixed funding. That should change.

Similarly, EPA has an "orphan share" policy. Pursuant to this policy, EPA can settle with private parties who desire to perform the cleanup, and compromise a portion of EPA's past and future costs attributable to liable parties who are either insolvent or defunct.

EPA's orphan share policy expressly states that it aims to provide incentives to voluntarily perform cleanups and to keep transaction costs low. Once again, the Superfund program uses this policy too sparingly.

By the policy's own terms, EPA's compromise is limited to the lesser of 25 percent of the cleanup costs or the total amount of EPA's unreimbursed costs. The statute contains no such limitation on an orphan share or past cost forgiveness.

One final suggestion. When private parties perform a cleanup, EPA charges those parties with EPA's oversight costs, a term not defined in the statute. Oversight costs include costs for EPA's contractors.

Oversight costs also include costs attributable to the time spent by EPA's personnel, with no limitation on how many people work

on a matter, or how many hours they spend. In other words, private parties are required to reimburse EPA for work performed by internal EPA employees on that matter.

Then, on top of these direct costs, EPA also pursues reimbursement of an "indirect cost" premium for its overhead expenses throughout a regional office, including rent, utilities, computers, et cetera. This indirect cost premium can sometimes exceed 100 percent. Personnel costs and a premium for overhead are not appropriately reimbursable, foster inefficiency and create a disincentive for parties to perform a cleanup.

In conclusion, the Superfund program has proven accomplishments. Going forward, the program needs these common sense solutions to ensure that the program returns to meeting its primary goals.

[The prepared statement of Mr. Fox follows:]

Testimony of Robert D. Fox, Esquire

Submitted to the U.S. Senate Committee on Environment and Public Works
Hearing on April 9, 2025

Chairman Capito, Ranking Member Whitehouse and Members of the Environment and Public Works Committee, thank you for the opportunity to testify. My name is Robert Fox. After graduating from Harvard Law School, I have practiced environmental law for 40 years. I have taught Superfund as an adjunct professor for 27 years at Penn Carey Law School. My clients on Superfund matters range across all industry sectors and municipalities, including the City of New York.

My testimony identifies common sense approaches to achieve Superfund's primary goals. For the past forty-five years, courts and Superfund's legislative history make clear that Superfund has two primary goals: (1) incentivizing the prompt, voluntary cleanup of the nation's most contaminated sites; and (2) ensuring that polluters pay for those cleanups. Undoubtedly, there have been significant accomplishments under Superfund. It is equally clear that the Superfund program has strayed from meeting those goals. However, solutions exist within Superfund's existing statutory language, its existing policies and with minor regulatory adjustments to re-align Superfund with its primary goals.

First, let's start with promptness. Superfund cleanups take too long and that increases costs. I am aware of Superfund sites listed on the National Priorities List in the early 2000's with no remedy selected to date. I am also aware of Superfund sites where private parties submitted remedial investigation reports to EPA and did not receive comments for years and years.

Here is a proposed solution. EPA requires that private parties adhere to strict deadlines for submitting required cleanup reports, with penalties for non-compliance. Yet, EPA has no timeframe for its own report reviews. Many states administered cleanup programs that for years experienced similar cleanup delays, but then adopted mandatory agency review times. That cleared the backlog. EPA should adopt a policy to do the same.

Second, incentivizing private parties to perform the cleanup and making the polluter pay are two sides of the same coin. To create proper incentives for private parties to perform cleanups, their share of cleanup costs must be fair. Otherwise, you don't get polluter pays, you get polluter overpays.

EPA has relied upon joint and several liability under Superfund to require the same deep pocketed parties at site after site to pay for 100% of the cleanup costs, leaving those parties to pursue tens and often hundreds of other responsible parties through costly and time consuming litigation. That approach is both unfair and inefficient and dissuades private parties from coming forward to perform cleanups. The solutions to this problem already exist within the Superfund statute and EPA's policies. EPA just has to use them.

For example, section 122(b)(1) of Superfund describes what is known as "mixed funding" for cleanups. This takes the form of (i) EPA pre-authorizing the Superfund to reimburse parties performing the cleanup for a portion of the costs not attributable to those parties; or (ii) EPA agreeing to perform a portion of the cleanup itself, with the remainder performed by the private parties. In either case, EPA pursues other parties to recover EPA's costs. That saves tremendous transaction costs for the parties performing the cleanup.

EPA acknowledges that mixed funding promotes expeditious cleanups rather than protracted litigation. Despite this clear statutory authority, the Superfund program rarely uses mixed funding. That should change.

Similarly, EPA has an "orphan share" policy. Pursuant to this policy, EPA can settle with private parties who desire to perform the cleanup, and compromise a portion of EPA's past and future costs attributable to liable parties who are either insolvent or defunct. EPA's orphan share policy expressly states that it aims to provide incentives to voluntarily perform cleanups and to

keep transaction costs low. Once again, the Superfund program uses this policy too sparingly. And by the policy's own terms, EPA's compromise is limited to the lesser of twenty-five percent of the cleanup costs or the total amount of EPA's unreimbursed costs. The statute contains no such limitation on an orphan share or past cost forgiveness.

One final suggestion. When private parties perform a cleanup, EPA charges those parties with EPA's oversight costs, a term not defined in the statute. Oversight cost include costs for EPA's contractors. Oversight costs also include costs attributable to the time spent by EPA's personnel, with no limitation on how many people work on a matter or how many hours they spend. In other words, private parties are required to reimburse EPA for work performed by all internal EPA employees on that matter. Then, on top of these direct costs, EPA also pursues reimbursement of an "indirect cost" premium for its overhead expenses throughout a regional office, including rent, utilities, computers, etc. This indirect cost premium can sometimes exceed 100%. Personnel costs and a premium for overhead are not appropriately reimbursable, foster inefficiency and create a disincentive for parties to perform a cleanup.

In conclusion, the Superfund program has proven accomplishments. But going forward, the program needs these common sense solutions to ensure that the program returns to meeting its primary goals.

Senate Committee on Environment and Public Works
Hearing Entitled, *“Improving Future Management of the Superfund Program”*
April 9, 2024
Questions for the Record for Mr. Robert Fox

Ranking Member Whitehouse:

1. **Mr. Fox, you testified that it may be “unfair and inefficient” for EPA to use a joint and several liability scheme to recover dollars or work from a small handful of the biggest polluters at a site, particularly when they have deep pockets. But large PRPs often want more control over the work, to keep site costs down and help select the remedy. And they want more control over the remediation and allocation of liability, to make sure everyone is paying their “fair share.” Occidental Chemical Corp., for instance, has been fighting EPA’s attempts to settle out other PRPs in the Passaic River Superfund Site in New Jersey, out of concerns that they are not being asked to pay enough.**
 - a. **Even if the final selection of the remedy is up to EPA, how can large PRPs currently use the law to influence the decision? For instance, can’t large PRPs help to determine the scope of site investigation, if they take the lead on work? And in this case, might it be in the best interest of that large PRP to step up quickly, to undertake that work?**

PRPs do have an incentive to have an active and early role in remedy selection. After all, PRPs ultimately pay for the vast majority of the costs at a Superfund site, including costs of investigation, remediation and EPA oversight. Typically, private parties can perform these tasks more cost-effectively than EPA can given the constraints of government contracting. These facts create incentives for PRPs to step forward to perform the work.

That said, there remain obstacles that lessen the extent to which PRPs can affect remedy selection:

- No matter how much a PRP controls the site investigation work, Superfund makes clear that the ultimate remedy selection rests exclusively within EPA. 42 U.S.C. § 9621(a) and (b)(1).
- Significantly, EPA’s remedy selection decision is not subject to pre-enforcement review. 42 U.S.C. § 9613(h). In other words, after EPA selects a remedy, a PRP has no right to challenge that remedy selection unless EPA takes a judicial enforcement action against that PRP. EPA judicial enforcement actions after remedy selection remain a rare occurrence.

- As an example, assume EPA issues a PRP a section 106 unilateral order to perform the remedy EPA selects. Given the pre-enforcement review bar, the PRP can choose not to comply and await an EPA enforcement action to enforce the unilateral order. In defense of EPA's enforcement action, the PRP can then challenge EPA's remedy selection. However, PRPs face a substantial risk in pursuing that course of action. Failure to comply with a unilateral order exposes a PRP to potential civil penalties of \$71,545 a day for non-compliance with the order, plus treble damages for the costs EPA incurs if EPA itself performs the remedy. PRPs can avoid these draconian penalties if they can prove they had "substantial cause" not to comply with the unilateral order, a standard courts have construed narrowly.
- If instead, a PRP chooses to perform the remedy by entering into a consent decree with EPA, EPA's model consent decree for remedial action requires that the PRP covenant not to sue the United States regarding anything relating to the Site or the work to be performed. Simply stated, there is no clear path for a PRP to challenge EPA's remedy selection if a PRP is ordered or agrees to do so.
- On a more practical level, EPA controls the flow of work even when performed by the PRP. EPA retains approval rights over every plan, large or small, submitted by the PRP. EPA even retains the right to approve the contractor selected by the PRP to perform the work.
- EPA's model consent orders and consent decrees also contain provisions authorizing EPA to modify the work or select further cleanup actions unilaterally, which modifications or further work the PRP must implement. EPA also retains the right to take over the work if EPA determines that the PRP is deficient in its work performance.
- Finally, as I mentioned in my testimony, there are no time limits on EPA's review of the many plans and reports submitted for approval by the work PRP. As such, EPA controls the timing of actual work at the Site.

In sum, while I agree that PRPs have incentives to step forward and perform the work, and most do so, those incentives can be diluted materially by both the statutory provisions cited above and EPA's implementation of the remedy selection process. For these reasons, reform of the remedy selection process remains a critical priority.

- b. **Regardless of who is taking the lead on a cleanup, disputes over the scope of sampling or other site decisions cause delays. Understanding that some disputes can be in good faith, how can we incentivize PRPs and EPA to negotiate work and funding agreements quickly, and to resolve issues that come up so that work continues unimpeded?**

I do not believe that negotiating the consent orders and consent decrees itself creates delays. As mentioned in my response to question 1.a. above, EPA has model enforcement documents that streamline the negotiation process.

Rather, the delays arise from the remedy selection process AFTER the enforcement document has been executed. I have identified below several issues/recommendations regarding resolution of disputes and the accompanying delays that arise during the remedy selection process:

- As I mentioned during my testimony, several states experienced extensive delays in remedy selection and agency approvals. In response, by statute or regulation those states adopted mandatory agency review times. These mandatory review times reduced the regulatory backlog and the timeframe for remedy selection and remedy completion. Agency review times at Superfund sites have become a chronic issue, extending for months and in some cases years. Therefore, I recommended that mandatory agency review times be adopted under Superfund.
- Underfunding and understaffing at EPA was an issue discussed at the hearing. While funding is always an issue, I do not believe it is the primary reason for pervasive delays remedy selection. More fundamentally, remedy selection under Superfund has deviated from well-established risk-based remedy selection approaches and well-understood and effective presumptive remedies in favor of a “science project” approach which makes the “perfect” the enemy of the “good.” The “good” is a remedy that is protective of human health and the environment.
- With respect to the well established risk-based remedy selection process, EPA should adhere to the time tested approach of (i) identifying who is exposed to the contaminants (i.e., human, ecological receptors), (ii) what contaminants are they exposed to, (iii) by what pathways are they exposed (i.e., inhalation, ingestion) and (iv) how do you mitigate those exposure pathways. Adhering to this approach allows for expeditious, cost-effective and overall protective remedies. Moreover, EPA has a fail-safe in Section 121(c) of

Superfund: EPA's mandatory five-year review process that evaluates whether the selected remedy remains protective every five years after initiation of the remedy construction.

- With respect to presumptive remedies, many sites address the same type of exposure scenarios and contaminants of concern. EPA and PRPs have a wealth of experience and empirical data as to the likely or presumptive remedies for these similar scenarios. Streamlining remedy selection in those situations makes plain sense.
- The dispute resolution provisions in EPA's model enforcement documents do not provide an effective solution to resolve technical issues during remedy selection, design or implementation. In effect, the dispute resolution process only provides review by higher level internal EPA decisionmakers and rarely affects the initial technical determination made by remedial project managers.
- Consistent with my written testimony, use of mixed funding and orphan share forgiveness also create incentives for PRPs to agree to perform work quickly.

c. In some circumstances, might a PRP be incentivized to delay, perhaps waiting until other PRPs are required to contribute, or stretching out site investigations to keep annual cleanup costs below a cap?

In my experience, there have been few examples of a PRP delaying performance of a remedy to spread out the costs of cleanup. In fact, delaying cleanups more likely increases the ultimate cost of the remedy and transaction costs for PRPs.

Further, this question suggests that a PRP may wait to do the work while it pursues other PRPs. Again, while that may be true in rare circumstances, my experience is that the remedy selection and remedy implementation generally proceed in parallel with pursuing other PRPs, rather than proceeding sequentially. That is true in part because EPA does not wait to pursue enforcement actions against targeted PRPs until after those PRPs successfully pursue other parties. On the contrary, as I testified to, EPA uses joint and severally liable principles to pursue deep pocketed PRPs leaving it to those PRPs, not EPA, to pursue others.

I do agree with the assertion in the question that PRPs may contest EPA settling out other PRPs out of concern that those other PRPs are not being asked to pay enough. That is a function of EPA imposing joint and several

liability on a small group of PRPs. That small group of PRPs has no choice but to ensure that other parties pay their fair share. That is the essence of the “polluter pays” principle that underpins Superfund. Otherwise, the targeted PRPs “over pay” and others “under pay.”

- d. **To the extent a PRP might want to stretch out site investigations to keep annual costs below a cap, under current law, how can EPA prevent delays for these reasons? Do you have additional ideas for keeping cleanups on track?**

As stated above, EPA has many tools to prevent PRPs from delaying cleanups:

- Under current law, EPA can use unilateral orders under Section 106 of Superfund to compel PRPs to complete the cleanup. Failure by PRPs to do so creates a potential liability for the PRPs for civil penalties and treble damages.
- Also under current law, EPA can accelerate portions of the work using mechanisms such as removal actions (i.e., short-term cleanups prior to completion of the permanent site remedy, including actions like installing water treatment units, removing drums, constructing site security fencing, removing soil hotspots); interim remedies (i.e., extraction wells, capping); or segregating the site into operable units (i.e., soil first, then groundwater).
- And, of course, there are the EPA self-help recommendations above including mandatory EPA review times, streamlined remedy selection processes and/or presumptive remedy selection.

Senator WHITEHOUSE. Our next witness is Steven Radel, President of Industrial Development Advantage. Mr. Radel has extensive experience in managing successful hazardous waste cleanups, including Superfund sites. His company specializes in acquiring contaminated properties and remediating them so they can be safely redeveloped.

I will now recognize Mr. Radel for his opening statement.

STATEMENT OF STEVEN B. RADEL, PRESIDENT, INDUSTRIAL DEVELOPMENT ADVANTAGE, LLC

Mr. RADEL. Chairman Capito, Ranking Member Whitehouse and members of the Environment and Public Works Committee, thank you for the opportunity to testify today.

My name is Steve Radel. By way of background, I graduated from Allegheny College with a degree in Environmental Studies, and while working earned a master's in business administration from the University of Pittsburgh and a law degree from Duquesne University.

I have worked for over 40 years in the environmental industry as an environmental consultant, a corporate environmental manager, and a founder and principal in Industrial Development Advantage, (IDA), an environmental liability assumption company. Industrial Development Advantage acquires contaminated sites and assumes the underlying environmental liabilities, which we then resolve through remediation and redevelopment.

Our transactions typically involve environmental insurance that includes pollution legal liability insurance and excess of indemnity coverage that can often be obtained by IDA for the benefit of the seller. By way of example, IDA acquired the East Chicago, Indiana Superfund site in 2022. IDA negotiated a liability assumption agreement with the participating PRPs (potentially responsible parties) and a prospective purchaser agreement with the EPA to finish the operable unit soil remediation.

Our focus at this site is on remediation, repositioning the site and integrating development design with remediation to ensure the work is performed in a manner that is protective of human health and the environment and also promotes productive reuse of the site.

East Chicago is a prime example of parties motivated to complete a transaction to accelerate the cleanup process, including the participating PRPs, EPA Region 5, and the State and local governments. I will note that the EPA Region 5 folks worked very hard to help make this happen.

There are a couple of takeaways from this example that reinforce my hope and belief that it is absolutely possible to redevelop a Superfund site quickly, efficiently and protectively if the right motivations are in place.

First, without question, the default Superfund process is cumbersome and prioritizes form and process over the ultimate goal of remediating and returning a contaminated site to productive reuse. When we approach a site we use the general approach, what is the last chapter of this story, and we work back from that.

IDA and our consultants can look at any contaminated site and figure out what the likely remediation approach should be and we

look at it in the context of the end use or best development option for that property, the last chapter. There may be some data gaps to complete a conceptual site model of the environmental conditions at the site, but for the most part we can cost effectively figure out the best remedial approach once we identify that last chapter or reuse of the site.

This can be done without the need to complete a number of reports and plans that are typically required by the CERCLA process. In short, we can take a site from a streamlined but still comprehensive remedial investigation straight to remedial action without the unnecessary time and expense of feasibility studies or alternatives evaluations that are irrelevant to the final chapter.

Our focus is on completing a risk-based cleanup based on the planned development by identifying potential exposure pathways and making sure they are eliminated as part of the remediation while also integrating development considerations into the overall remedial design. This significantly reduces the timeline to redevelopment.

Second, the basic tools needed to make the CERCLA process more efficient are already being widely used in other parts of the environmental industry, for example, voluntary cleanup programs that encourage the cleanup and reuse of sites with prospective purchaser agreements, covenants not to sue and appropriate institutional controls are already in place.

Third, private parties like IDA can be incentivized to bid on and acquire contaminated sites for the expected costs of remediation with assurances like the tools mentioned a moment ago to ensure that we do not inadvertently become PRPs, while at the same time holding us to our commitment to complete the remediation on schedule and on budget. These deals also include environmental insurance, which is a motivation for PRPs as well, or can be.

Fourth, implementing our approach to more timely and efficient cleanups can be facilitated and accelerated by empowering more State-led CERCLA cleanups that place incentives on more of a voluntary program risk-based approach that gets to the final chapter efficiently, and by encouraging EPA to provide comfort letters and "ready for use" determinations on the front end of cleanups subject to approved remedy implementation.

We note that States already have authority to lead Superfund cleanups through cooperative agreements but in our view or experience, few States have done so because they lack clear direction from EPA.

Fifth, Superfund liens present difficult challenges for Superfund cleanups, especially for environmental liability transfer deals. These liens basically discourage innocent parties from stepping in to facilitate cleanup. EPA already has the tools to address this challenge by negotiating the release or settlement of liens in exchange for completion of an agreed-upon cleanup plan. Lien waivers do not affect EPA's ability to go after responsible parties separately, but do help clear up title for remediation and redevelopment. That is an excellent tool that can be used.

Finally, making the de-listing process more efficient can help achieve the last chapter more quickly and efficiently. A prolonged delisting can delay investment and development. Presently there

are only two times a year when parties can request a delisting, and the process is extremely burdensome. We view this as an opportunity for reform.

In summary, in my opinion, the CERCLA program can be improved to incentivize the cleanup and redevelopment of sites avoiding unnecessary transaction costs and costly remediation approaches. This will allow Superfund dollars to be used on more sites and it will significantly reduce the timeframe to clean up a site and make it available again for development, shortening the timeline by years.

Communities with these black hole sites are significantly and negatively impacted by the prolonged lack of progress, which often has a negative ripple effect throughout the larger community. This is a real negative opportunity cost in these communities.

A clear path to success requires a “last chapter” focused, risk-based cleanup design to address the underlying contamination and restore sites to their post-remediation condition and use. This will speed up the time to get these sites back into productive use and reduce the transactional costs associated with the traditional Superfund process.

Thank you.

[The prepared statement of Mr. Radel follows:]

Testimony of Steven B. Radel, President, Industrial Development Advantage, LLC

Submitted to the U.S. Senate Committee on Environment and Public Works

Hearing on April 9, 2025

Chairman Capito, Ranking Member Whitehouse and Members of the Environment and Public Works Committee, thank you for the opportunity to testify today. My name is Steven B. Radel. I graduated from Allegheny College with a degree in Environmental Studies, and while working earned a Masters in Business Administration from the University of Pittsburgh and a Law Degree from Duquesne University. I have worked for over 40 years in the environmental industry, as an environmental consultant, a corporate environmental manager, and a founder and principal in Industrial Development Advantage, LLC, an environmental liability assumption company.

IDA acquires contaminated sites and assumes the underlying environmental liabilities, which we then resolve through remediation and redevelopment. Our transactions typically involve environmental insurance that includes Pollution Legal Liability insurance and excess of indemnity coverage that can often be obtained by IDA for the benefit of a seller.

By way of example, IDA acquired the East Chicago, IN Superfund site in 2022. IDA negotiated a liability assumption agreement with the participating PRPs and a prospective purchaser agreement with the EPA to finish the Operable Unit soil remediation. Our focus at this site is on remediation, repositioning the site and integrating development design with remediation to ensure the work is performed in a manner that is protective of human health and the environment and also promotes productive reuse of the site.

East Chicago is a prime example of parties motivated to complete a transaction to accelerate the cleanup process, including the participating PRPs, EPA Region 5, and the state and local governments. I'll note that the EPA Region 5 folks worked very hard to help make this happen.

There are a couple of key takeaways from this example that reinforce my hope and belief that it is absolutely possible to redevelop a Superfund Site quickly, efficiently and protectively if the right motivations are in place.

First, without question, the default Superfund process is cumbersome and prioritizes form and process over the ultimate goal of remediating and returning a contaminated site to productive reuse. When we approach a site we use the general approach – "...what is the last chapter of this story..."; and we work back from that. We and our consultants can look at any contaminated site and figure out what the likely remediation approach should be and we look at it in the context of the end use or best development option for that property (the last chapter). There may be some data gaps to complete a conceptual site model of the environmental conditions at the site but for the most part we can cost effectively figure out the best remedial approach once we identify that last chapter or reuse of the site. This can be done without the need to complete a number of reports and plans that are typically required by the CERCLA process – in short, we can take a site from a streamlined but still comprehensive remedial investigation straight to remedial action without the unnecessary time and expense of

feasibility studies or alternatives evaluations that are irrelevant to the final chapter. Our focus is on completing a risk-based cleanup based on the planned development by identifying potential exposure pathways and making sure they are eliminated as part of the remedial action while also integrating development considerations into the overall remedial design. This significantly reduces the timeline to redevelopment.

Second, the basic tools needed to make the CERCLA process more efficient are already being widely used in other parts of the environmental industry, for example, voluntary cleanup programs that encourage the cleanup and reuse of sites with prospective purchaser agreements, covenants not to sue and appropriate institutional controls.

Third, private parties like IDA can be incentivized to bid on and acquire contaminated sites for the expected costs of remediation with assurances like the tools mentioned a moment ago to ensure that we do not inadvertently become PRPs, while at the same time holding us to our commitment to complete the remediation on schedule and on budget. Typically our deals include environmental insurance that often includes protection for sellers, which we believe is an important incentive for PRPs to participate.

Fourth, implementing our approach to more timely and efficient cleanups can be facilitated – and accelerated – by empowering more state-led CERCLA cleanups that place incentives on more of a VCP risk-based approach that gets to the final chapter efficiently; and by encouraging EPA to provide comfort letters and “ready for use” determinations on the front end of cleanups subject to approved remedy implementation. We note that states already have authority to lead Superfund cleanups through cooperative agreements, MOAs and Superfund state contracts (all of which are existing tools), but few states have done so because they lack clear direction and encouragement from EPA. This could be a transformative change simply based on the right signals from EPA to the states.

Fifth, Superfund liens present difficult challenges for Superfund cleanups, especially for environmental liability transfer deals. These liens basically discourage innocent parties from stepping in to facilitate cleanup. EPA already has the tools to address this challenge by negotiating the release or settlement of liens in exchange for completion of an agreed-upon cleanup plan. Lien waivers do not affect EPA’s ability to go after responsible parties separately but do help clear up title for remediation and redevelopment.

Finally, making the de-listing process more efficient would help achieve the last chapter more quickly and efficiently. A prolonged delisting can delay investment and development. Presently there are only two times a year when parties can request a delisting, and the process is extremely burdensome. This should be a target for reform. Also, during the delisting process, EPA can and should do more to provide interim relief, including comfort letters to assure

interested parties that they are not at risk of becoming PRPs simply by virtue of their private investment in the remediation and redevelopment process.

In summary, in my opinion, the CERCLA program can be improved to incentivize the cleanup and redevelopment of sites avoiding unnecessary transaction costs and costly remediation approaches. This will allow Superfund dollars to be used on more sites and it will significantly reduce the timeframe to cleanup a site and make it available again for development, by years and years and years. Communities with these “black” hole sites are significantly and negatively impacted by the prolonged lack of progress, which often has a direct ripple effect throughout the larger community. This represents a real negative opportunity cost to the community, all while potential risks to human health and the environment remain unaddressed.

A clear path to success requires a “last chapter” focused, risk-based cleanup design to address the underlying contamination and restore sites to their post-remediation condition and use. This will speed up the time to get these sites back into productive use and reduce the transactional costs associated with the traditional Superfund process.

Thank you.

Senator WHITEHOUSE. Thank you, Mr. Radel.

Our final witness this morning is J. Alfredo Gómez, Director in the Natural Resources and Environment Team at the U.S. Government Accountability Office, GAO. Mr. Gómez leads the GAO's work on environmental protection, including hazardous waste cleanups, toxic chemicals and agency management.

Welcome. I will now recognize Mr. Gómez for his opening statement.

STATEMENT OF J. ALFREDO GÓMEZ, DIRECTOR, NATURAL RESOURCES AND ENVIRONMENT TEAM, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. GÓMEZ. Chairman Capito, Ranking Member Whitehouse, and members of the committee, good morning. Thank you for the opportunity to discuss GAO's past work on the Superfund program.

The Environmental Protection Agency administers the Superfund program to clean up sites contaminated by hazardous substances. Some of the Nation's most seriously contaminated sites are listed on the National Priorities List, (NPL). Superfund sites can include mining sites, landfills, and former manufacturing sites. As has been noted already, cleanups of these sites are often expensive and lengthy.

My statement today is based on several issued reports as well as on updated appropriations data. Specifically, my statement discusses trends in Superfund program appropriations, numbers of NPL sites and reasons for changes, and factors identified as affecting the timeliness of NPL site cleanups.

Appropriations for the Superfund program have generally declined since Fiscal Year 1999. In 1999, the program received about \$2.6 billion. In Fiscal Year 2024, it received \$537 million. Since the Infrastructure Investment and Jobs Act and the Inflation Reduction Act recently reinstated some Superfund taxes, an additional \$1.44 billion was also made available to the program in Fiscal Year 2024.

The Superfund program also receives supplemental appropriations in some years. For example, in 2009, the Recovery Act provided \$600 million, and the IIJA provided an additional \$3.5 billion in Fiscal Year 2022.

Regarding full-time equivalents, the Superfund program had 2,585 employees in 2023, a decrease of 274 positions over the prior 10 years.

Regarding the number of NPL sites, as of March of this year, there were 1,340 active sites, 459 sites that had been deleted from the list. When we last reviewed the NPL site cleanups, we found that the number of non-Federal sites added to and deleted from the NPL generally declined from 1999 through 2013.

According to EPA, there are several reasons for the decline in the number of non-Federal sites added to the NPL. For example, some States may have been managing the cleanup of sites with their own State programs, especially if a potentially responsible party was identified to pay for the cleanup.

The decline in the number of non-Federal sites deleted from the NPL was because of the decline in annual appropriations and the

fact that sites remaining on the NPL were more complex and took more time and money to clean up.

From our prior work, we have identified many factors that can affect EPA's ability to clean up NPL sites in a timely manner. One is that some sites are more technically complex to clean up, because of site characteristics. For example, complicating factors at sediment sites include their large size, the location, tidal influences, multiple sources of contamination, and difficulties related to sampling and modeling at the site.

Another is challenges with stakeholder involvement, which can take EPA time and resources to address. For example, stakeholders such as surrounding communities, local government, and industry may have different opinions and competing interests. Their levels of knowledge of the Superfund program may vary.

A third is decreases in agency resources can cause cleanup delays. For example, shortages in EPA regional staffing levels and a decline in State environmental agency personnel can cause delays throughout the Superfund program from site assessments to completion of remedial action projects.

In summary, EPA's Superfund program has generally faced declining annual appropriations with influxes of supplemental appropriations in some years. In addition, the Superfund taxes are now providing additional funding.

Our previous work shows that the numbers of new sites added to and removed from the NPL have generally declined from Fiscal Year 1999 through Fiscal Year 2013. There are several factors that can affect the timeliness of NPL site cleanups.

GAO has ongoing work for the House Majority that is reviewing funding and expenditures of the program, as well as planned work to examine NPL site cleanup status.

Chairman Capito, Ranking Member Whitehouse, this completes my statement. I would be pleased to respond to questions.

[The prepared statement of Mr. Gómez follows:]



United States Government Accountability Office

Testimony
Before the Committee on Environment
and Public Works, U.S. Senate

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SUPERFUND

Many Factors Can Affect Cleanup of Sites Across the U.S.

Statement of J. Alfredo Gómez, Director,
Natural Resources and Environment

GAO Highlights

Highlights of [GAO-25-108408](#), a testimony before the Committee on Environment and Public Works, U.S. Senate

Why GAO Did This Study

EPA is responsible for administering the Superfund program to clean up sites contaminated by hazardous substances. EPA lists some of the nation's most seriously contaminated sites on the NPL.

Superfund sites include mining sites, landfills, and former manufacturing sites. Sites may include a variety of contaminants, such as polychlorinated biphenyls, lead, and arsenic. EPA may select different types of remedies to clean up these sites.

For nonfederal sites, EPA can, for example, carry out the cleanup itself or oversee cleanup conducted by parties responsible for the contamination, known as potentially responsible parties.

Cleanups are often expensive and lengthy. Historically, the program received money from sources such as taxes, appropriations, and recoveries from potentially responsible parties. Authority for the taxes expired at the end of 1995 and began to be reinstated in 2021 and take effect in 2022.

This statement discusses (1) trends in Superfund program appropriations, (2) numbers of NPL sites and EPA-identified reasons for changes, and (3) factors EPA officials identified as affecting the timeliness of NPL site cleanups.

GAO based this statement on its [2009](#), [2015](#), and [2016](#) reports about the Superfund program. Appropriations data presented in the 2015 report were updated for this statement.

For more information, contact J. Alfredo Gómez at GomezJ@gao.gov.

April 9, 2025

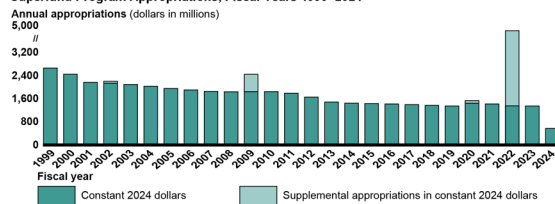
SUPERFUND

Many Factors Can Affect Cleanup of Sites Across the U.S.

What GAO Found

Appropriations for the Superfund program have generally declined since fiscal year 1999. Specifically, these appropriations declined from about \$2.6 billion in fiscal year 1999 to about \$537 million in fiscal year 2024. In fiscal year 2023, the Treasury collected \$1.44 billion in Superfund taxes, which was available to the program in fiscal year 2024 as it transitioned to a combination of base and tax funding. The Superfund program also received supplemental appropriations in some years. For example, the American Recovery and Reinvestment Act of 2009 provided an additional \$600 million in fiscal year 2009, and the Infrastructure Investment and Jobs Act provided an additional \$3.5 billion in fiscal year 2022.

Superfund Program Appropriations, Fiscal Years 1999–2024



Source: GAO analysis of appropriation laws. | GAO-25-108408

Note: After authority for Superfund taxes expired at the end of 1995, they began to be reinstated in 2021 and take effect in 2022. In fiscal year 2023, the Treasury collected \$1.44 billion in Superfund taxes, which was available to the program in fiscal year 2024 as it transitioned to a combination of base and tax funding.

As of March 5, 2025, the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL) had 1,340 active sites across the U.S. About 90 percent of these sites are nonfederal. According to prior GAO analyses of EPA data, from fiscal year 1999 through fiscal year 2013, the numbers of new sites added to and deleted from the NPL generally declined. According to EPA officials, the decline in the number of nonfederal sites deleted from the NPL was because of the decline in annual appropriations and the fact that the sites remaining on the NPL were more complex and took more time and money to clean up.

In its prior work, GAO identified factors that EPA officials characterized as affecting the timeliness of NPL site cleanups, including the following:

- **Discovery of new contaminants or a change in the extent of contamination.**
- **Lack of potentially responsible parties** to contribute to cleanup costs.
- **Technical complexity** of some sites (e.g., sediment sites).
- **Limited agency resources**, such as decreases in funds and regional staff to perform the cleanup.

Chairman Capito, Ranking Member Whitehouse, and Members of the Committee:

Thank you for the opportunity to discuss some of GAO's past reviews of the Superfund program. In administering the program, the U.S. Environmental Protection Agency (EPA) lists some of the nation's most seriously contaminated sites, both federal and nonfederal, on its National Priorities List (NPL). Contaminants at these sites have included polychlorinated biphenyls, lead, and arsenic.¹ According to EPA documents, the precise human health effect of many chemical mixtures at NPL sites is uncertain. However, hazardous substances found at Superfund sites have been linked to human health problems such as birth defects, cancer, changes in neurobehavioral functions, and infertility. Superfund sites include mining sites, landfills, and former manufacturing sites. Cleanups of these sites are often expensive and lengthy.

This statement discusses (1) trends in Superfund program appropriations, (2) numbers of NPL sites and reasons EPA identified for changes, and (3) factors EPA identified as affecting the timeliness of NPL site cleanups. We based our statement on our 2009, 2015, and 2016 reports, as well as on updated appropriations data.²

A detailed discussion of our objectives, scope, and methodologies, including our assessment of data reliability, is available in each of the prior reports we cite throughout this statement. We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

¹Polychlorinated biphenyls belong to a broad family of manmade organic chemicals known as chlorinated hydrocarbons, which are chemical compounds of chlorine, hydrogen, and carbon atoms.

²GAO, *Superfund: Litigation Has Decreased and EPA Needs Better Information on Site Cleanup and Cost Issues to Estimate Future Program Funding Requirements*, [GAO-09-656](#) (Washington D.C.: Jul. 15, 2009); *Superfund: Trends in Federal Funding and Cleanup of EPA's Nonfederal National Priorities List Sites*, [GAO-15-812](#) (Washington, D.C.: Sept. 25, 2015); and *Superfund Sediment Sites: EPA Considers Risk Management Principles but Could Clarify Certain Procedures*, [GAO-16-777](#) (Washington, D.C.: Sept. 22, 2016).

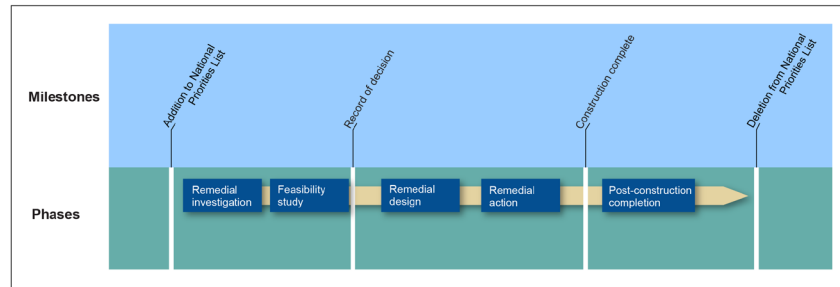
Background

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, (CERCLA) established the Superfund program, the federal government's principal program to address sites with hazardous substances. EPA is principally responsible for administering the program.

Superfund Process

The Superfund remedial process consists of several milestones and phases, as figure 1 shows.

Figure 1: EPA's Remedial Cleanup Process at National Priorities List Sites



Source: GAO analysis of Environmental Protection Agency (EPA) data. | GAO-25-108408

The process begins with the discovery of a potentially hazardous site or notification to EPA of the possible release of hazardous substances, pollutants, or contaminants that may threaten human health or the environment. EPA, states, Tribes, or other federal agencies then conduct a site assessment to evaluate site conditions. As part of the site assessment process, EPA regional offices use a Hazard Ranking System to guide decision-making and numerically assess the site's potential to pose a threat to human health or the environment. Sites with sufficiently high scores are eligible to be proposed for listing on the NPL. Sites that EPA proposes to list on the NPL are first published in the Federal Register.³ After a period of public comment, EPA reviews the comments

³As a matter of policy, EPA seeks concurrence from the government of the state in which a site is located before proposing a site for listing on the NPL.

and decides whether to list the sites on the NPL by publishing the decision in the Federal Register.

After a site is listed on the NPL, EPA or parties responsible for contamination at a site (known as potentially responsible parties) generally begin the remedial cleanup process.⁴ This process begins with a two-part study of the site: (1) a remedial investigation to characterize site conditions and assess the risks to human health and the environment, among other actions, and (2) a feasibility study to develop and evaluate various options to address the problems identified through the remedial investigation. These studies culminate in a record of decision that identifies EPA's selected remedy for addressing the contamination.

A record of decision typically lays out the planned cleanup activities for each operable unit of the site.⁵ EPA then plans the selected remedy during the remedial design phase, which is followed by the remedial action phase, during which one or more remedial action projects are carried out. When all physical construction at a site is complete, all immediate threats have been addressed, and all long-term threats are under control, EPA generally considers the site to be construction complete. After construction completion, most sites enter the post-construction phase, which includes actions such as operation and maintenance, during which the potentially responsible parties or the state maintains the remedy and EPA ensures that the remedy continues to protect human health and the environment. Eventually, when EPA and

⁴In addition to these remedial cleanup actions, EPA may conduct removal actions, which are generally short-term or emergency cleanups to mitigate immediate threats. This statement discusses the remedial process.

⁵According to EPA guidance, EPA uses operable units and remedial action projects to subdivide a Superfund site into a series of smaller components that allow for effective management and implementation of cleanup activities. An operable unit is a discrete action that comprises an incremental step in cleaning up a site and commonly refers to a geographic area, a pathway of the contamination (e.g., groundwater), or type of remedy. A site may consist of one or more operable units, each of which may be addressed by one or more remedial action projects. A remedial action project is generally where the physical work undertaken to address contamination takes place at a site.

the state determine that no further site response is needed, EPA may delete the site from the NPL.⁶

Sources of Funding for the Superfund Program

CERCLA created the Superfund Trust Fund in the U.S. Treasury. The Trust Fund can be used to pay for the cleanup of sites on the NPL.⁷

Historically, the Superfund Trust Fund received money from four major sources: certain taxes; transfers from the General Fund of the Treasury via appropriations; fines, penalties, and recoveries from potentially responsible parties; and interest earned on the balance of the Fund. Specifically, revenue from the following taxes was historically deposited into the Trust Fund: (1) an excise tax on crude oil and imported petroleum products, (2) an excise tax on certain chemical feedstocks, (3) an excise tax on certain imported chemical derivatives, and (4) an environmental tax on corporate income. These taxes accounted for most of the deposits into the Superfund Trust Fund until the authority for the taxes expired at the end of 1995.

From 1996 until 2022, the Superfund Trust Fund was primarily financed with transfers from the General Fund of the U.S. Treasury via appropriations. In 2021, the Infrastructure Investment and Jobs Act reinstated and modified the Superfund excise taxes on certain chemical feedstocks and certain imported chemical derivatives through December 31, 2031.⁸ In 2022, the Inflation Reduction Act permanently reinstated the Superfund excise tax on crude oil and imported petroleum products beginning on January 1, 2023.⁹

⁶According to EPA's website, when all site cleanup has been completed and all cleanup goals have been achieved, EPA publishes a notice of its intention to delete the site from the NPL in the *Federal Register* and notifies the community of its availability for comment. EPA then accepts comments from the public on the information presented in the notice and issues a Responsiveness Summary to formally respond to public comments received. If the site still qualifies for deletion after the formal comment period, EPA publishes a formal deletion notice in the *Federal Register* and places a final deletion report in the Information Repository for the site.

⁷Specifically, the Trust Fund can be used to pay for remedial actions at NPL sites. In addition, the Trust Fund can be used to pay for certain removal actions.

⁸Pub. L. No. 117-58, § 80201, 135 Stat. 429, 1328-1330 (2021).

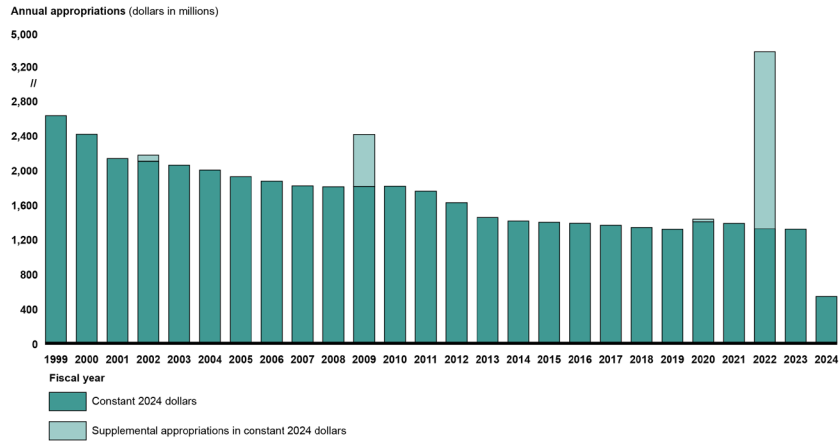
⁹Pub. L. No. 117-169, § 13601, 136 Stat. 1818, 1981-1982 (2022).

EPA's fiscal year 2024 budget request estimated that the Superfund taxes would generate \$2.5 billion in revenue in fiscal year 2024. In March 2024, this estimate was updated to \$2.17 billion.

Appropriations for the Superfund Program Have Generally Declined Since 1999

EPA's Superfund program receives annual appropriations from the Superfund Trust Fund, as figure 2 shows.

Figure 2: EPA's Superfund Program Annual Appropriations, Fiscal Years 1999–2024



Source: GAO analysis of appropriation laws. | GAO-25-108408

Note: After authority for the Superfund taxes expired at the end of 1995, they began to be reinstated in 2021 and take effect in 2022. In fiscal year 2023, the Treasury collected \$1.44 billion in Superfund taxes, which was available to the program in fiscal year 2024 as it transitioned to a combination of base and tax funding, according to the Environmental Protection Agency's (EPA) website. EPA's fiscal year 2023 appropriation act permanently made all Superfund tax revenue in the Superfund Trust Fund at the end of each preceding fiscal year available without further appropriation. Pub. L. No. 117-328, div. G, § 443(b), 136 Stat. 4760, 4833 (2022) (26 U.S.C. § 9507 Note).

From fiscal year 1999 through fiscal year 2024, appropriations to EPA's Superfund program generally declined, with some years of increases. In fiscal year 1999, appropriations to the program were approximately \$2.6 billion; in fiscal year 2024, they were approximately \$537 million. In addition, in fiscal year 2023, the Treasury collected \$1.44 billion in Superfund taxes, which was available to EPA's Superfund program in fiscal year 2024 as it transitioned to a combination of base and tax funding, according to EPA's website.¹⁰

The Superfund program also received supplemental appropriations in some years. For example, the American Recovery and Reinvestment Act of 2009 (Recovery Act) provided an additional \$600 million in fiscal year 2009,¹¹ and IIJA provided an additional \$3.5 billion in fiscal year 2022.¹² EPA reported that the Superfund program had 2,859 full-time equivalent positions in fiscal year 2013 and 2,585 in fiscal year 2023, a decrease of 274 full-time equivalent positions over the 10-year time frame.¹³ GAO has ongoing work reviewing EPA's obligations and expenditures of the Trust Fund.

EPA Identified Several Reasons for Changes in Numbers of NPL Sites

As of March 5, 2025, there were 1,340 active sites across the U.S. on the NPL, according to EPA data. There were also 41 proposed sites and 459 sites that EPA determined need no further cleanup action (deleted sites). About 90 percent of active sites are nonfederal, where EPA generally carries out the cleanup or oversees cleanup conducted by potentially responsible parties. The other NPL sites—approximately 10 percent—are located at federal facilities, and the federal agencies that administer those facilities are responsible for their cleanup.¹⁴ GAO has planned work to examine NPL site cleanup status.

¹⁰EPA's fiscal year 2023 appropriation act permanently made all Superfund tax revenue in the Superfund Trust Fund at the end of each preceding fiscal year available without further appropriation. Pub. L. No. 117-328, div. G, § 443(b), 136 Stat. 4760, 4833 (2022) (26 U.S.C. § 9507 Note).

¹¹Of this \$600 million, EPA allocated \$582 million to remedial cleanup activities and \$18 million to internal EPA activities related to the management, oversight, and reporting of Recovery Act funds.

¹²Most of this \$3.5 billion is dedicated to EPA-financed remedial action construction projects at nonfederal NPL sites, according to EPA documentation.

¹³EPA's budget justification shows 2,479 full-time equivalent positions in fiscal year 2023. However, in commenting on this statement, EPA provided the updated number.

¹⁴EPA is responsible for oversight of cleanup at federal facilities that are on the NPL.

When we last reviewed NPL site cleanup status in 2015, we found that the number of nonfederal sites added to and deleted from the NPL from fiscal year 1999 through fiscal year 2013 generally declined, according to our analysis of EPA data.¹⁵

According to EPA officials we interviewed for that report, there were several reasons for this decline in the number of new nonfederal sites added to the NPL from fiscal years 1999 through 2013. For example, some states may have been managing the cleanup of sites with their own state programs, especially if a potentially responsible party was identified to pay for the cleanup.

Additional reasons the officials identified for the decrease during this time period include: (1) funding constraints that led EPA to focus primarily on sites with actual human health threats and no other cleanup options, (2) use of the NPL as a mechanism of last resort, and (3) referral of sites assessed under the Superfund program to state cleanup programs.

While the number of new sites generally decreased, they increased from fiscal year 2008 through fiscal year 2012. According to the EPA officials, these numbers may have increased because the agency expanded its focus to consider NPL listing for sites with potential human health and environmental threats, and it shifted its policy to use the NPL when it was deemed the best approach for achieving site cleanup rather than using the NPL as a mechanism of last resort. Also, states' funding for cleanup programs declined, and states agreed to add sites to the NPL where they encountered difficulty in getting a potentially responsible party to cooperate or where the potentially responsible party went bankrupt, according to the officials.

According to the EPA officials, the decline in the number of nonfederal sites deleted from the NPL was due to the decline in annual appropriations and the fact that the sites remaining on the NPL at this time were more complex and would take more time and money to clean up.

¹⁵GAO-15-812.

Many Factors Can Affect Timeliness of NPL Site Cleanup

In our prior work, we identified examples of factors that EPA officials said can affect the agency's ability to clean up NPL sites in a timely manner.¹⁶ These include the following:

- **Adverse conditions.** Weather conditions, such as excessive rain, can delay progress at some sites ([GAO-15-812](#)).
- **Discovery of new contaminants or a change in the extent of contamination.** The discovery of new contaminants or a change in the extent of contamination, such as contaminants migrating at a groundwater site, can cause delays. Adjustments may be necessary to remedy designs, which could take additional time and money ([GAO-15-812](#)).
- **Lack of potentially responsible parties.** Fewer sites may have responsible parties who can contribute to cleanup, which could affect EPA's ability to fund and conduct site cleanups ([GAO-09-656](#)).
- **Limited agency resources.** Decreases in funds and regional staff available to perform the cleanup can cause delays. For example, EPA officials stated that shortages in EPA regional staffing levels and a decline in state environmental agency personnel can cause delays throughout the Superfund program, from site assessments to completion of remedial action projects ([GAO-15-812](#)).
- **NPL listing process.** Addressing complex comments during the NPL public comment process may require considerable EPA time and resources ([GAO-15-812](#)).
- **Stakeholder involvement.** Challenges with stakeholder involvement can take EPA time and resources to address. For example, stakeholders such as communities, local governments, and industry may have differing opinions and competing interests, and their levels of knowledge of the Superfund process may vary. ([GAO-16-777](#)).
- **Technical complexity.** Some sites are more technically complex to clean up because of site characteristics. For example, complicating factors at sediment sites include their size, location, tidal influences, multiple sources of contamination, and difficulties related to sampling and modeling ([GAO-16-777](#)).

In conclusion, EPA's Superfund program has generally faced declining annual appropriations since fiscal year 1999, with influxes of

¹⁶We identified these factors in our 2009, 2015, and 2016 reports on the Superfund program. The factors are listed alphabetically and do not constitute an exhaustive list but provide illustrative examples for the purpose of this statement.

supplemental appropriations in some years and increases in some years. Our previous work shows that the numbers of new sites added to and removed from the NPL have generally declined from fiscal year 1999 through fiscal year 2013. EPA officials identified several factors that can affect the timeliness of NPL site cleanup, including those I discussed in this statement. GAO has ongoing work reviewing funding and expenditures of the program and planned work to examine NPL site cleanup status.

Chairman Capito, Ranking Member Whitehouse, and Members of the Committee, this completes my prepared statement. I would be pleased to respond to any questions you may have at this time.

GAO Contacts and Staff Acknowledgments

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Senator WHITEHOUSE. Thanks very much.

I guess I will begin, until the Chair can return. Let me start with you, Mr. Gómez. Is there any doubt in your mind that flooding of a Superfund site, whether from storm surge or riparian flooding, or a wildfire burning through a Superfund site, can create contamination issues and if not properly managed, can interfere with the remediation process?

Mr. GÓMEZ. Certainly, there is no doubt. In our past work where we looked at this question, of the Superfund sites, and then the potential effects from flooding, wildfires, storm surge, there are many sites across the Country that are located in places where these things are happening.

In fact, we traveled to several sites. We visited a site in Houston, Texas, the San Jacinto River site, where because of unprecedented rainfall from Hurricane Harvey, it actually dispersed the contamination on the river. It is happening at sites across the Country. I think the purpose of our work was to show how many sites are located in places where these things are happening. It is important, then, for EPA to ensure that the remedy that is in place is going to be protective.

Senator WHITEHOUSE. I would argue that recent experience that you described in Texas, also in Florida, shows that this is not a potential, it is actually happening, and we have to be prepared. I would add my own editorial comment that the flagrant errors in FEMA flood mapping create an additional burden for people managing Superfund sites, because they have to figure out what the real flooding risk is, not what FEMA's phony baloney flooding risk is based on incompetent or inaccurate mapping.

I have a specific question, because we have a Bradford Dye and Finishing site on the Pawcatuck River in Rhode Island. It is an American wild and scenic river. There is significant risk of flooding and release of contamination there.

While we are going through the process of remediation, there is significant danger of contamination out of lagoons that have been prepared as sort of a catchment area.

What are the interim measures during the period of a remediation that EPA could require for a site like this, while the listing package is being prepared?

Mr. GÓMEZ. In this case, EPA can explore other options. It sounds like this is contaminated sediment, which really complicates in terms of what the agency can do, just because of the various things that are happening in place. In other places, perhaps you could do a removal, where you could do a removal, perhaps of the contaminations that are present, as the continuing work takes place to figure out how you are going to remediate it.

Really, I think in those cases, it is important for EPA to have the expertise, to be able to figure out what are the steps that they can take in that very site-specific place, and to make sure that it has the expertise, and if it does not, that it can go outside to get it.

Senator WHITEHOUSE. Mr. Radel, another site-specific question here. In the Navy property in Newport, Rhode Island, there is an abandoned hospital, which is on extremely valuable property, could be put to valuable reuse. It is within the boundaries of a Superfund site, although it appears to have itself very minor contamination.

In your experience, what would be the appropriate vehicles for trying to assist with the development and reuse of that hospital, even though it is within the Superfund boundary, if it can be shown that the contamination specific to the property is minor?

Mr. RADEL. In my experience, if we could separate that hospital location from the overall Superfund site through some kind of segregation, modifying the parcel lots, I think that a competitive bid process for folks to come in and evaluate it, I think the market would take care of that one.

My suspicion would be, there is probably asbestos, ACM contamination in the building.

Senator WHITEHOUSE. In the building itself, yes.

Mr. RADEL. That could be pretty significant. I think an RFP for folks to come in and look, first an asbestos evaluation, and then bring folks in to look at it, and kind of get a sense for who would put an investment in to take on that risk would be worthwhile. I could see that being a motivating factor for folks to get involved in cleaning that up.

Senator WHITEHOUSE. Waterfront property, no less.

Mr. FOX. EPA does have a policy called redefinition of Superfund sites, where you can go through a process and redefine the site boundaries and segregate that property.

Senator CAPITO. [Presiding.] I am going to go to Senator Husted from Ohio, since I am just getting back into the committee.

Senator HUSTED. Thank you, Chairwoman Capito. Welcome, thanks for joining us today.

Ohio is a State that has traditionally been part of our Nation's manufacturing heritage. Over time, it has had the legacy of some of the challenges of those industrial sites. We have had 38 Superfund sites, 31 of them have been addressed. We have some that have been pending since 1993, one that has been pending since 1993. Many of these that have been pending over 15 years are over major aquifers, which citizens in our communities get their water.

Whether it be storm or hurricane or just the constant fact that we get rain a lot, and there is drainage and there is all kinds of things that happen to these sites over time and how it can affect people's quality of life and health, what can we do to speed this up? I am interested in learning from all of you today what action can we take, what action can the government take, what action can States take? I want your best thoughts on how a State like Ohio can do a better job on cleaning up these last seven that are hanging out there.

We will start with you, Mr. Fox.

Mr. FOX. Sure. First of all, I worked on the Painesville Superfund site, so I am aware of what is going on in Ohio.

I really think that the Superfund remedy selection process is completely broken. I will tell you why. I have done work on the Superfund cleanups, RCRA cleanups, State voluntary cleanups, and there are really three issues that really go to what Mr. Radel said. It is who is exposed, meaning who are the receptors, what contaminants are they exposed to, and how do we cutoff those exposure pathways. Those are the three things.

We have gotten bogged down in making the perfect the enemy of the good. The good is for the remedy to be protective. It is al-

ways that, to make the remedy protective. The process is so burdensome and cumbersome, and takes so long and is so costly that we do not serve the cleanup——

Senator HUSTED. Is that a law or a regulator problem?

Mr. FOX. That is the way that the National Contingency Plan, which is the process for selecting the remedy, is actually implemented. It is not the law; it is the way it is being implemented.

We can not have these be a science project. We want them to be technically sound. That is everybody's goal. You can not have a process where you do not get a remedy selected, as you said, for 20 years. That has to change.

Also, just to give you one example of this, I mentioned I worked on the Gowanus Canal, when a remedy was selected and they looked at the cost of implementing two CSO, combined sewer overflow, tanks, they thought that the remedy for that was going to cost \$77 million for the city of New York. The current estimate for that is over \$2 billion.

That has to change, too. A realistic cost of what the remedy is to achieve the cleanup goals has to be incorporated into this process.

Senator HUSTED. Mr. Radel?

Mr. RADEL. I think Robert hit the key points. We have talked about them in our summaries.

I would say, not knowing anything about these seven sites, but the fact that they have been looked at and in the Superfund process for 20-plus years. My recommendation would be bring in a new team and audit all seven and just see where they are and how we can get to, I will use a football analogy, how we can get to the end zone. There has to be so much data on these sites that you can almost come up with what are the hurdles here, what are we waiting on.

I think sometimes there are issues on the community side where maybe there is hesitancy to move things forward. The flip side of that is the community has been waiting for 20-plus years for something to happen, so that is why they are upset, and who can blame them.

I think a fresh set of eyes to look and audit these projects, and hopefully could clear the way that this is not a 30-year project, as Rob said. Let's get to the end chapter, let's get to that end zone and let's look at it.

My inclination would be that there is so much data out there that if there are some data gaps that have to be completed, they are minor and there are things that should be able to be done in relatively short order, just in my opinion, just because of the fact that these sites have been ping-ponged around for 30 some years. I think a new set of eyes would help audit that process.

Senator HUSTED. Mr. Gómez?

Mr. GÓMEZ. Senator, I would say, because it is at the EPA regions where the work is taking place, so that you want to make sure that for Ohio, and Region Five, that they have the people they need to do the work. I do agree that the remedy selection process takes a long time. It takes a long time sometimes to list sites on the NPL but then also to get them cleaned up.

You want to make sure that you have the staff, the regional staff who are doing the work, like the remedial project manager, for example, for each of those sites.

Senator HUSTED. Thank you, Chairman Capito.

Senator CAPITO. Senator Merkley.

Senator MERKLEY. Thank you, Madam Chairman.

Back when I was first elected to the Senate, Congressman Blumenauer took me out on the Willamette River for a 10-mile stretch, Portland Harbor Superfund site. He said, this has been going on for 10 years. This has to be resolved before I retire.

Well, he retired last January, and I have watched this with enormous frustration. Essentially, the project involves testing the soils along this 10-mile stretch, deciding what to excavate, what to cap, and then doing that, doing those two things, and what to leave to natural erosion, the natural process.

Finally, 17 years after it was listed, there was a record of decision about what to do. Still basically nothing has happened for cleanup. It appears to me that the process is stalled, waiting for resolution about who among the potentially responsible partners will pay what, which means all kinds of lawyering, lawyers being hired every which direction, all sorts of subgroups being formed to challenge the EPA's decision in court.

I think it has gone now through three rounds of testing the river, because every seven or 8 years, it is like, oh, well, maybe the river has changed, maybe we need to reexamine where the contaminants are.

How do we stop this eternal process of planning and actually do the damned cleanup? Do we need to dive into the cleanup after the record of decision and not wait for the potentially responsible partners to sort out who will pay for it? How do we avoid this, now that we are 25 years into this project? I think this is emblematic of what has happened to many Superfund sites.

Whoever feels like they have the best insight on how to fix this.

Mr. FOX. I am involved in a lot of that litigation that you talked about. I will speak against interest here. That should never, those transaction costs should never slow down the cleanup.

EPA has many tools, I mentioned a couple, but they have other enforcement tools to bring the parties forward to do the work. They had to create the incentives for those parties to do it, so that you can not go to the same companies, deep-pocketed companies, every time and say, you have to pay 100 percent of the cost, and you figure out how to sue the other 100 parties and spend 10 years in litigation doing that. That is inefficient.

I agree with you, I know the Portland Harbor site. Contaminated sediment sites are more complex than your typical site. There are examples where there have been remedies selected in two or 3 years and the work started and partially completed.

That remedy selection process is the obstacle, it is not private parties suing. That can happen separately, completely separately from the actual remedy selection and the cleanup.

Senator MERKLEY. The remedy in this case was, the record of decision was made. Should the Federal Government be paying for the work until the responsible, potentially responsible partners sort out who pays for it?

Mr. FOX. There are many options that they have. One is they could do the work themselves and seek to recover it later. Two, they could have the private parties come forward and do that. In order to incentivize the private parties to do that, those private parties want to know that they are not going to be in years and years of litigation to recover.

If there are 100 parties at the site, and the Federal Government says, you four do it, and then spend the rest of your time going against those other 96, that is inefficient.

Senator MERKLEY. Okay. Well, it is massively complex, and I have watched as personnel have changed in terms of trying to drive the process forward. I think there are probably several dozen very well-intentioned employees of EPA who have burned out over the process of trying to drive this forward in the context of the lawsuits and resistance and reexamining.

I would like to see the work done and get on with other challenges as opposed to spending endless years and endless amounts of money planning, replanning, trying to figure this out. If it requires major changes in how the law is designed, I want to understand those and see if we can make this process work more effectively.

I am extremely concerned now about the cuts to EPA's staff and how that may reverberate in terms of people continuing to drive the process forward. My whole impression has been that the potentially responsible parties understand every strategy for delay and are intent on pursuing those. They do not want to pay out, and this is going to be a billion dollar cleanup. They do not want to pay for a billion dollar cleanup.

They have been very effective at working at that angle and having EPA competent staff are essential to keep the project moving forward. I am afraid with reductions in those staff we may see the problem just get worse.

Senator CAPITO. Thank you.

I would like to, we are hearing a lot about what is driving the costs. I talked about the Superfund premium. I think from the testimony we may not have the same name for it, but it is falling under the same umbrella of what I was talking about.

Let me just kind of dig deeper on this remediation plan holdup, Mr. Fox, that you have talked about. Is it a matter of the best strategy to clean up a particular site? Is it arguing over the best way to do it? We have heard it is not really arguing over who is going to pay for it. Or is that the holdup? Or is it, the science has not been done? I do not know. Point to one or two or three things in this process that we could change that would make this go faster.

Mr. FOX. First of all, I want to say I do not think the holdup is who is responsible for it. That is not the holdup in my mind.

Senator CAPITO. Okay.

Mr. FOX. I am going to echo what Mr. Radel said, and that is, there are very known ways to evaluate what the risk is at the site, and how to clean them up. Some sites are more complicated than others, but those general principles that I mentioned about knowing who is exposed, knowing what they are exposed to, and elimi-

nating those pathways. I do not want to use the wrong term, but it is not rocket science. We have been doing this for a long time.

What happens if the process is so cumbersome, the reports, and back and forth on scientific stuff. It is not a science project where you have to study every molecule. You can get there much faster, get a remedy selected.

By the way, Superfund contains a failsafe. The statute requires that every 5 years, the remedy that is selected and implemented is reviewed to see whether it is protective of the environment. Let's get it done through a much more streamlined remedy selection process. That is the major holdup as I see it.

Senator CAPITO. Mr. Radel, I am going to ask you, I am assuming that you have done cleanups for Superfund sites and cleanups for private or State level cleanups.

Mr. RADEL. Correct.

Senator CAPITO. Okay. I want to contrast those. When you do a cleanup, say, for a State or maybe for a private entity and you do not have this cumbersome process, would you agree with Mr. Fox that some of the things that are thrown into the Superfund process—so how does that work in a different, when you are doing it for the State or for a private entity? You mentioned a site in West Virginia that is a Superfund site you are getting ready to do, the McElroy Mine, is that correct?

Mr. RADEL. That is not a Superfund site, but I have a better example. The site we closed on in 2022 in Indiana was a Superfund site. If we had done that cleanup under the voluntary program of Indiana versus how we did it under the Superfund program, just my consulting costs alone and to some extent my legal cost probably two times more doing it on the Superfund site than if we were doing that same work under a voluntary program.

As Rob said, it is almost like when you have your little kid anxious to go out and play, when we have a site, we want to clean it up, we want to get started with a remedial investigation and get to the RA. Superfund, you have to stop, you have to do your QAPP, you have so many extra plans that you have to do.

A QAPP, by way of example, Quality Assurance Project Plan, where you go through basically a really thorough analysis of the laboratories that you are going to use, the laboratory that you are going to use to test the groundwater, the dirt, and things. It is a very detailed process, it is an expensive process, there are smart people involved.

We are using EPA certified labs—

Senator CAPITO. They're already certified?

Mr. RADEL. We are already using an EPA certified lab. I have to do this extra level of detail to satisfy the Superfund requirements. That is one small example.

It just compounds, it compounds. Instead of getting focused on what are the issues, how do we deal with them and how do we clean them up to be protective of human health and environment and then integrated development, we are still in this process of this plan, that plan, this plan.

Senator CAPITO. Right. I mean it would, it begs the question, if you are using an EPA certified lab, why do you have to keep going back and recertifying—

Mr. RADEL. Begs my questions, for sure.

Senator CAPITO. Mr. Fox, let me ask you, just from the folks that live in and around Superfund sites, they have great economic development promise, in my view, because they are clean, it is much easier for a developer in some cases to come in, because the work has already been done. What do you see when you go into different communities about the restlessness of, why is it taking so long, not adding the economics onto the health issues that are sometimes associated with these sites?

I think what we are doing is we are stymieing communities from being able to have confidence that they can redevelop, or be living in a healthy community.

Mr. FOX. I agree with you 100 percent. I see it over and over again. Communities are frustrated because the potential exists for a win-win-win. Redevelopment of the site, protective of their human health and the environment. The longer it goes on, they become distrustful.

Senator CAPITO. Right.

Mr. FOX. They become distrustful of EPA, they become distrustful of the private parties who are doing the work, and it feeds upon itself. Speeding up the process will get this back to productive use and eliminate the exposure of these communities, and they will eliminate that distrust.

Senator CAPITO. Thank you.

Senator Blunt Rochester?

Senator BLUNT ROCHESTER. Thank you, Chairwoman Capito and Ranking Member Whitehouse. Thank you to the witnesses. As you can hear from the questions that are being asked, I think this is an issue that cuts across party lines, it cuts across rural, urban, wherever you are.

We know that the Superfund program is vital to communities across the Country. It ensures that our lands are clean. It is important for economic development issues. It helps protect the health of Americans, even after the original polluters are gone.

By cleaning up these industrial pollutants, we can decrease the risk of cancer, heart disease, and respiratory illness.

Mr. GÓMEZ, your testimony and extensive research on the Superfund program highlights issues related to site complexity as a factor in delays. Can you further discuss how site complexity leads to delays, and how a project may utilize funding to clean these types of sites?

Mr. GÓMEZ. Sure. We have also been talking about the sediment sites; I think everyone has had examples. Senator Merkley talked about one in his State. Those sediment sites, where the sediment is contaminated, it could be miles of contamination along a river.

Those are areas that take a lot of work and resources for EPA to sort of figure out the contamination, where it is spreading. There are other site characteristics also that can be complicated in terms of tidal movements.

Figuring out in those cases where the contamination is, what is it, is it migrating, how to contain it, how to treat it, that requires a lot of time and resources. Those are the biggest sites. They take over a decade to work on. I think Senator Merkley talked about

over 20 years in his case. I know that in your State there are some as well that are sediment sites.

There is a lot of knowledge and information already on treating and dealing with sediment sites, even though each Superfund site is different. There is a lot of knowledge and expertise already there that the agency needs to make sure that it is using as it moves forward.

Senator BLUNT ROCHESTER. Yes, I would say we know that this takes reliable and robust funding to really deal with the cleanup of these contaminants. It is why the Bipartisan Infrastructure Law was so important. Someone mentioned the IRA as well.

In Delaware, we have Standard Chlorine, a site that is known as an orphan site, because the original polluter has since gone bankrupt. Again, back to how that impacts communities, this has left the site in the hands of the State and EPA to clean up and protect the community's health and safety.

Mr. GÓMEZ, the Standard Chlorine site is a complex site. What factors should be considered before a cleanup takes place or is completed?

Mr. GÓMEZ. This is one of the orphan sites you were talking about as well?

Senator BLUNT ROCHESTER. Yes.

Mr. GÓMEZ. Right. The orphan sites is an area that EPA has to figure out, if it tries to find a responsible party, otherwise it has to do it itself and then try to recoup those funds.

That is where appropriations do come into play, because you want to make sure that funding is available to start new projects in that case. EPA historically focuses appropriations on ongoing remedial action.

What we have learned from our work is in the past, EPA does not start new remedial actions, because it does not have the funds to do it, because it is prioritizing the funds that it has to continue the cleanup on those that are already taking place. It is less expensive to just continue that. Whereas if you stop them, you have to remobilize all of the equipment that you are working on.

Yes, for orphan sites, that is a challenge. When there have been supplemental appropriations, the agency has been able to focus on those. You had mentioned the Infrastructure Act. That allowed EPA, in fact I think their latest report to Congress from last year, over 100 sites were able to start remedial actions. They have been using those funds for that purpose.

Senator BLUNT ROCHESTER. I know we can all speak to the health aspects of this. Could you speak specifically to it for a complex site? For example, does the EPA need to consider contamination migration? Can you talk a little bit about that as well?

Mr. GÓMEZ. Sure. For these sites, there is a lot of sampling that has to take place and modeling. The sampling is sort of getting at what you are talking about, figuring out, first trying to characterize what the contaminants at the site are, if they are migrating, where they are going.

The modeling aspect is again trying to sort of figure out the inputs from the data that you are collecting in the sampling to figure out again how the contaminations might migrate, but also how it might affect the risk that is there.

Those are things that take a lot of resources and take a lot of time from the agency. There is also uncertainty in the model so that you have to spend enough resources to make sure that the models are predictive of what might actually be taking place.

Senator BLUNT ROCHESTER. I have run out of time. I will submit more questions for the record.

Thank you so much to the witnesses, and I will also submit some questions for the other witnesses as well regarding complex sites.

Thank you, and I yield back.

Senator CAPITO. Thank you.

Senator SCHIFF?

Senator SCHIFF. Thank you, Madam Chair. Congratulations on your former staff who moved forward in the confirmation process.

Senator CAPITO. Yes, thank you.

Senator SCHIFF. She had the best training possible, clearly.

Thank you all for coming in to testify. Mr. Fox, it is good to see you again. In the interest of full disclosure, we are law school classmates. Somehow you must be in a much less stressful line of work; you still have much more hair than I do.

Mr. Fox, you testified about one idea to improve the timeliness of cleanup. That was mandatory agency review times. I guess I have a couple related questions. One is, in the States that have adopted those kinds of time periods, what is the repercussion if the agency does not get the work done in time? Is it an automatic approval of the remediation plan?

Then a related question is, if we are, and it is an attractive idea that I have thought about in other contexts, but if we do not have the staffing at EPA, if we further reduce staffing at EPA, if the reason for the delays by the agencies is there just are not the personnel, then does that work? Or does that just result in remediation plans being approved without any review?

How much of the issue of the current delays is simply lack of capacity at EPA? Does your proposal work if we do not address that?

Mr. FOX. That is a fair question. I do not think the primary issue is the lack of staffing. I can relate Pennsylvania and New Jersey examples of deemed approvals. It is a deemed approval.

If you do not respond within specific timeframes, and there are different timeframes for different reports, that is written into the regulations, then it is a deemed approval.

You do not want a deemed approval, to be honest with you. The goal is not to get something approved because the agency has not reviewed it. The goal is to make the agency review it.

It has worked, it has speeded things up tremendously. I would say we certainly have not overfunded our State agency in Pennsylvania.

I think that is a real issue, but I do not think that is the heart of the problem. It is the time it takes to review. It can go on for years before you get a response. That just can not happen.

Senator SCHIFF. We have seen that in California, where it has gone on for years and years.

If it is not staffing, then what do you think it is that accounts for such delays?

Mr. FOX. I think it is the overly prescriptive nature of the Superfund remedial selection process, which has too many bells and whistles that are unnecessary.

Steve gave one example of a QAPP. There are a number of different examples. It is just overly prescriptive and unnecessary to get to a protective remedy.

Senator SCHIFF. Mr. Gómez, do you have a similar or contrary view on that?

Mr. GÓMEZ. I think there is something to be said for that. What we have learned from the work, that it is important to have the staffing that is there. I think that the Superfund program has been in place for a very long time. I think there is an opportunity, especially as Congress is considering changes, to look at the process and perhaps look to see where most of the time is spent. We have some new work that we are starting. We are going to be looking at the funding, and then some planned work, to just look at the overall Superfund process.

In those places, perhaps, where there are the longest times, try to figure out why and what can be done to change it.

Senator SCHIFF. The DOGE website announced a few weeks ago that it intends to shut down the EPA regional office in Los Angeles. Can you describe, Mr. Gómez, a bit about what those regional offices do and what will that mean in terms of Superfund sites around L.A.?

Mr. GÓMEZ. Sure. In the Superfund program, the work takes places at the regional offices. You have to, if you are going to make changes, any kind of changes, you have to keep in mind how those regional resources might be affected, because those are the folks that are doing the work.

Yes, I think we are also, in our work, waiting to see if there are going to be any proposed changes, what that may mean for how the program is carried out.

Senator SCHIFF. If that office closes, then they would just have to deploy EPA personnel from farther away?

Mr. GÓMEZ. I think that is one of the comments that is out there, is that people might be given additional responsibilities how that may affect their work is yet to be seen, if that takes place.

Senator SCHIFF. Yes. Among others, you are probably familiar with the Stringfellow Acid Pits in Riverside County, that was added to the National Priority List. Apparently it has been on that list year after year after year.

I appreciate your testimony and suggestions you have made. Thank you, Madam Chair, for holding the hearing. We will followup with some additional questions for the record.

Senator CAPITO. Thank you.

I believe Senator Kelly is on his way, so we will wait just a few minutes, and while we wait, I want to ask an additional question.

On the train derailment in Ohio several years ago, we had testimony in this committee about EPA's role. We also heard again, delays in cleaning it up. Part of the problem, from my understanding, was that certain States decided, even though they had certified, probably, EPA certified toxic, folks that could take toxic material into their businesses, that is their business, that certain

States said, we do not want that in our State. I believe Michigan, if I am recalling correctly, was one of the States that said this.

Have you run into this type of issue as you are remediating, either you, Mr. Fox, or Mr. Radel, where you have had a refusal to accept toxic materials that you are taking? I am assuming you do this, take it an EPA certified site. Is this an issue?

Mr. RADEL. My experience is that I have not run into that. If we are going to an offsite location in whatever State it is, that location is permitted to accept those hazardous wastes, and they have a permitted facility that is either a landfill, an incinerator, or whatever it might be.

They have the permit, you have the right DOT permits and you have the right transporter, I have not seen an instance in my experience where anything has been denied. We are using all the proper protocol.

Senator CAPITO. Right. That is what I thought. Mr. Fox, do you recall that?

Mr. FOX. There are two issues. One is, there is a limited number of hazardous waste disposal sites. You do not have this great selection.

I suspect that a lot of that was community opposition.

Senator CAPITO. It was.

Mr. FOX. Yes. That was, we do not want that. The facility is properly permitted to accept it.

Senator CAPITO. Right.

Mr. FOX. The community says, I do not want that waste. You are taking it off of there and putting it into my community.

I am assuming that was probably what was behind it.

Senator CAPITO. Yes, and it kind of blows up into a—

Mr. FOX. A political issue, as opposed to a regulatory issue.

Senator CAPITO. Yes. I just hope—these are professionals that are going to the letter of the law to be able to dispose of this, and actually creating a business model that can help you and help all these other sites. It was rather, I think kind of shocking, not just to me but to them, that this was going on, when these sites have been there forever, the cleanup sites.

Mr. FOX. Trust me, to get a RCRA permit for a hazardous waste disposal facility is a rigorous process.

Senator CAPITO. Right. My understanding as well.

All right, Senator Kelly.

Senator KELLY. Thank you, Madam Chair.

Mr. Gómez, good morning. I want to ask you for your perspectives about a group of Superfund sites, the more than 500 abandoned uranium mines on the Navajo Nation. I have discussed these frequently before this committee. I want to get your perspective on how we address this issue.

First off, as you may know, the Navajo Nation is spread across three States, actually four now with a little purchase in Colorado. The majority of the Nation is in Arizona; it is about the size of West Virginia, the Navajo Nation, in Arizona, but it stretches into both Utah and New Mexico, and there are abandoned mines in all three States, more than 500 of them.

As you may also know, those three States are all served by different EPA regional offices. Arizona is Region 9, Utah is 8, New

Mexico is Region 6. While Region 9 is the lead office for all issues on the Navajo Nation, we have run into issues because of the split jurisdiction.

For example, mines just off of tribal land are coordinated through other regional offices. Often it is other EPA regional offices in New Mexico or Utah that have relationships with hazardous waste landfills, contractors, and responsible parties to carry out this mine cleanup.

Mr. GÓMEZ, are you aware of other similar instances where a group of Superfund sites stretch across EPA regions?

Mr. GÓMEZ. That is a really good question, and I am not aware that that is the case. We can look to see if other tribal nations are sort of spanning across multiple EPA regions. At this point, I can not recall one, but we will double check.

Senator KELLY. Okay. Congress has periodically established geographic offices at EPA to help carry out programs within a region that faces similar issues by virtue of geography, including the Great Lakes Office or the Chesapeake Bay Office. When it comes to Superfund cleanups, what role have these offices played in helping to coordinate CERCLA efforts in a more streamlined fashion?

Mr. GÓMEZ. I am not sure that we have done work on that, but we can look at that. I am obviously very familiar with the Great Lakes Office, as you noted, that is a separate office as well. We can look to see, to the extent that they have worked with the EPA Region 5 in this case, for the Midwest, to see whether they go back and forth and share information. That is a good question.

Senator KELLY. Yes, I think, my sense is that they probably do.

Mr. GÓMEZ. Okay.

Senator KELLY. Another challenge that has been facing cleaning up the Navajo Nation mines is that the remedial actions identified for mine sites are extremely costly, and it is technically challenging. In many instances, the preferred solution would require digging up hazardous waste rock and transporting it hundreds of miles to a waste repository.

This seems like a classic case of needing to find a new and different technological solution to address this kind of cleanup.

Mr. GÓMEZ, what tools and authorities exist within the Superfund program to help accelerate research and development efforts to find new and more efficient and more cost effective site cleanup methods?

Mr. GÓMEZ. Currently, the Office of Research and Development at EPA is the one that does a lot of that research that the Superfund program relies on. For example, in toxicity studies, on research on new technologies to make sure that the remedies are working as intended.

There are those opportunities there that are currently taking place, and go back and forth. You are right, that mining sites are the sites that are very costly. In our past work, when we have looked at the cost to remediate sites, mining sites are pretty high, because of the things that you talked about in terms of having to dig it out, transporting the waste, removing it offsite, then treating it.

Those are challenges for EPA.

Senator KELLY. It is good that EPA has research and development efforts underway to solve challenging problems like this.

I will note that a lot of the west faces very similar issues to what we are seeing on the Navajo Nation. I think the entire region could benefit from the expertise of a geographic office like the Great Lakes Office.

That is why Senator Lummis and I introduced legislation called the Legacy Mine Cleanup Act, which would authorize an Office of Mountains, Deserts, and Plains at EPA to address issues unique to the western United States.

Madam Chair, I know we have had a good conversation with your staff, and I hope to find a path forward for this legislation through the committee process here in the coming weeks.

Senator CAPITO. We will take a look at it. Thanks.

Senator KELLY. Thank you.

Senator CAPITO. I think Senator Whitehouse has a final question.

Senator WHITEHOUSE. If you do not mind, Chairman. Thank you very much.

This is for Mr. Fox. You have obviously had a lot of experience in this space. There is a phenomenon that I think is real that I would like you to react to, which is that when there is a focus on a particular Superfund site and there is a particular potentially responsible party who has the deep pockets to do the necessary funding to clean up the site, and they become kind of a primary actor in that Superfund cleanup, they can have motives of their own.

They can wish for control over how the remediation is done and argue, hey, I am going to end up paying for this, I am entitled to a voice in how it gets done. They can have the desire for control over what happens with other potentially responsible parties, and there have been cases in which the primary target, if you will, the primary funder, stalls things up to push EPA to look for a greater contribution from other responsible parties.

Then they can have a third concern, which is that if they can put a fixed expenditure on their books year after year after year after year for this cleanup, so that it just does not affect the bottom line particularly, then they have a sudden incentive to draw out the remediation as long as they can, both to keep the annual number under what they have internally allocated as a problem, and because who knows? Somebody might come along and throw out the whole EPA Superfund team, and now they can come in and say, hey, we have all sorts of new opportunities here to shut down our own responsibility.

It strikes me that the PRP is not necessarily the victim entirely of bureaucratic delay, but in particular circumstances can actually be a cause and protagonist in the question of delay of the cleanup of the site. I would be happy to have you respond to that now and I would also be happy to have you write out a more thoughtful and complete answer, if you would like to.

I see circumstances in which PRPs become part of the problem and not part of the solution.

Mr. FOX. I think that is a fair question. It is a very complex question, which I probably will have to write, but I will just give you a couple of quick thoughts, if you do not mind.

The first one is on the control over the remedy. I think it is correct that private parties would like to control the remedy.

Understand that the way the statute is written, ultimately the decision on the remedy is always the agency's. Even if a private party is under an order to suggest what the remedy should be, the selection of the remedy is done by the agency and the statute does not allow for pre-enforcement review of that remedy selection.

There is only a certain amount of control you can get on remedy selection.

The second point you made with respect to going against other parties is undeniably correct. A central PRP is always looking to spread those costs among other parties who are liable, whether they do it through their own litigation or they encourage EPA to pursue those parties. That is clearly a dynamic that happens at site after site.

I would quibble with you a little bit on wanting to spread out the costs over time. The reason I would quibble with that is because the cost expands to fill the time. The longer these go on, the costs increase, not just the transaction costs to get to the remedy selection, but the cost of the remedy increases as well.

I am not sure that in all cases it is actually in the economic interests of the private party to say, let's string this out over time. It may be better to have a more cost effective remedy done quickly, and then try to spread those costs among other parties.

I am happy to expound upon that in writing.

Senator WHITEHOUSE. I think on that last point, while the argument you have made may be the case in certain circumstances, I do not think it obviates the prospect that there are times in a large corporation when, to put something under a cap so you know it is going to be forever, and you have time value of money working in your favor because it is an out year expenses that you are moving it out to, when the financial object of the PRP's role becomes one that incentivizes delays.

Mr. FOX. I can not say that that never happens. I am just saying it does not always happen that way.

Senator CAPITO. Okay, good. With no further questions, I would like to thank the witnesses and all my colleagues for participation.

Senators who wish to submit written questions for the record have until 5 p.m. on Wednesday, April 23d, to do so. The witnesses' responses to those questions are due back to the committee no later than close of business Wednesday, May 7th, and will be submitted for the record.

I would like to say just in closing that I think, first of all, this has been an excellent hearing, because you are all so knowledgeable on the issue, having lived it. I think we have good bipartisan agreement here that the system is broken. We have put more money into this recently. We want to see it result in completions of these projects as much as you do.

Let's work together to try to find a solution, and hopefully we can ameliorate some of the problems that have been identified today.

Thank you very much.

Senator WHITEHOUSE. I will second that emotion.

Senator CAPITO. Thank you. This hearing is adjourned.

[Whereupon, at 11:18 a.m., the hearing was adjourned.]

Possible CERCLA Improvements – Suggested Topics for a Planned Legislative Hearing

Prepared by Walter Mugdan¹

January 2025

- **Improve/Streamline Superfund Contracting.** Background: A significant element causing lengthy delays in getting Superfund work done is the contracting process. It can take multiple years to award the major contracts through the Remedial Acquisition Framework or RAF. Given that these are multi-year contracts worth hundreds of millions of dollars, that may be understandable. However, it also takes 6 to 12 months or more to assign a Task Order to one of the contractors to actually carry out site work (RI, FS, RD, RA). Each Task Order has to be competed among the multiple available contractors, which is time consuming and resource intensive, not only for the EPA staff but for the contractors themselves. The underlying contract guarantees them a certain amount of work and allows them up to a specified limit (capacity). But under the current approach the contractors have to put a lot of work into “bidding” for every individual task, while only succeeding in, say, 1-out-of-3 or 1-out-of-4 of the times they bid. Protests can also add to the time delays. **Suggestions to prepare for a hearing:**
 - Ask EPA for data on how long, on average, it takes to award the main contracts, and – importantly – how long it takes to issue Task Orders for different categories of work (e.g., RI, FS, RD, RA)
 - Speak with regional Superfund program staff with extensive experience (e.g., Courtney McEnery in R2), and in OLEM.
 - Note that EPA contracting staff may see the delays as the inevitable consequence of applying the Federal Acquisition Regulation (FAR). Some program staff believe the FAR to be less restrictive.
 - Note that EPA has had significant difficulties filling Contract Officer positions. The EPA's hiring process is VERY slow – it can take 6-8 months to get a “certificate” with eligible candidates and make a selection; by that time, qualified candidates have often found another job.
 - Speak with representatives of the environmental contracting industry; e.g., the Water & Environmental Committee of the American Council of Engineering Companies (<https://www.acec.org/>).
- After a hearing, perhaps ask GAO to study the issue and recommend improvements.
- **Streamline Enforcement.** Under CERCLA §122(d)(1)(a) (42 USC §9622(d)(1)(a)) a settlement in which PRPs consent to carry out a remedial action (RA) must be

¹ Contact information: waltermugdan@gmail.com; 917-832-0208. This paper incorporates suggestions made by James Woolford (jmwoolford2@msn.com) and Cyndy Mackey (cyndymackey@gmail.com), both former EPA officials with extensive Superfund experience. The issues and ideas in this paper were discussed on January 27, 2025, with Jake Kennedy of Sen. Capito's staff (Senate Environment & Public Works Committee).

memorialized as a judicial consent decree in federal district court. By contrast, settlements for other kinds of response action, including Removals, RI/FS and Remedial Design, can be memorialized as an administrative Consent Order.

- This makes RA settlements much more burdensome and time-consuming than necessary, involving DOJ staff who are often stretched very thin.
 - Significantly increases transaction costs for both the U.S. and the PRPs.
 - **Proposal:** remove the restriction and allow Administrative Consent Orders under §106 to be used for RA settlements.
 - Require EPA to take public comment on such ACOs
- **Allow PRPs to do 5-Year Reviews**, but do NOT make this mandatory; this should be discretionary for EPA, as with other response actions. Ensure an opportunity for state review and public comment.
- **Adjust State Cost Share for Remedial Action.** Under §104(c), states pay 10% for RA; 100% for O&M after 1 year; and 100% for Long Term Remedial Action (LTRA) after 10 years. Note that the Bipartisan Infrastructure Law of 2021 eliminated the state cost share for remedial cleanups paid for with the \$3.5 billion appropriated under the law.

Possible changes:

 - Lower state cost share, e.g., to 5%.
 - Reduce LTRA share to 50% at 10 years; and 75% at 20 years
 - Reduce O&M share to 50% at 1 year
 - And/Or: eliminate state cost share requirements entirely in exchange for removing the need for state concurrence for remedy selection & NPL deletions.
- **Provide States with further “Silver Bullet” authority.** Currently, under §104(a)(8)(B), a State can designate one site for the NPL irrespective of whether it “scores” under the HRS (called the “Silver Bullet” provision). **Possible changes:**
 - Allow each State one “Silver Bullet” nomination every 5 or 10 years.
- **Increase TAG Amount.** Currently, under §117(e)(2), Technical Assistance Grants for communities are limited to \$50,000 (in the absence of a waiver). This amount was set in the mid-1980s. Accounting for inflation, that would be about \$150,000 today.

Possible changes:

 - Increase TAG amount to \$150,000, or preferably \$200K or \$250K.
 - Note: For Federal Facilities on the NPL, EPA typically pays the cost of a TAG; instead, provide that the pertinent federal agency pays for a TAG.
 - Reduce the TAG recipient’s required cost share from 20% to 10%

- **Federal Agencies to pay Oversight.** Federal agencies doing Superfund work subject to EPA oversight should reimburse EPA for the oversight costs, like other PRPs.
- **Use of Interim Remedies:** At some very complex sites, it may take decades to arrive at a “final” site-wide remedy. PRPs and EPA have agreed at a number of large sediment sites that interim remedies can make good sense (e.g., Passaic River, Berry’s Creek, Newtown Creek, all in Region 2). An interim remedy can accelerate cleanup, while all parties recognize the possibility that further work could be called for in a final remedy. It may be worthwhile for EPA and the PRP community to consider interim remedies at other appropriate sites.
- **Incentivize Response Action by non-PRPs to Promote Redevelopment.** Note: the Superfund Study called for by then Administrator Pruitt in 2017-18 included this as an objective. **Possible changes:**
 - Create Federal Tax Credits for non-PRP volunteers?
 - Make “Comfort Letters” more comfortable (i.e., provide greater “comfort”)?
 - Note: the “Good Samaritan” [Good Sam] legislation recently enacted is cumbersome and resource intensive for both EPA and the volunteer. The legislation requires a new permit program, creates new terms/standards, and invokes NEPA. It might be easier to modify CERCLA so that settlement agreements under Section 122(a) can be used to facilitate Good Samaritan mining projects under CERCLA. To do this, Section 107(d) (Rendering Care) could be modified to expressly refer to certain Good Samaritan mining cleanups and could expressly make available settlement authorities under Section 122(a) of CERCLA.
- **IDEAS FOR RCRA CORRECTIVE ACTION PROGRAM:**
 - Allow Special Accounts to be established to reimburse EPA oversight of RCRA Corrective Actions.
 - Allow for Technical Assistance Grants (TAGs) to communities interested in RCRA Corrective Action sites.

PFAS: NOTE – PFAS is NOT expected to be addressed during the planned hearing. Nevertheless, here are some observations and a suggestion:

- It is important that EPA have the ability to use the full suite of Superfund tools to address dangerous PFAS contamination, e.g. at Hoosick Falls in NY, or Chemours Deepwater in NJ, or other places where significant contamination threatens drinking water and surface water supplies. EPA took steps to do this by listing several PFAS compounds as CERCLA Hazardous Substances. That regulatory action has been challenged and is now in the courts.
- There are legitimate concerns about Superfund liability being imposed inappropriately. For example, against a farmer who used sewage sludge as fertilizer – generally considered an environmentally desirable practice – but unbeknown to the farmer AND the sewage treatment plant the sludge had PFAS in it **OR** the local fire company that used aqueous firefighting foam (AFFF).
- Congress has the ability to make CERCLA available to address PFAS contamination by statutorily listing PFAS as a hazardous substance, while establishing appropriate limits to liability for certain "passive" PFAS contributors. The combined action of listing PFAS as a hazardous substance, defining PFAS liability for certain contributors, and clarifying coverage for PFAS releases to all media would ensure polluters are appropriately paying for cleanup of PFAS, while protecting from liability those who deserve and need such protection.
- Any legislative action related to addressing PFAS contamination under CERCLA should focus on small changes to the definition of "hazardous substance," where Congress could expressly add PFAS and in the same sentence limit its application to certain parties. An example is set forth below:

CERCLA 9601(14): The term "hazardous substance means...[list of statutes].... The term includes PFAS releases to air, water and soil, except for PFAS released through proper usage of aqueous firefighting foam and biosolids in compliance with all applicable requirements.

