U.S.EPA

SUPERFUND TASK FORCE

SUPERFUND TASK FORCE FINAL REPORT

Final report on the recommendations developed in response to the EPA Administrator's request on May 22, 2017. The recommendations address: expediting cleanup and remediation process; reducing financial burden on all parties involved in the entire cleanup process; encouraging private investment; promoting redevelopment and community revitalization; and building and strengthening partnerships.

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Revitalizing our Nation's Land through Superfund

Perhaps no EPA program better reflects the mission of the Agency and the priorities of President Trump than the Superfund program. For nearly 40 years, the program has cleaned up the nation's most contaminated sites, directly improving public health and breathing new life into struggling areas of the country. Superfund allows communities and businesses to rediscover and repurpose land that was once abandoned or written off.

Over the past two years, the Superfund Task Force has been working to improve the Agency's implementation of the Superfund Program in order to accelerate cleanups and shorten the path to redevelopment and safe, productive reuse. By prioritizing the Superfund program, we are prioritizing the health and well-being of the communities that live near these sites.

The renewed focus on and renovation of the Superfund program through the work of the Superfund Task Force is already paying dividends for communities nationwide. In Fiscal Year 2018, EPA deleted all or part of 22 sites from the National Priorities List, the largest number of deletions in one year since Fiscal Year 2005. Our renewed focus on the Superfund Program results in sites on the National Priorities List being just that – a national priority.

The Superfund Task Force's initial set of goals and recommendations were the result of input from EPA's career staff and others. Calling upon their collective experience with the Superfund Program, they offered important suggestions for ways to improve the program and increase its ability to play an even more important role in America's future.

One tool for accelerating the transformation of contaminated land into future use is EPA's Superfund Enforcement Program. EPA will continue to use enforcement tools to maximize and expedite the cleanup and reuse of contaminated sites. EPA achieves these goals by requiring responsible parties to perform and pay for cleanups and by addressing the liability concerns of volunteers who invest in remediation and revitalization. The increased emphasis on leveraging responsible party and other investment in cleanup and reuse enhances EPA's ability to clean up more sites throughout the nation.

I am proud to present the Final Superfund Task Force Report, which demonstrates the numerous achievements by the hard-working EPA staff (listed on the following pages) who planned and implemented specific actions over the past two years to expedite sites through remediation and into to productive use. Their accomplishments have led to significant progress at Superfund sites throughout the country. Even more importantly, the report identifies the performance measures that will be integrated into EPA to ensure the successful implementation of these lessons learned for the future of the Superfund Program and the future

of Superfund sites. These performance measures will impose accountability on the Agency to maintain its commitment to ***reclaim***, ***restore***, and ***reuse*** these sites (themes which run throughout this report). I invite all of us to hold the Agency accountable to achieve the prompt cleanup and reuse of these national priority sites.

I look forward to working hand-in-hand with states, local communities, tribes, other federal agencies and private parties to implement these lessons learned and continue our progress in the Superfund program.

My sincere thanks to the EPA employees who contributed to the development of the Superfund Task Force report and the implementation of the 42 recommendations. It was a heavy lift, and you carried it out successfully. Thank you for working closely with your EPA colleagues, federal partners, states, tribes, the public, local governments, private industry, developers, and numerous other stakeholders to ensure EPA's commitments under the Task Force report were successfully met. Thank you for ensuring that the Task Force was transparent and accountable by providing quarterly updates on the Task Force webpage that highlighted the accomplishments and next steps for each of the recommendations. Finally, thank you for your commitment to protecting human health and the environment. Because of your efforts, the Superfund Program will continue the environmental and economic transformation of communities across the nation.

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Environmental Council of the States-EPA Superfund Workgroup

Respectfully,

Andrew Wheeler
Administrator

LOOKING AHEAD

The ultimate measure and goal of the improvements to the Superfund Program is how well the affected communities we serve are transformed by reclaiming and returning land to productive use. Communities across the country rely upon the Superfund Program to remediate the most contaminated property caused by a wide range of historic land use and waste disposal practices. Where once in America's history making land useful required clearing trees, rocks, and boulders and diverting streams, meeting the needs of the 21st Century and beyond requires the effective and innovative application of Superfund and other cleanup programs. The goal of returning land to communities drives us to continue to learn, improve, and refine our approach to the implementation of Superfund.

The roll-out of the Task Force recommendations through EPA's regional offices and across the country to the ongoing work at sites needs to be more and different than simply issuing the report and how to improve performance and associated guidance documents. A report and collection of guidance documents sitting on shelves across the country will not improve the Superfund Program. Implementation of the recommendations will require an ongoing effort with EPA headquarters, the regions, states, tribes, other federal agencies, responsible parties, and affected communities. Execution of the reforms will lead to more efficient uses of resources, rapid adoption of best suited technology, and improved practices in order to increase consistency of the effectiveness of the Superfund Program across the regions, which will require sustained commitment and focus.

Implementation has already started for those recommendations that had been completed before the issuance of this final Task Force report. We look forward to receiving comment and suggestions about the actions, measures, and guidance that has been developed by the Task Force related to the recommendations. Similarly, we welcome comment on what has not been proposed or prepared. We will also begin to experiment with application of the Task Force's responses to recommendations at sites across the country. We will learn how effective some responses are for different circumstances and how some might be improved, modified, or maybe even abandoned. We will continue to reflect and refine all of the responses to the recommendations to demonstrate our commitment to continue to improve the Superfund Program.

The immediate and continuing next step is to demonstrate improvement. The report contains metrics that will allow us to track and report on progress on many of recommendations and on overall implementation of the Program. We will evaluate the metrics and their usefulness and consider adopting additional or different methods to measure and report on progress.

The issuance of this report documents the work over the last two years of many EPA career professionals elaborating on their ideas for the improvement of the Superfund Program. This is a product of the Task Force members' decades of experience with the successes and shortcomings of the Program and their commitment and passion for improvement of all aspects of remediation and resolution of associated issues at Superfund sites.

The Agency will continue transforming communities by developing their vision for the future of sites in their communities. Having a vision for reuse attracts resources faster, accelerating cleanups and shortening the path to the future productive use. Like these communities, EPA has a vision for the future of the Superfund Program, and the Superfund Task Force is just the beginning!

Respectfully,

Peter C. Wright
Assistant Administrator
Office of Land and Emergency Management

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EXECUTIVE SUMMARY

The Superfund Program makes a visible and lasting difference in communities by cleaning up the nation's worst hazardous waste sites; tackling threats to public health and our natural environment; supporting local economies; enhancing quality of life; and preventing future hazardous substance releases. The Superfund Program's many demonstrated achievements over its nearly 40-year existence represent significant contributions in meeting the Environmental Protection Agency's (EPA's) mission. Many sites have been remediated and removed from the National Priorities List (NPL); however, numerous sites remain, and more sites are added to the NPL each year. EPA continues to seek ways to more efficiently and effectively remediate these Superfund sites and protect human health and the environment.

The Superfund Task Force, which was comprised of over 100 EPA career employees, was commissioned on May 22, 2017, to provide recommendations on how the Agency can restructure the cleanup process, realign incentives of all involved parties to promote expeditious remediation, reduce the burden on cooperating parties, incentivize parties to remediate sites, encourage private investment in cleanups of sites, and promote the revitalization of properties across the country. On July 25, 2017, the EPA Superfund Task Force Report identified multiple opportunities to accelerate cleanup and reuse of Superfund sites. Specifically, the Task Force identified 42 recommendations under five overarching goals. EPA convened workgroups and developed implementing tasks for each of the recommendations. The Task Force workgroups identified effective ways to implement the recommendations and reach outcome-driven results to expedite cleanups, site redevelopment, and community revitalization while protecting human health and the environment. The next challenge, which the Agency is already working on, is to continue the implementation of the recommendations into the Program.

Expediting Cleanup and Remediation

Superfund cleanups provide significant public health benefits including reductions in birth defects and blood-lead levels among children living near sites. One of the tools developed by the Task Force to expedite cleanup and remediation is the Administrator's Emphasis List, a list of sites targeted for the Administrator's immediate and intense attention. Since the initial release of the Emphasis List in December 2017, substantial progress has been made at sites placed on the list. EPA updates the dynamic list on a regular basis as sites achieve major milestones throughout the Superfund process as highlighted by the following examples.

Following placement of the **Delaware Sand and Gravel Landfill Superfund Site** on the Emphasis List, Region 3 secured a settlement with the responsible parties and initiated pre-design work and installation of two groundwater interceptor wells to protect water supply wells.

At the **Tar Creek Superfund Site** in Oklahoma, the Emphasis List was instrumental in bringing parties together to develop a long-term strategy to manage risks, cleanup, and economic opportunities at the Site.

Sites on the NPL can bring stigma to a community, so deleting sites from the NPL has also been a major focus of the Task Force. By completing these deletion activities, EPA provides comfort to communities that no further cleanup is required to protect human health or the environment. After reviewing the existing policies and procedures for deleting sites from the NPL, the Task Force took actions to streamline the deletion process. In addition, the Superfund Program began providing senior Agency officials with monthly updates on upcoming deletions. Through these and other actions, EPA deleted 18 full sites and portions of four more sites in FY 2018, a significant increase over the three full or partial deletions in FY 2016. In coming years, EPA will continue its focus on deleting sites through sharing information about the most effective approaches for moving sites to deletion.

The Task Force emphasis on deletions has provided comfort to communities that no further cleanup is required a neighboring sites that have been on the NPL for a number years. In particular, EPA recently deleted these three sites, which were part of EPA's first NPL rulemaking in 1983:

- **Fulton Terminals** (New York): The City of Fulton, the current owner of the former facility property, is interested in developing the land for community use;
- **Whitehouse Oil Pits** (Florida): Currently, the site is used as a natural ecological buffer for the floodplain of the adjacent creek, and there is potential for possible recreational land uses in cooperation with the city; and
- **Frontier Hard Chrome** (Washington): Current site reuse activities include a pipe fabrication facility's operations as well as parking and storage.

Re-Invigorating Responsible Party Cleanup and Reuse

In FY 2018, the Superfund Enforcement Program obtained commitments from private parties of approximately $453 million for site cleanup and $80 million to reimburse the Agency for past costs for cleanup work at Superfund sites under 174 enforcement settlements, orders, and other tools. Environmental benefits of these commitments include the cleanup of over 244 million cubic yards of contaminated soil and water, including thousands of lead-contaminated residential yards, as well as addressing liability concerns at sites to foster redevelopment.

One of the major highlights of the Agency's cleanup Superfund Enforcement Program under the Task Force is new guidance to accelerate remedial design (RD) starts at potentially responsible party (PRP)-lead Superfund sites. The guidance is already being applied and has accelerated RD work by PRPs as highlighted below:

In April 2019, to accelerate the implementation of the record of decision (ROD) and the start of RD at the **B.F. Goodrich Superfund Site** in Kentucky, EPA negotiated a settlement agreement with PRPs for RD. The agreement allows the settling PRPs to begin designing the cleanup while negotiating a separate agreement for the remedial action (RA) phase of the cleanup.

In May 2019, EPA signed a Superfund Alternative Approach (SAA) administrative settlement for RD in connection with the **Foster Wheeler Energy Corporation/Church Road Trichloroethylene Site** in Pennsylvania. The administrative settlement allows the facility to start the design immediately while the parties complete negotiations and await court entry of the consent decree.

Also, in May 2019, EPA finalized an administrative order on consent with Bridgeton Landfill, LLC, Cotter Corporation (N.S.L.), and the U.S. Department of Energy (DOE) to develop a RD work plan for Operable Unit 1 of the **West Lake Landfill Superfund Site** located in Missouri. This early response action agreement allows the design of the cleanup to move forward while the parties negotiate the RA.

Encouraging Private Investment

Private sector tools and approaches to manage environmental liabilities and risks are important to the cleanup and reuse of contaminated sites. The Agency supports innovative approaches to promote third-party investment in cleanup and reuse of contaminated properties consistent with EPA's statutory authorities, as highlighted in the examples below.

In March 2018, two consent decrees were approved that ensure the continued cleanup work and payment of past and future response costs at two California Superfund sites: **Coast Wood Preserving** in Ukiah and **Valley Wood Preserving** in Turlock. Under the agreements, two small family-run businesses with common owners transferred the corporate stock in each company to a new shareholder who assumed responsibility for completion of the cleanup work and long-term operations and maintenance at both sites. The use of a non-traditional approach to reach a settlement on the responsibility for and financing of the cleanup of the sites will allow these sites, that otherwise may remain dormant, to get cleaned up and returned to use.

In February 2019, EPA entered into an administrative settlement with Missouri Mining Investments, LLC to conduct

removal actions at a portion of Operable Unit 2 of the **Madison County Mines Superfund Site** in Missouri. Missouri Mining Investments purchased the property from the previous owner as part of an environmental liability transfer to address mine waste. The settlement will result in the consolidation and capping of on-site mine waste and allowed the approximately 1,750-acre property to be redeveloped for future mining of cobalt and other metals. Missouri Mining Investments constructed a new tailings processing facility to recover metals from existing mine waste on site, and production has already begun.

Promoting Redevelopment and Community Revitalization

In 2019, the Superfund Redevelopment program celebrated 20 years of successfully returning sites to communities for reuse. A significant Task Force achievement in FY 2018 was increasing the annual number of sites returned to communities for redevelopment. By redeveloping Superfund sites, communities are able to use thousands of acres of formerly contaminated land, strengthening local economies. Many sites that EPA has designated as ready for reuse now host parks, business districts, renewable energy facilities, wildlife habitats, neighborhoods, and farms. In FY 2018, EPA committed to increase the number of NPL sites that achieved sitewide ready for anticipated use by roughly 25 percent over the previous year. Through focused management attention and improved program practices, EPA achieved the sitewide ready for anticipated use goal at 51 sites in FY 2018, the highest total since FY 2013.

Superfund cleanups are linked to increases in residential property values within three miles of sites after cleanup. Superfund cleanups also facilitate job creation and enhance local tax bases. As of the end of FY 2018, 529 Superfund sites have been returned to productive use. These sites support more than 8,600 businesses; host more than 195,000 employees; and generate more than $13 billion in annual employment income.

Communities that have benefited from this renewed focus on site redevelopment include the following.

EPA identified the **Libby Asbestos Superfund Site** and the **Libby Groundwater Contamination Superfund Site** in Montana as Superfund Redevelopment Opportunity sites. In addition to cleanup restoring neighborhoods and business areas, parts of the sites are now in reuse. Riverfront Park, for example, has river access, pavilions, a memorial, parking, and picnic tables. In November 2018, EPA Region 8 recognized the work and collaboration in Libby, Montana, with its Excellence in Site Reuse Award.

EPA's Superfund Job Training Initiative is a job-readiness program that provides training and employment opportunities for people living in communities affected by Superfund sites. EPA's goal is to help communities develop job opportunities and partnerships that remain long after a Superfund site is cleaned up. After a rigorous screening and recruitment process, 13 trainees were selected to participate in the **Fairfax St. Wood Treaters Superfund Site** program. Once selected for the program, the trainees earned three certifications: (1) 40-hour hazardous waste and emergency response, (2) cardiopulmonary resuscitation (CPR)/first aid, and (3) Occupational Safety and Health Administration 10-hour construction safety. Participants also completed coursework in work-readiness training. Site contractors have hired eight graduates of the program to work onsite.

Engaging Partners and Stakeholders.

EPA has long recognized the importance of early and meaningful stakeholder participation and will continue to enhance community and stakeholder engagement to promote transparency, community support, and more timely cleanup decisions.

Implementing clear and effective communication and public engagement processes will help accelerate the pace of cleanups and encourage reuse while addressing risks to human health and the environment.

Since issuance of the July 2017 report and to promote transparency, EPA developed and posted Task Force quarterly reports to EPA's website to provide a comprehensive list of accomplishments and next steps each quarter since October 2017. Furthermore, in July 2018, EPA released the 2018 Superfund Task Force update to highlight the Task Force work in the first year that led to significant progress at Superfund sites across the country and to outline next steps for the recommendations that remained.

First, EPA developed and released a "Partnership and Stakeholder Engagement Strategy" to increase public participation and transparency at Superfund sites and to strengthen EPA's partnerships and engagement with: states; tribal governments; local governments and regional authorities; environmental and community-based organizations - including Environmental Justice; industry, contractors and PRPs; and land development and banking associations.

EPA will continue to seek ways to improve its engagement with other federal agencies, emphasizing protective cleanups and recognizing site reuse opportunities and successes.

Next, EPA worked with National Environmental Justice Advisory Community (NEJAC) leadership to engage a diverse array of contamination, remediation, and revitalization experts from across the country representing different levels of government, business and industry, academia, non-profits, and impacted communities. A series of draft recommendations were developed, including: improve effectiveness in how EPA engages with communities; provide a "knowledge foundation" to impacted communities; improve risk communication practices; engage to enable decision making; foster a community-centric, concentric circle approach to stakeholder engagement; improve information accessibility and amplify community voices; promote national consistency in application of Superfund policies and promoting best practices; establish a case study repository; establish a Superfund "Innovation Incubator;" expand Superfund's role beyond cleanup to community asset creation; increase grant resources for reuse planning assistance and community engagement; and expand use of health impact assessments as a planning tool.

As part of the Agency's efforts to increase public participation and transparency and strengthen communication with stakeholders, EPA's Office of Enforcement and Compliance Assurance hosted nine listening sessions to solicit public and stakeholder input related to specific recommendations. More than 680 persons registered to participate in the sessions, representing external stakeholders for the legal community; corporations and companies; state, municipal, and tribal agencies; environmental and other non-profit groups; and public citizens.

Lastly, EPA refocused efforts on improving risk communication with communities and stakeholders at Superfund sites, particularly at locations where waste has been left in place, and the site requires long-term operation and maintenance and institutional controls (long-term stewardship). EPA developed a Superfund Risk Communication Improvement Plan to: 1) conduct focused risk communication evaluations at select, priority long-term stewardship sites; 2) continue a national dialogue on improving risk communication at Superfund sites and build and strengthen partnerships to improve risk communication; and 3) develop measures for continual improvement of EPA risk communication activities. The following case study highlights EPA's efforts to improve risk communication at Superfund sites.

At the **BoRit Asbestos Superfund Site** in Pennsylvania, it was crucial to provide accurate and timely information to assure the community that potential risks were being addressed. Communication tools included using the Community Advisory Group to amplify risk communication messaging and using EPA's Technical Assistance Services for Communities contract to facilitate independent expert consultation services. Robust community involvement and risk communication throughout the process paved the way for community support for site reuse and continues to play a key role as the site heads into long-term stewardship. Today, the entire site has been capped and is ready to be used for recreational, non-residential purposes. Beneficial reuses are already planned or underway by the owners of two of the three parcels.

Note to the reader: This Final Report is organized by Task Force goal and recommendation and contains more detail about the work completed under each recommendation and in many cases, examples of this work at specific Superfund sites. Please note that as work progressed over the last two years, a few recommendations were broken into sub-parts or may overlap. The report is organized to enable the reader to obtain all relevant information under each recommendation, so some details show up more than once in the report.

- **The Superfund Task Force Recommendations can be found at https://www.epa.gov/sites/production/files/2017-07/documents/superfund_task_force_report.pdf.**
- **Quarterly reports can be found at https://www.epa.gov/superfund/superfund-task-force#quarterly.**
- **The 2018 Superfund Task Force Recommendations Update can be found at https://semspub.epa.gov/work/HQ/197209.pdf.**
- **The Superfund FY2018 Accomplishments report can be found at https://semspub.epa.gov/work/HQ/100001884.pdf.**
- **The final Superfund Task Force Report can be found at https://www.epa.gov/superfund/superfund-task-force-recommendations-and-accomplishments (All linked material can also be located here.)**

NEXT STEPS

Although EPA is concluding the Superfund Task Force, this important work continues until every site on the NPL is cleaned up and deleted! To ensure the integration of the work completed under the Task Force into the Superfund Program, EPA has identified performance measures to impose accountability on the Agency in implementing lessons learned from the Task Force. More information on each of these measures is found at https://www.epa.gov/superfund/superfund-task-force-metrics.

In addition to these performance measures, EPA will apply the Task Force work to the Superfund Program by conducting a review of every site remaining on the NPL. This portfolio review will be strategic and comprehensive. Rather than analyzing the NPL as one long list, EPA will analyze and compare logical groupings of similar sites to enable the Agency to better utilize tools and appropriate metrics to truly assess the Agency's work across the country. Sites may be compared by physical characteristics, similar technologies, similar contaminants, or other considerations. Such an analysis can help the Agency learn together by sharing best practices, lessons learned, and experiences with new technologies, among many takeaways, to improve national consistency.

PERFORMANCE MEASURES

GOAL	INDICATOR OR MEASURE	SCHEDULE TO IMPLEMENT
1	Number of sites that effectuate human exposure under sitewide control each year and program to date	In place
	Remedial projects and sites that have achieved groundwater remedial action objectives	FY2021
	Deletions and partial deletions	In place
	Number of NPL sites and sites with SAA Agreements with a written adaptive management plan (site or project level)	FY2021
	Remedies greater than $50 million approved (or modified) by Administrator – quarterly reporting with annual total	FY2020
	Number of NPL sites and sites with SAA Agreements undergoing National Remedy Review Board/Contaminated Sediments Technical Advisory Group review under revised process each quarter and each year with program to date total	FY2021
	Groundwater flexibilities used annually*	FY2020
	Number of optimization reviews and technical support projects started and completed annually	FY2020
2	EPA will complete 70% of RD/RA negotiations within one year	FY2020
3	Number of Superfund enforcement tools provided to third parties to encourage investment in the cleanup and/or long-term protection, including reuse, of contaminated sites by addressing liability concerns.	In place
4	Total number of NPL sites and sites with SAA Agreements that have reuse on part or all of site and estimated acres, annually	FY2020
	Total acres of land at Sitewide Ready for Anticipated Use stage at NPL sites and sites with SAA agreements annually	In place
	Reuse economic data (i.e., job creation, income, number of businesses)	In place
5	Number of Community Involvement Plans produced in FY2020 that used EJSCREEN and/or census data to identify communities with environmental justice concerns	FY2021
	Number of Community Involvement Plans produced in FY2020 that incorporated reuse discussions into the interview process	FY2021

*EPA will begin tracking this performance measure by reporting the number of technical impracticability waivers approved quarterly.

GOAL 1
EXPEDITING CLEANUP AND REMEDIATION

STRATEGY 1:

EVALUATE AND ACCELERATE NATIONAL PRIORITIES LIST SITES TO COMPLETION

BACKGROUND: As of September 1, 2019, there are 1,343 sites on the NPL. These sites (and portions thereof) are in various stages of investigation, cleanup and reuse. As EPA has added sites to the NPL, the Agency has chosen to spread its resources across the Superfund pipeline (from remedial investigation (RI) through remedial action (RA), including long-term response actions) to maximize its ability to make incremental progress at most sites. An effort to accelerate RA and NPL completions will involve re-prioritizing some resources to focus on remedial actions, construction completions, ready-for-reuse determinations, and deletions.

RECOMMENDATION 1: Oversee Administrator's Emphasis List of Superfund Sites

What was accomplished?

EPA released the initial Administrator's Emphasis List on December 8, 2017. The list included 21 sites from across the United States that EPA targeted for immediate and intense attention. In developing this list, EPA considered sites that could benefit from the Administrator's direct engagement and that have identifiable actions to protect human health and the environment. These are sites requiring timely resolution of specific issues to expedite cleanup and redevelopment efforts. EPA adds sites to the Administrator's List by using one or more of the following criteria:

- Sites where the Administrator's attention may help to promote more timely resolution of issues and/or advance more effective cleanup, or enhance human health or environmental protection, or redevelopment opportunities;
- Sites with a diverse geographical representation to include various environmental settings, e.g., rivers, urban, rural;
- Sites with diverse contamination, e.g., lead, radiation, dioxin contamination; and
- Ensure a mix of fund and PRP lead sites.

The dynamic list is designed to spur action at sites where opportunities exist to act quickly and comprehensively. Significant progress has been made at each of the sites because of this special emphasis. Since 2017, EPA has removed 14 sites from the list after short-term milestones were achieved. With the fifth update on July 15, 2019, there are 17 Superfund sites on the list. More detailed information can be found at https://www.epa.gov/superfund/superfund-sites-targeted-immediate-intense-action.

The following are examples of sites on the Emphasis List and the progress that has been made to date at each of them:

West Lake Landfill Superfund Site in Missouri

Beginning in 1962, parts of the site property were used for landfilling of municipal solid waste and construction debris. Two areas became radiologically contaminated in 1973 when soils mixed with uranium ore processing residues were used as daily cover in the landfilling operation. Also located on the site is the Bridgeton Sanitary Landfill, which ceased operations in 2005. To facilitate cleanup, the site was divided into three operable units to address contaminated media. After selecting a remedy in 2008 for Operable Unit 1 to address the areas of the site that contain radiological material, the Agency spent nine more years conducting additional investigations and analysis to further characterize the radiological material. In 2017, EPA committed to the West Lake community that a final decision on the remedy for Operable Unit 1 would be made by the end of September 2018. To ensure EPA met its commitment to the community, the West Lake Landfill Site was added to the Emphasis List in December 2017. The intense and immediate attention and continued oversight by the EPA Administrator led to finalizing a remedy for Operable Unit 1. On September 27, 2018, Administrator Andrew Wheeler signed an amendment to the 2008 remedy, meeting EPA's commitment to the community to finalize a decision by the end of September 2018. The amended remedy includes partial excavation and removal of radioactive material, capping, and institutional controls. Now that the final remedy has been selected, EPA has provided certainty to the community of Bridgeton and the greater St. Louis metropolitan area, and cleanup design is now moving forward. In April 2019, EPA entered into a remedial design administrative settlement Agreement and Order on Consent with the PRPs at the site to begin RD.

Tar Creek Superfund Site in Oklahoma

The Tar Creek Superfund Site is part of the larger Tri-State Mining District that consists of thousands of acres of historical lead and zinc mining areas in northeast Oklahoma, southeast Kansas, and southwest Missouri. The site is one of four NPL sites that make up the Tri-State Mining District.

The site has five operable units that address contaminated sediment, soil (including residential properties), surface water, groundwater, chat piles, and mine, mill and smelter waste. Since being placed on the NPL 36 years ago, numerous actions have been implemented at the site; however, due its complexity and size, the cleanup will require many years to complete. To focus EPA's efforts, the site was added to the Administrator's Emphasis List for immediate and intense action. The milestone was to develop a strategic plan to guide the progress of the site cleanup with near- and long-term actions. The Strategic Plan, a culmination of a year-long cooperative effort with the state of Oklahoma and the Quapaw Nation, was released for public comment in March 2019. The Plan communicates the long-term vision and road map for managing site risks, cleanup, and economic opportunities. The Emphasis List was instrumental in bringing parties together to develop a timely long-term strategy. EPA expects to issue the final Strategic Plan in late summer 2019.

Delaware Sand and Gravel Landfill Superfund Site in Delaware

The 27-acre Delaware Sand and Gravel Landfill Superfund Site accepted municipal and industrial waste from 1968 to 1976. The waste contaminated soil and groundwater with hazardous substances.

In 2017, 34 years after being placed on the NPL, EPA issued a second amendment to the ROD to address the source material and groundwater contamination. The site was placed on the Emphasis List to expedite a settlement agreement for implementation of the second ROD Amendment. Placing the site on the Emphasis List effectively secured a timely settlement with the PRPs to initiate pre-design work and installation of two groundwater interceptor wells to protect water supply wells. An administrative order on consent for RD was executed on May 22, 2018.

How are the accomplishments integrated into the program?

The Emphasis List is dynamic; sites move on and off the list according to which ones need the Administrator's attention and focus most. EPA released the sixth iteration of the Emphasis List on July 15, 2019.

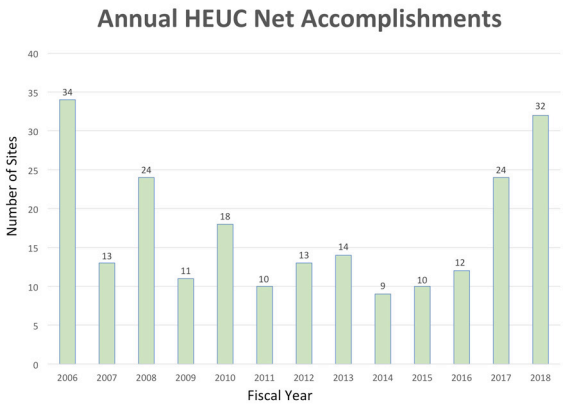
How will the accomplishments be sustained?
Following the Task Force, the Agency will continue utilizing the Emphasis List to focus the Administrator's attention by updating the list every quarter. EPA will update its website to reflect changes to the list and to provide sites' progress. EPA will also look for ways to improve management of the Emphasis List.

RECOMMENDATION 1: Prioritize and take action to expeditiously effectuate control over any site where risk of human exposure is not fully controlled

What was accomplished?
The Superfund Program has taken many steps to reduce actual or potential human exposure to contamination. In 2017, the Superfund Program provided the Administrator with a comprehensive list of Superfund sites considered to be "human exposure not under control" at that time and the actions being taken or to be taken to bring each site to "human exposure under control" status. Human exposure determinations and descriptions continue to be available on each Superfund site profile page on EPA website; the Agency updates human exposure status annually or as site conditions change (in accordance with program operating guidance).

In January 2018, EPA launched an interactive Human Exposure Dashboard on the Superfund website to make environmental indicator information more easily accessible to communities and the broader public. The dashboard provides real-time human exposure status for all sites in a single, easily accessible webpage. For each site where status is either "human exposure not under control" or where there is currently insufficient data to make a human exposure determination (i.e., status of Human Exposure Insufficient Data), the dashboard contains details as to why the site is not "human exposure under control."

Most importantly, the Superfund Program successfully effectuated control at a net total of 24 sites in FY 2017 and 32 sites in FY 2018, compared to 12 sites in FY 2016. Additional information about the Human Exposure Dashboard and the Superfund Site Profile Pages can be found at https://www.epa.gov/superfund/superfund-human-exposure-dashboard. An example of a site that achieved "human exposure under control" are highlighted below:



Sharon Steel Corp. (Farrell Works Disposal Area) Superfund Site in Pennsylvania

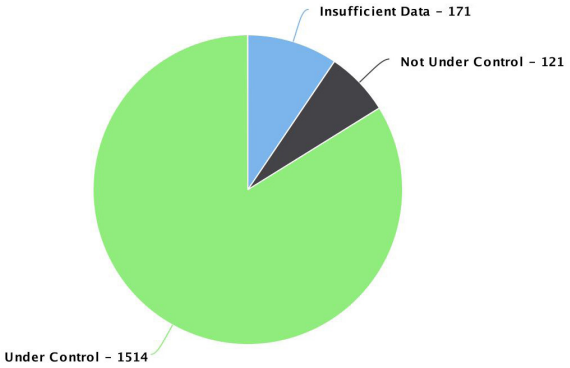
The Sharon Steel Corp. (Farrell Works Disposal Area) Superfund Site was considered Human Exposure Not Under Control due to estimated unacceptable risk from the inhalation and/or ingestion of heavy metals, particularly manganese, from slag waste on and in surface soil. The PRP operating the onsite asphalt plant implemented cleanup actions including a dermal cover over exposed soil and slag using either clean soil, aggregate, or concrete across the 29-acre Operable Unit 2 (where the asphalt plant is located). Construction was substantially completed in April 2019—seven months ahead of the agreed upon schedule. Due to these efforts, EPA was able to designate the site as "Human Exposure Under Control" in April 2019.

How are the accomplishments integrated into the program?

EPA will continue to update Superfund site human exposure status annually or as site conditions change; the Human Exposure Dashboard and the Superfund Site Profile pages reflect the changes in real time. In April 2018, the program solicited feedback from EPA regional offices on best practices for managing human exposure at sites nationally. In May 2018, EPA's National Environmental Indicator Workgroup, comprised of 10 regional and headquarters environmental indicator experts, met to establish environmental indicator best management practices. These best management practices include the following:

- Periodic management focus on environmental indicators;
- Consideration of human exposure status in prioritization of site work;
- Regular review and management attention to "human exposure not under control" /human exposure insufficient data;
- Increased information sharing and coordination via tools, educational resources, and training;
- Increased situational awareness of linkages between environmental indicators, the Sitewide Ready for Anticipated Use metric, and five-year review protectiveness determinations; and
- Continued focus on quality environmental indicator data.

Human Exposure Environmental Indicator Status



Notes: Pie chart data exclude 48 Proposed, 10 Final, and 5 Deleted sites that are not in the Environmental Indicator baseline. Data as of 07-08-2018 13:15. https://www.epa.gov/superfund/superfund-human-exposure-dashboard#summary

Many regions have and continue to integrate these best management practices into their regional operations, with an overarching goal to effectuate control at Superfund sites where human exposure is not currently under control. To continue a national focus on prioritizing control at "human exposure not under control" sites, EPA regional offices reviewed all "human exposure not under control" sites estimated to become "under control" within the next five fiscal years (i.e., FY 2019 through FY 2023) and identified steps to accelerate the sites' achievement of the human exposure under control" milestone (if possible). Regions then discussed options for "prioritizing effecting control at these sites, including both opportunities and challenges during the program's annual work planning discussions in August 2018.

How will the accomplishments be sustained?

The National Environmental Indicator Workgroup continues to discuss and address environmental indicator issues and consider future improvements to national environmental indicator program management. The Superfund headquarters environmental indicator coordinator continues to closely monitor human exposure changes and coordinates

with the regions to answer questions, address issues, and to strategize achievement of annual program targets. The Superfund Program continues to report annual accomplishments for this metric in the **Superfund Remedial Annual Accomplishments report, EPA's Report on the Environment**, and on the **Superfund Remedial performance measures webpage** on EPA website.

RECOMMENDATION 1: Develop list of potential NPL sites to target for completion and develop recommendations for tracking and reporting progress

What was accomplished?

EPA developed and applied criteria to identify potential NPL sites to target for this recommendation. The program reviewed ongoing projects with unusually long durations in an effort to identify root causes. This information is being used to support program metrics development and a methodology for tracking and reporting site investigation and cleanup activities' progress. EPA created a new internal visual management tool, which will facilitate ongoing projects' routine review based on project duration and other key site characteristics.

How are the accomplishments integrated into the program?

The new internal visual management tool will allow program managers in headquarters and all regional offices to more closely monitor site progress across the Superfund remedial pipeline. The tool utilizes real-time data from the Superfund Enterprise Management System (SEMS), the program's authoritative data source for project schedules.

How will accomplishments be sustained?

The program will continue to conduct annual regional work planning sessions to discuss program priorities, metrics, and site progress. More frequent program review sessions between headquarters and the regions will be instituted to help ensure greater oversight on overall progress at the project, site, and program level. The program anticipates that these efforts will result in additional candidate sites to consider for NPL deletion or partial deletion, as discussed under Recommendation 2.

RECOMMENDATION 2: Focus resources on maximizing deletions/partial deletions, including review of policy and tracking eligible sites

What was accomplished?

After a review of current NPL deletion policies and practices, EPA developed several recommendations relating to both procedural and technical issues that may affect an NPL site's deletion or partial deletion. In June 2018, EPA issued a memorandum to regional offices emphasizing the importance of close coordination between the remedial and legal programs to ensure institutional controls' timely implementation. The program also now provides senior Agency officials with a monthly projection of deletion actions. Due to more direct attention to the sites potentially eligible for partial or full deletion, the Agency deleted all or part of 22 sites from the NPL in FY 2018, the largest number of deletions accomplished in one year since FY 2005 and a significant increase over the past few years. As of September 1, 2019, EPA has accomplished two full deletions and seven partial deletions in FY 2019. In FY 2019, EPA intends to exceed the prior year's deletion action achievements.

EPA identified the deletions process as a meaningful project to review under EPA Lean Management System[1]. A workgroup of headquarters and regional experts conducted a detailed review of the current steps involved in a single deletion action and identified opportunities to reduce redundancies, encourage concurrent process steps, and improve consistency in a manner that will lead to efficiencies.

1 EPA Lean Management System is a set of a practices and tools that EPA is employing to support all Agency staff and managers in identifying and solving problems where they occur.

The Task Force emphasis on deletions has provided comfort to communities that no further cleanup is required at neighboring sites that have been on the NPL for a number years. In particular, EPA recently deleted these three sites, which were part of EPA's first NPL rulemaking in 1983.

- Fulton Terminals (New York): The City of Fulton, the current owner of the former facility property, is interested in developing the land for community use;
- Whitehouse Oil Pits (Florida): Currently, the site is used as a natural ecological buffer for the floodplain of the adjacent creek, and there is potential for possible recreational land uses in cooperation with the city; and
- Frontier Hard Chrome (Washington): Current site reuse activities include a pipe fabrication facility's operations as well as parking and storage.

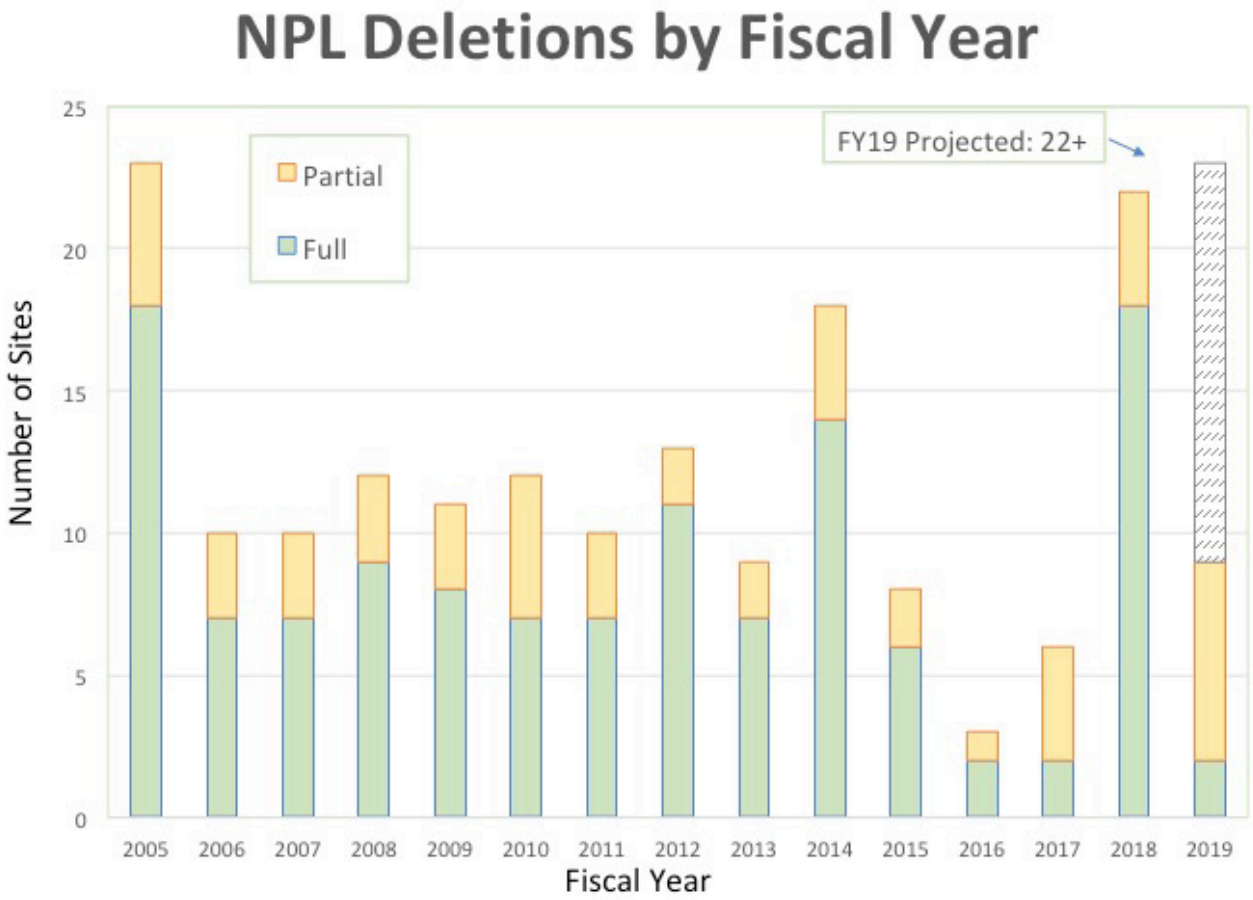
More information regarding NPL site deletions can be found at: https://www.epa.gov/superfund/superfund-national-priorities-list-deletion**.**

How are the accomplishments integrated into the program?

EPA focused on moving sites from construction complete through the cleanup process to deletion with an emphasis on partial deletions where cleanup is complete at a portion of the site and reuse may be possible. The Agency will continue to monitor deletion candidates monthly to maximize opportunities to demonstrate completion of cleanup activities.

How will the accomplishments be sustained?

The workgroup's streamlining of the deletions process will maximize the program's ability to sustain future increased deletion accomplishments. Sustained efforts include continued training to increase regional deletions expertise and sharing information on effective approaches to moving sites to deletion. EPA announces deletions and partial deletions on EPA website at https://www.epa.gov/superfund/superfund-national-priorities-list-npl-deletion-search.



The final number of deletions for FY19 will be reported separately as the date falls after the issuance of the report.

STRATEGY 2:

PROMOTE THE APPLICATION OF ADAPTIVE MANAGEMENT AT COMPLEX SITES AND EXPEDITE CLEANUP THROUGH USE OF EARLY/INTERIM RODS AND REMOVAL ACTIONS

BACKGROUND: Adaptive management is an approach particularly useful at large or complex sites that focuses limited resources on making informed decisions throughout the remedial process. Adaptive management requires the development of a clear site strategy with measurable decision points and focuses site decision-making on a sound understanding of site conditions and uncertainties. Based on site uncertainties, decisions are made from data collection to remedy selection and implementation that allow for the ability to adapt if these uncertainties result in fundamental changes to site conditions.

Under an adaptive management strategy, regions are encouraged to consider greater use of early actions, including use of removal authority or interim remedies, address immediate risks, prevent source migration, and return portions of sites to use pending more detailed evaluations of other site areas. The characterization data collected to support early action can be used to update the site conceptual site model and reduce the remedial investigation/feasibility study's (RI/FS') duration and cost. This approach will be most effective at contaminated sediment and complex groundwater sites where using removals or early actions to address sources or areas of high contamination is highly efficient.

RECOMMENDATION 3: Promote the Application of Adaptive Management at Complex Sites

What was accomplished?

In response to the Task Force recommendation, EPA is developing an implementation plan for utilizing adaptive management on a more structured and broader scale. First, EPA issued a memorandum to its regional offices that provided a working definition of adaptive management and outlined an implementation plan to expand its use at Superfund sites.

Next, EPA is implementing six pilots to demonstrate the benefits of implementing a formal and structured adaptive management process at complex Superfund sites and to collect lessons learned from adaptive management implementation. The pilots represent three complex mining sites and three complex groundwater sites. The Superfund adaptive management pilot program is pursuing the development of both the site- and project-level adaptive management frameworks or management plans. The pilots are described below.

1. **Bonita Peak Mining District Superfund Site, CO**

Objective: Develop an adaptive management site plan that will include the development of high-level site remediation goals and formation of a framework for achieving these goals by prioritizing future response actions.

2. **Ore Knob Mine Superfund Site, NC (Passive Water Treatment System)**

Objective: Demonstrate how a formal adaptive management framework can be described in a Superfund remedy decision document.

3. **Baytown Township Ground Water Plume Superfund Site, MN (Strategy to Reach a Final Remedy)**

Objective: Demonstrate how an adaptive management plan can target resources and structured decision-making with the goal of moving a site with an interim source control remedy to a final remedy decision.

4. **10th Street Superfund Site, NE (Groundwater Remedy Completion Strategy)**

Objective: Demonstrate how adaptive management can be applied at a groundwater site in operation and maintenance to support decision-making with a drive towards expediting site completion.

5. **Bunker Hill Mining & Metallurgical Complex Superfund Site, ID (Lower Basin)**

Objective: Demonstrate how an adaptive management plan can be developed for a complex, large mining site with a focus on remediation efforts under a ROD.

6. **Naval Undersea Warfare Engineering Station Superfund Site, WA (4 Waste Areas)**

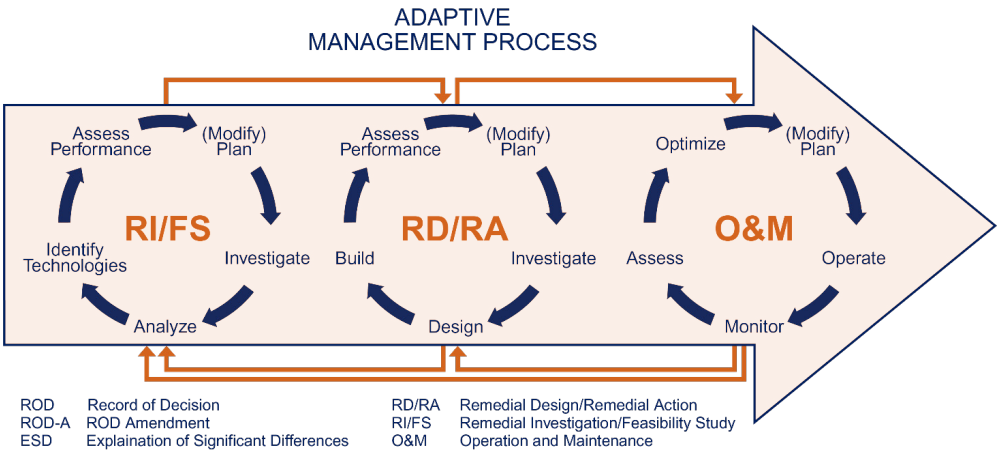
Objective: Demonstrate how an adaptive management plan can support the development of potential RA approaches for a site in operation and maintenance that is not meeting groundwater and surface water goals.

How are the accomplishments integrated into the program?

As part of the pilot efforts, EPA is creating adaptive management plan templates. These management plans will be living documents that outline objectives, site/project strategies, stakeholder roles and responsibilities, and a structured adaptive decision-making process. These plans will be reviewed and modified as site conditions change.

In addition to the formal pilots, EPA has encouraged regions to consider employing adaptive management at sites not part of the pilot program. If regions consider the use of adaptive management, the Task Force will consult with these regions to ensure its use is consistent with pilot efforts.

How will accomplishments be sustained? Lessons learned from the pilot efforts will be used to develop a more detailed adaptive management directive and training in FY 2020. In addition, EPA is developing a SharePoint site for regional use to share case studies and templates.



Bonita Peak Mining District Superfund Site, CO

The site consists of 48 historical mines or mining-related sources throughout the Mineral Creek, Cement Creek and Upper Animas River areas in San Juan County, CO. Critical to the development of a site management plan is upfront coordination and input from key stakeholders. To facilitate this coordination, EPA convened a stakeholder meeting in Denver, Colorado. In attendance were EPA (Headquarters and Region 8), the U.S. Forest Service, Bureau of Land Management, and state of Colorado representatives. The presentation included a primer on adaptive management, an overview of an adaptive management plan, and specific discussions on the Bonita Peak elements under development.

The meeting facilitated agreement and understanding of adaptive management's use at the site; provided a forum for discussing site principles, including goals, priorities, and a site strategy; and initiated a discussion on the adaptive management decision-making process. Additional stakeholder outreach and input, including community outreach and engagement, will continue as the site management plan is developed.

Berry's Creek Study Area at the Ventron/Velsicol Superfund Site in New Jersey

Berry's Creek is a tributary to the Hackensack River traveling through Carlstadt, East Rutherford, Lyndhurst, Moonachie, Rutherford, Teterboro, and Wood-Ridge, and includes approximately six miles of waterway, tributaries to the creek, and approximately 750 acres of marshes. The major contaminants are mercury, methyl mercury, polychlorinated biphenyl, and chromium, which are at high levels in the water and sediment.

Administrator Wheeler, Peter Lopez, Region 2 Administrator (right), Michael Sivak, Region 2 (center)

Based on the understanding of source areas and the need for further information to develop risk-based cleanup goals, EPA decided to utilize adaptive management principles, addressing the portions of the Study Area causing the highest risk and acting as a source of contamination to other areas, and then to evaluate the impact of that cleanup on the remaining portions of the site so that risk-based cleanup goals could be developed.

The ROD selected an interim remedy that includes bank-to bank cleanup of waterway sediment in Upper and Middle Berry's Creek, to eliminate or isolate the source of contaminants that are being remobilized and backfilling to restore the waterways to their current depth. The areas selected for this cleanup address a major portion of the contamination within Berry's Creek, which act as a source of contamination to the other areas of the site, as well as to animal life.

A marsh demonstration project will help evaluate the effectiveness of the interim remedy as well as assess if a thin layer cap of the marshes will sufficiently reduce risk from exposure to the soils in the marshes. This information will be used to develop risk-based remediation goals.

A decision for other areas (Lower Berry's Creek and Berry's Creek Canal) and approximately 700 acres of tidal marshes will be made after EPA has evaluated the effectiveness of the interim remediation.

STRATEGY 3:

CLARIFY POLICIES/GUIDANCE TO EXPEDITE REMEDIATION

BACKGROUND: Regions should be consistent in prioritizing RI/FSs to identify those sites that need more immediate action to help focus available funds and resources. Targeting EPA's efforts, resources, and funding may achieve efficiencies in both performance and results. These efficiencies, in turn, will help foster cooperative partnerships, shorten review times, target sampling and analysis, engender creative thinking, provide a higher level of program accountability, and communicate EPA's commitment to the public. To accomplish these objectives, the program will focus resources (funds and personnel) on NPL site-related activities and should establish RI/FS timeframes and financial limits.

Superfund statutory (CERCLA and its amendments) and regulatory (the National Oil and Hazardous Substances Pollution Contingency Plan) provisions outline key groundwater restoration principles. Developing improved guidance in this area may help facilitate more timely remedy decisions and may increase use of inherent statutory and regulatory flexibilities—such as phasing cleanup actions, considering monitored natural attenuation, and determining whether a technical impracticability waiver is warranted. When considered early in the cleanup process, these strategies may allow for early stakeholder consensus and input and more expedient remedy implementation.

Remedy decision consistency is, in part, facilitated by the National Remedy Review Board and the Contaminated Sediments Technical Advisory Group. Current policy provides that all remedy decisions estimated to cost more than $50 million must be approved by the Administrator to promote national consistency and expedite remedy completion.

RECOMMENDATION 4: To Better Promote National Consistency and Review, Update the Authority for Approval of the Remedy Selection While Considering the Retained Authority of the Administrator

What was accomplished?

EPA developed a review process and flowchart for the Administrator's review and approval of remedies estimated to cost equal to or greater than $50 million or changes to a remedy with an original cost more than $50 million. As of September 4, 2019, the EPA Administrator has participated in the decision-making process for 21 sites.[2]

EPA is revising the charters for the National Remedy Review Board and the Contaminated Sediments Technical Advisory Group to ensure greater consistency in national remedy selection and improve the overall performance of the Superfund Program. The National Remedy Review Board peer review process underwent significant revisions, including conducting primary review earlier in the RI/FS process and adding follow-up meetings later in the remedy development process. These changes will allow remedial project managers to benefit from the insights of a focused review earlier in the remedy selection process while also providing expert input later in the remedy development process. The Contaminated Sediments Technical Advisory Group charter was modified to engage with regions at select points during the RI/FS rather than on a yearly schedule. Both groups' charters will be available on the EPA website.

How are the accomplishments integrated into the program?

The Administrator will continue to review remedy decisions equal to or greater than $50 million. The Agency is closely tracking planned decisions that trigger the Administrator's involvement to ensure that involvement is timely. EPA has also outlined an enhanced headquarters/regional engagement process to provide earlier feedback and to facilitate issue resolution during the RI/FS. The updated charters complement this process by providing technical expertise to complex sites that warrant additional resources.

How will the accomplishments be sustained?

The National Remedy Review Board and Contaminated Sediments Technical Advisory Group will meet regularly to identify trends, issues, lessons learned, and best management practices. These findings will be summarized in an annual report, which will identify policies that may benefit from additional guidance and identify opportunities to operationalize lessons learned/best management practices into the Superfund Program. The decision-making process and the remedies the Administrator approves can provide guidance in EPA's future remedy selection in the Agency's portfolio review of the NPL, ensuring that remedy selections are not isolated decisions.

Mississippi Phosphates Corporation Superfund Site in Mississippi

EPA signed a $107 million action memorandum to fund the site's cleanup. The memorandum selects a $71.6 million cleanup and includes an additional $36 million for ongoing wastewater treatment during the three-year cleanup period estimated to end at the end of 2020. The site is a former diammonium phosphate fertilizer plant that began operation in the 1950s. The facility ceased operations in December 2014 under Chapter 11 bankruptcy protection, leaving more than 700,000,000 gallons of acidic, nutrient-rich wastewater stored at the facility. The action memo addressed closure of a gypsum stack that was generating millions of gallons of wastewater, resulting in ongoing operations and maintenance costs. The Administrator's involvement in the remedy decision ensured the Agency's selection of a high-cost remedy was made with increased oversight and accountability. This engagement helps ensure remedies are nationally consistent and that the Agency expends its limited resources wisely.

[2] San Jacinto River Waste Pits, TX; USS Lead, IN; Mississippi Phosphate, MS; Casmalia Resources, CA; Hanford, WA; B.F. Goodrich Calvert City, KY; American Cyanamid, NJ; Ventron/Velsicol Wood Ridge Borough (Berry's Creek), NJ; West Lake Landfill, MO; Atlantic Wood, VA; Newton County Mine Tailings, MO; Commencement Bay, Nearshore/Tideflats, WA; Wyckoff Co./Eagle Harbor, WA; Centredale Manor, RI; Silver Bow Creek/Butte Area, MT; Quendall Terminal, WA; Portland Harbor, WA; Oak Ridge Reservation, TN; Matteo, NJ; Anaconda Company Smelter, MT; and Petroleum Products, FL

Silver Bow Creek/Butte Area Superfund Site in Montana

Tim Fox, Attorney General for Montana (far left); US Senator Steve Daines (Montana) (center) and Administrator Wheeler

Beginning in the late 1800s, mining wastes were dumped into areas in and around Butte, as well as into streams and wetlands near mining operations. In addition, smelters and mills produced aerial emissions contaminated with arsenic and heavy metals. In 2006, EPA published the Butte Priority Soils Operable Unit ROD, which established in-stream water quality standards for the remedy. Based on extensive data collection and modeling, EPA has determined that some of these standards are technically impracticable to achieve. In April 2019, with support from Administrator Wheeler, Region 8 published a proposed plan to amend the 2006 ROD. EPA is proposing to amend current in-stream acute water quality standards for copper and zinc (which apply during storms and other high-flow events) and replace those standards with EPA promulgated water quality criteria. Other changes include defining expanded areas for floodplain removal, expanded groundwater controls, removal of additional tailings, and construction of stormwater retention/detention basins.

RECOMMENDATION 5: Clarify Priorities for RI/FS Resources and Encourage Performing Interim/Early Actions During the RI/FS Process to Address Immediate Risks

What was accomplished?

EPA often takes early actions at NPL sites to address current exposure, reduce risk and threats quickly, prevent further contaminant migration, and to speed up site reuse. The Agency seeks to more routinely consider and implement early actions during the RI/FS process. Based on a review of current interim and early action guidance, EPA has developed a regional memorandum re-iterating early and interim action policy and encouraging use of early action (including interim actions and non-time-critical removal actions) as part of RI/FS scoping and throughout the RI/FS process. The memo conveys the key concept that early action, if appropriate, should be developed as part of a dynamic site strategy.

How are the accomplishments integrated into the program?

Integrating consideration of early action during the site cleanup process initial phases is meant to accentuate these opportunities. EPA plans to provide further information on development and maintenance of a sitewide strategy that considers and documents the role of early and interim actions.

How will the accomplishments be sustained?

To share lessons learned at successful early actions, EPA will produce case studies and deliver webinars and enhanced training to regional staff.

Southside Chattanooga Lead Superfund Site in Tennessee

The Southside Chattanooga Lead site entails cleaning up 1,100 properties in eight residential neighborhoods where lead has been detected above health-based benchmarks. Lead-bearing material from past foundry operations was used as fill and topsoil across the site, leading to some properties with elevated lead levels in soil. In February 2019, EPA issued a ROD to conduct an early action to address immediate risks, while both RI and screening-level ecological risk assessment activities are ongoing. This early action approach is consistent with the Task Force's recommendation to undertake early actions at sites to mitigate immediate risks while investigation activities are underway.

RECOMMENDATION 6: Provide Clarification to the Principles for Superfund Groundwater Restoration

What was accomplished?

EPA identified a need to better communicate Superfund groundwater policy and guidance, specifically groundwater policy flexibilities. The multiple guidance documents and dispersed nature of where and how the policies and documents are displayed hindered effective use of these flexibilities by cleanup professionals. As a first step, the Agency redesigned the way the Superfund website organizes and describes groundwater policy and guidance documents. The revised website introduces groundwater, how it becomes contaminated, and the different approaches used to address the problem. Each subsection of the website provides a table of contents that links to specific types of policy and guidance and clearer document descriptions. The revised website is available at https://www.epa.gov/superfund/superfund-groundwater-guidance-and-reports.

EPA also identified a need to further standardize review of operating groundwater remedies to enhance Superfund's technology transfer program to better disseminate state-of-the-practice groundwater characterization and remediation information and to track completed groundwater cleanups.

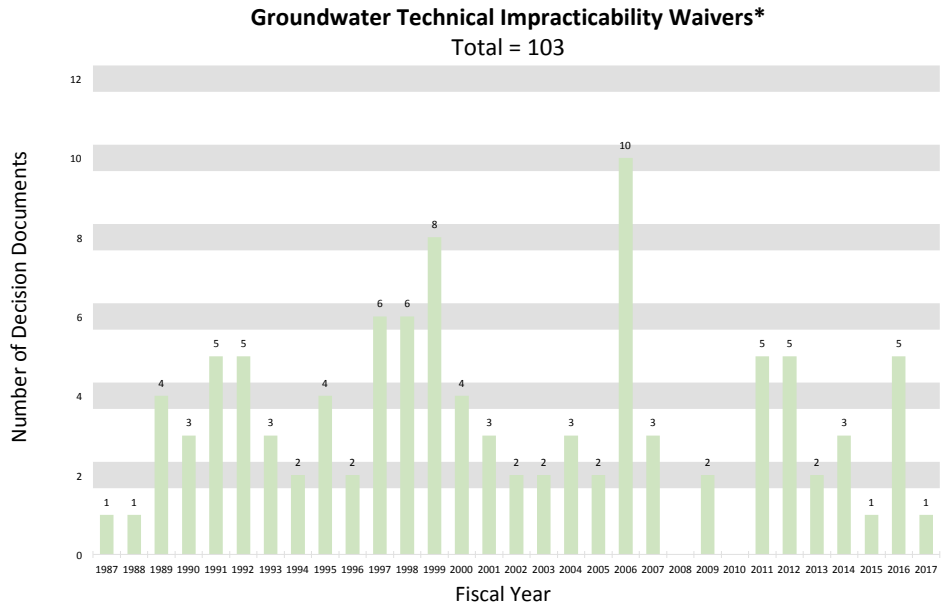
How are the accomplishments integrated into the program?

EPA plans to further standardize the review and optimization (see Recommendation 7) of operating groundwater remedies. The Agency has initiated development of an integrated manual to consolidate the multiple Superfund groundwater policy and guidance documents, including those related to flexibilities, to clearly define policy and help reduce the time and resources necessary to complete groundwater cleanups.

In addition, EPA is developing classroom training to present up-to-date cleanup information to regional staff and other groundwater remediation professionals and creating web-based training on groundwater topics, such as technical impracticability waivers and monitored natural attenuation, for EPA staff and external audiences.

How will the accomplishments be sustained?

EPA is employing a variety of tools to sustain the Superfund Task Force reforms, including enhancing its current Superfund groundwater coordination to improve information sharing, timely sharing of best practices, and reporting and tracking of groundwater cleanup actions. Furthermore, EPA will more closely track use of groundwater flexibilities (such as technical impracticability waivers), groundwater cleanup completions, and use of innovative technologies and approaches and associated lessons learned. This information will be included in ongoing and future classroom and web training for EPA headquarters and regional staff and external stakeholders.



*Technical impracticability waivers are one of the available groundwater flexibilities.

Groundwater Cleanup Flexibilities

At most sites, the groundwater cleanup approach may incorporate one or more flexible provisions that are found in existing Superfund laws, regulations, policy and guidance. The four provisions described below may be selected and adjusted to meet site-specific conditions and remedial needs. A phased approach to the selection and implementation of groundwater remedies and a groundwater completion strategy both allow a remedial approach to be flexible as remedy effectiveness is evaluated and site conditions change. If a remedy is not achieving cleanup objectives, an effective phased approach and completion strategy will lead to reconsideration of the remedial approach and, if appropriate, the use of one or more flexible provisions.

Flexible Provisions

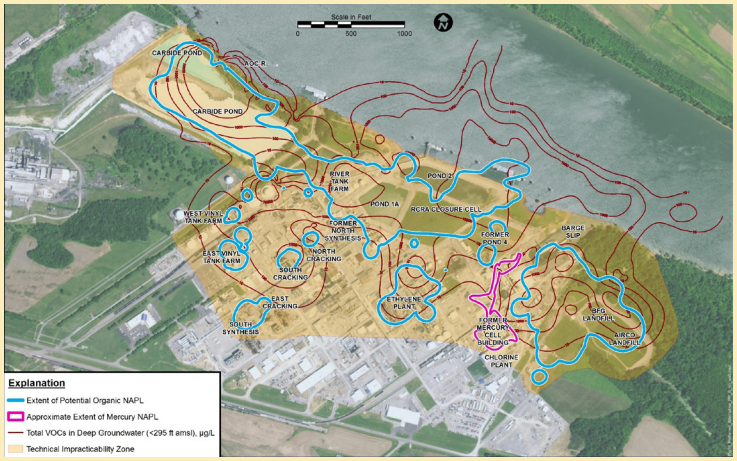
- Monitored natural attenuation – Depending on site conditions and cleanup goals, response actions may include active treatment or less active approaches. For certain sites, monitored natural attenuation, which relies on natural processes that decrease or attenuate soil and groundwater contaminant concentrations, may be used to complement or as an alternative to pump-and-treat or other active technologies.
- Technical impracticability – EPA recognizes that it may not be possible to restore groundwater to its designated beneficial use in some cases. In situations where, from an engineering perspective, it is not possible to restore all or part of a groundwater plume, EPA may waive applicable or relevant and appropriate requirements (ARARs) and establish alternative, protective remedial strategies.
- Designated beneficial use – How current and future use of groundwater are determined may be based on EPA designation or designation by state or tribal authorities. EPA recognizes the central role of the states and tribes in making groundwater protection decisions; if a state has an EPA approved Comprehensive State Groundwater Protection Plan[3] or other codified groundwater standards that meet the regulatory criteria, those are the standards that will drive the groundwater cleanup.
- Remediation timeframe – Remediation should be completed as expeditiously as possible; however, the time required for remediation may be extended based on site-specific conditions, future use, remediation approach and technology and other factors.

Flexible Strategies

- Phased Approach – Site response activities are implemented in a sequence of steps, or phases, such that information gained from earlier phases is used to refine subsequent investigations, objectives, or actions. Phased remedy approaches may include the implementation of early and interim actions. A phased approached may be most appropriate with varied degrees of contamination over the area of the site.
- Completion Strategy – A completion strategy is a tool to help assess whether the remedial action is working as anticipated and helps focus resources on gathering the most relevant data and other information to inform decision-making on the given remedy's future steps. The strategy has three key elements::
    - Understanding the site conditions;
    - Designing site-specific remedy evaluations; and
    - Developing performance metrics and collecting monitoring data.

3 Thirteen states have Comprehensive State Groundwater Protection Plans: Alabama, Connecticut, Delaware, Georgia, Illinois, Massachusetts, Nevada, New Hampshire, Oklahoma, Rhode Island, Vermont, Washington and Wisconsin.

B.F. Goodrich Superfund Site in Kentucky



The B. F. Goodrich Superfund Site is a complex mixture of fine-grained and coarse-grained sediments present as both separate bodies and interbedded. Dense nonaqueous phase liquid (DNAPL) is distributed among these diverse hydrogeological units. An analysis of the extensive and comprehensive database of geologic, hydrogeologic, and chemical information indicates that approximately half of the site's 3.5 million cubic yards of DNAPL-impacted soils are comprised of fine-grained sedimentary units such as silts, clays, and interbed formations (approximately 13,000,000 pounds). An extensive infrastructure network exists at the site, limiting the implementation of potential remedial technologies. This existing infrastructure includes subsurface sumps and catch basins to collect spilled or overflowing liquids, pipelines and trenches to convey fluids to storage or discharge, and various treatment systems. Numerous investigations conducted over the years amassed an extensive amount of data regarding the geology, hydrogeology, and contaminant distribution. The engineering difficulty of groundwater restoration with these very large volumes of DNAPL,complex interbedded fined grained units, and technology access limitations were the major factors leading to a technical impracticability waiver, one of EPA's groundwater flexibilities, for the groundwater on a portion of the site.

STRATEGY 4:

USE BEST MANAGEMENT PRACTICES, SYSTEMATIC PLANNING, REMEDY OPTIMIZATION, AND ACCESS TO EXPERT TECHNICAL RESOURCES TO EXPEDITE REMEDIATION

BACKGROUND: Site characterization and RAs can take years to complete, especially when site conditions are complex and dynamic. Remedial activities should be continually reviewed and optimized to enhance understanding of site conditions as they evolve and consider recent technological advances in site characterization and cleanup.

Undertaking thorough, systematic planning early in the cleanup process and throughout the project lifecycle, coupled with technical support for remedial project managers, can improve project management of site cleanup projects. As site work progresses, reviewing progress through independent, third-party remedy optimization can maximize project effectiveness throughout its life cycle. Applying best science, researching innovative technologies and cleanup approaches for their applicability, and employing optimization best management practices are important to site cleanup success. Best practices are being shared within EPA headquarters, regions, and Office of Research and Development laboratories through direct technical support and advice, technical fact sheets, webinars and face-to-face training.

Recent developments in real-time investigation technologies and data visualization techniques offer opportunities to build robust understanding of site conditions, which can be portrayed in conceptual site models focused on the primary sources of contamination and the most important targets for RA. Advances in electronic data capture and distance collaboration platforms enable project stakeholders to work as a team on RI/FS and RD and RA activities, helping ensure all stakeholder concerns are considered as project implementation occurs. In this way, the team can focus on taking actions that drive sites toward completion.

RECOMMENDATION 7: Promote Use of Third-Party Optimization Throughout the Remediation Process and Focus Optimization on Complex Sites or Sites of Significant Public Interest

What was accomplished?

Optimization is applicable throughout the site characterization and remediation process.

For August 2017 through September 2018, EPA initiated 17 and completed 26 third-party remedy optimization evaluations. EPA will report this year's numbers at the end of September 2019.EPA is compiling a report on lessons learned and the implementation status of more than 300 recent optimization recommendations. To date, the Superfund optimization program has made over 2,000 technical recommendations across hundreds of optimized remedies, and overall, 64 percent of optimization recommendations were implemented, are in progress, or are planned, with an additional 15 percent under consideration. Further, EPA has established criteria to allocate optimization resources in a manner consistent with the Task Force report's objectives and priorities. These priorities emphasize optimizing sites that are: "human exposure not under control", particularly those involving groundwater migration; large and complex, such as large sediment sites and sites with remedies greater than $50 million; projected to be completed within 5-15 years and where optimization may accelerate closure; and on the Emphasis List. More information on EPA's optimization program can be found at https://www.epa.gov/superfund/cleanup-optimization-superfund-sites.

How are the accomplishments integrated into the program?

EPA will continue to use the optimization resource allocation scheme to enhance cleanup progress at sites with the targeted characteristics. To advance optimization as a tool throughout the cleanup pipeline - from RI through RA (including long-term response actions) - EPA is implementing several projects to advance optimization practices and related tools, including:

- Expanding the number of third-party optimization service providers and identifying additional team members who can lead optimization projects;
- Increasing efficiencies, where possible, by: (1) conducting more optimization projects that look at multiple, related sites in a region in a single optimization event and (2) conducting less intensive "desk top" optimizations where appropriate;
- Developing best management practices fact sheets based on lessons learned from individual optimization projects and continuing classroom and webinar training programs; and
- Improving tracking of ongoing optimization projects and implementation of resulting recommendations. EPA issues periodic reports on optimization findings and status and is developing brief project summaries to capture key optimization evaluation recommendations to disseminate results more widely to the cleanup community.

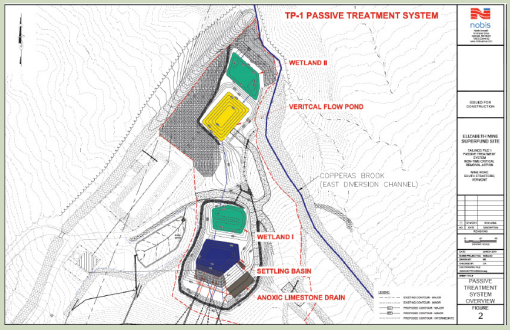
How will the accomplishments be sustained?

EPA will continue to work to identify priority site optimization candidates and will implement the program efficiencies noted above. EPA plans to issue a biennial report that provides a national summary of the optimization projects and results.

St. Regis Paper Company Superfund Site in Minnesota

One example of an optimization completed during the two-year Task Force took place at the 125-acre St. Regis Paper Company Superfund Site located within the external boundaries of the Leech Lake Band of Ojibwe Indian Reservation. The wood treatment facility operated from the 1950s to the 1980s using creosote and pentachlorophenol. The facility's operations contaminated soil and groundwater with hazardous chemicals. The contaminants of concern include pentachlorophenol, dioxin, and polycyclic aromatic hydrocarbons. A pump-and-treat system has been operating since the 1980s. In 2018, EPA conducted a third-party optimization review that leveraged historical operating data and focused on the performance of the treatment system and the current characteristics of the contaminated groundwater. The review resulted in several recommendations to potentially speed up site cleanup. EPA is evaluating the recommendations, and incorporating lessons learned into other ongoing optimization projects and best management practice fact sheets.

Elizabeth Mine Superfund Site in Vermont



The Elizabeth Mine Superfund Site is an abandoned copper mine that consists of two mine tailings piles, one area of waste rock and heap leach piles, two open-cut mines, several adits (horizontal mine entrances), underground shafts and tunnels, ventilation shafts, and several former ore processing buildings, as well as other on-site structures. A pump-and-treat remedy has operated at the site since 2008.

In 2016, EPA completed a third-party optimization review of the current site remedy and the planned construction of a passive treatment system to remove iron from leachate discharge. One optimization recommendation was to perform pilot-testing for at least one year to ensure the passive treatment system's success under different seasonal conditions. In response to the recommendation, pilot testing occurred in 2017 and focused on two passive treatment technologies (iron terrace and limestone drain). The pilot results supported installation of a full-scale system in 2018, which will be completed and operational in 2019. The final design for the passive treatment system fully evaluated the optimization recommendations, including separation of dilute and high-concentration flows. As with other optimization projects, lessons learned from this optimization are being considered for other projects and included in best practices fact sheets.

RECOMMENDATION 8: Reinforce Focused Scoping Which Closely Targets the Specific Areas for Remediation and Identify and Use Best Management Practices in the Remedial Investigation/Feasibility Study Stage

What was accomplished?

This recommendation's intent is to improve and streamline the RI planning process. EPA issued three technical guides to assist environmental professionals in scoping, data management, and strategic sampling activities to help strengthen Superfund site characterization activities. The guides are intended to improve site remedy decisions and remedy performance:

- Smart Scoping for Environmental Investigations Technical Guide;
- Strategic Sampling Approaches Technical Guide; and
- Best Practices for Data Management Technical Guide.

EPA also provided classroom training related to these best management practices at the 2017 National Association of Remedial Project Managers training conference and has delivered several trainings in regional offices and via public webinars. In addition, EPA is revising a 1989 RI/FS scoping fact sheet to recommend ways to streamline complex technical, policy, and contractual needs to effectively scope the RI/FS. The fact sheet will encompass both the conceptual site model and the site management strategy's scoping roles. To further assist EPA site teams, EPA is creating a new RI/FS toolbox, an internal online summary of new RI/FS policies and guidance, innovative site characterization tools and remedies, and relevant case studies. For instance, headquarters provided assistance to EPA Region 9 to plan and implement sampling at the Carson River Mercury Superfund Site in Nevada.

How are the accomplishments integrated into the program?

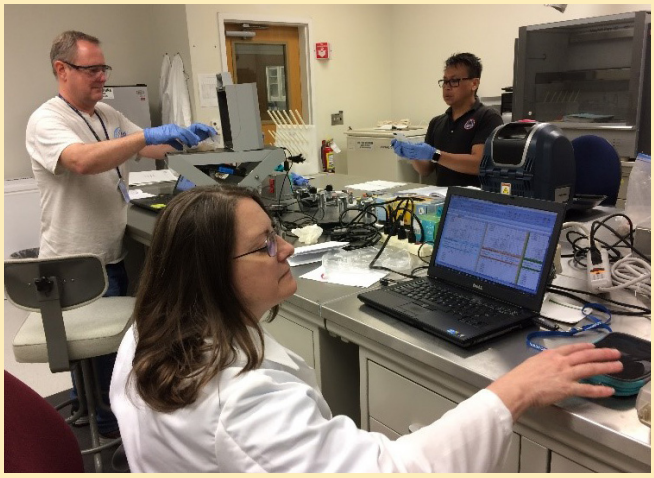
The Superfund Program will be focused on assisting sites in transition between Superfund remedial phases or sites that are in transition between contract vehicles. EPA will be developing new online training for site teams and developing guidance on how to integrate scoping and project management best practices into site cleanup projects. In addition, EPA will assist states, tribes, and contractors in applying these best management practices.

How will the accomplishments be sustained?

Through its technology transfer and support efforts, the Superfund Program will continue to provide site-specific technical support on RI/FS scoping, as well as continuing to deliver webinars and in-person training.

Carson River Mercury Superfund Site in Nevada

In 2018 and 2019, the Carson River Mercury Superfund Site in Nevada applied the three scoping guides' best management practices, while planning and implementing an incremental sampling study of soils contaminated with lead, arsenic, and mercury. The Carson River site's 130-mile length makes it a good candidate to demonstrate how innovative planning and sampling procedures will streamline site characterization and property assessment.



RECOMMENDATION 9: Utilize State-Of-The-Art Technologies to Expedite Cleanup

What was accomplished?

EPA's Superfund technology transfer program has incorporated the practices initiated under this recommendation to advance promising state-of the-art technologies and tools for streamlining and improving the cost and performance and shortening the duration of site cleanups. Efforts include partnerships with federal and states agencies with a shared interest in advancing innovation, including: collaboration with the Interstate Technology and Regulatory Council in developing technical guidance and outreach; the Federal Remediation Technologies Roundtable for sharing lessons learned among the federal agencies; and Department of Defense's (DOD's) Environmental Research Programs in demonstrating innovative technologies. Through its ongoing technology transfer efforts, the program has contributed to advancing the practice and acceptance of innovative tools and technologies such as broadening the suite of in situ treatment options for contaminated groundwater, expanding the use of high-resolution site characterization, and fostering acceptance of field portable analytical technologies.

Specifically, during the two years of the Task Force, EPA employed numerous methods to maximize opportunities to inform, train, and assist regional staff in researching cleanup technologies, including the following:

- For August 2017 through September 2018, worked directly with site managers by starting 11 site-specific technical support projects related to site characterization and cleanup, and completing 21 (EPA will report FY2019 numbers at the end of the year);
- Conducted or hosted more than 40 webinars for almost 3,000 participants (including EPA remedial project managers and other EPA cleanup professionals) on technical topics, such as technology selection, biochemical reactors for mining-influenced water, chlorinated solvent bioremediation, combined remedies, in situ carbon amendments, phytoremediation, radioactive mining site waste, and vapor intrusion. Webinars also serve as a platform to advertise Agency technical support resources. Archived webinars are available at https://clu-in.org/live/archive/;
- Conducted 12 classroom trainings on groundwater high-resolution site characterization, best practices for site characterization throughout the remediation process, and incremental sampling. The trainings instructed nearly 300 EPA regional staff in these characterization and sampling techniques;
- Developed multiple presentations on geological characterization and three-dimensional data visualization for EPA's Ground Water Forum and the National Association of Remedial Project Managers;
- Published two technical fact sheets related to improved implementation of in situ technologies (related to in situ carbon amendments and performance monitoring for in situ technologies); and
    - In Situ Treatment Performance Monitoring: Issues and Best Practices (available at https://semspub.epa.gov/work/HQ/100001169.pdf);
    - Remedial Technology Fact Sheet– Activated-Carbon Based Technology for In Situ Remediation (available at https://semspub.epa.gov/work/HQ/100001169.pdf);
- Finalized improved technical resource webpages for characterization, monitoring, and remediation technologies, which are available at http://www.epa.gov/remedytech.

How are the accomplishments integrated into the program?

The Superfund Program offers regional technical support related to site cleanup. Through site-specific technical support to site managers in both remedial and removal programs, the program provides access to very specific skills or tools implementing innovative practices or assists project managers in deploying innovative technologies or practices. Technical support efforts are an excellent opportunity to "deliver" applied innovation and to gather insights on challenges experienced and acquire knowledge on developing practices from field personnel.

How will the accomplishments be sustained?

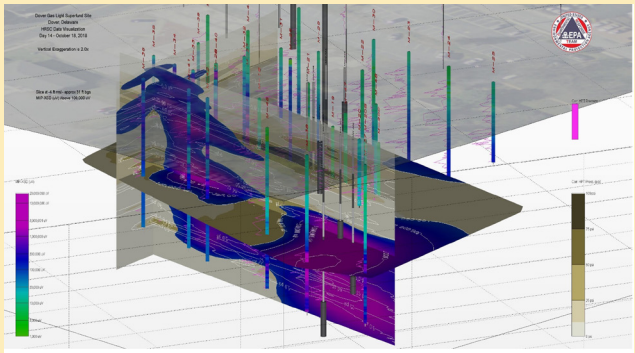
The Superfund Program will continue to identify technical webinar and fact sheet topics. Through site-specific technical support for both remedial and removal site managers, the program will also continue to provide access to skills and tools to implement innovative practices or assists project managers in innovative technologies or practices' deployment. Technical support efforts will be used to gather insights on challenges project managers experience and to acquire knowledge on field

personnel's developing practices. EPA will share the information gathered in several ways, including site-specific support, webinars, and technical fact sheets. The program will provide periodic updates that communicate new information to regional offices.

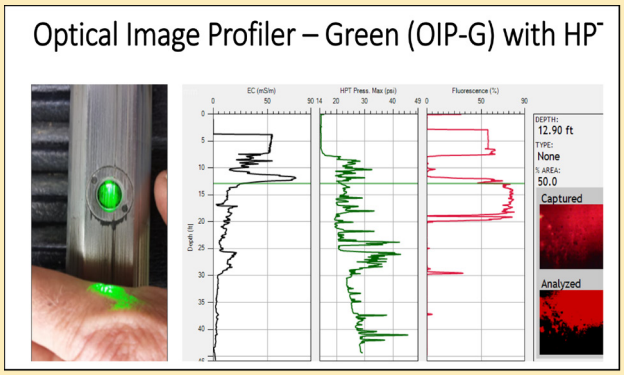
The program will continue to seek out collaborative training topics with other EPA offices, such as Office of Research and Development, as well as other federal agencies and states. The program will use training, its internal online technical resource catalogue (*TechHub* - see Recommendation 10), webinars, and other means of communicating the availability of technical support.

Dover Gas Light Superfund Site in Delaware

High-resolution site characterization used at the Dover Gas Light Superfund Site provided a detailed understanding of subsurface contamination. The site is a former manufactured gas plant that produced gas for industrial, commercial, and residential use, as well as street lighting, from 1860 to 1948. Manufactured gas plant residuals (coal tar) from plant operations are present as a nonaqueous phase liquid in groundwater. The residuals include one or two ring aromatic compounds (benzene, toluene, ethylbenzene, xylene, and naphthalene) and polycyclic aromatic hydrocarbons such as acenaphthene, benzo(a)pyrene, and chrysene. Approximately 300 feet southeast from the site, the Capitol Uniform and Linen Service facility ran an industrial dry-cleaning operation from about 1940 until 1989, when fire destroyed it. This facility used chlorinated and petroleum-based solvents, both of which are comingled with the manufactured gas plant site plume. Due to its proximity and the comingled plumes, EPA integrated Capitol Cleaners into the Dover Gas Light Superfund Site.



Three-Dimensional Visualization using High Resolution Site Characterization Tools



In September 2018, EPA deployed multiple state-of-the-art technologies to perform a high-resolution site characterization of the Dover site's two source areas. A high-resolution characterization provides a detailed understanding of contaminant distributions. Such an understanding facilitates selection of the most effective cleanup technologies and determination of optimal remedial footprints. In the first commercial application of the "Optical Imaging Hydraulic Profiling Tool – Green," a green laser diode induced fluorescence of the manufactured gas plant residuals in the soil as the probe was advanced into the subsurface. A camera captured images of the fluorescence every 1.5 centimeters. Simultaneously, a hydraulic profile tool measured soil permeabilities at the same intervals. EPA used a membrane interface probe combined with a hydraulic profiling tool, a technology introduced in 2011, to delineate the chlorinated and petroleum-based solvents at the former dry-cleaning site. In addition to the detailed logs generated for each boring, state-of-the-art data visualization software produced two-dimensional and three-dimensional interpretations of the high-resolution data.

Technical Advice on Vapor Intrusion Investigation

The Superfund Program is presenting a four-part webinar series on vapor intrusion for EPA staff. These vapor intrusion webinars also help regional staff (particularly those new to Superfund) connect with headquarters experts who are available to offer technical advice and support for vapor intrusion sites. The most recent webinar concerned vapor intrusion investigations. After participating in a technical webinar, a regional project manager contacted the headquarters expert for advice on a site-specific vapor intrusion investigation. With the expert's assistance, the regional manager will move forward with additional investigations.

RECOMMENDATION 10: Develop a Technical Support Team and Tools to Inform RPMs Regarding Available Resources to Assist with Best Management Practice Applications, Including Scoping and Targeted Technical Reviews

What was accomplished?

This recommendation's goal was to increase use of internal EPA resources for technical support and advice, particularly to assist with use of best management practices related to site characterization and cleanup. EPA regional staff that manage Superfund site cleanups address varied and complex technical issues related to risk assessment, site investigation, remedy selection and implementation, and site reuse. EPA focused its efforts on making it easier for regional Superfund staff to find and access EPA technical experts in these areas to provide advice and support. The Agency developed an internal electronic tool (*TechHub*) that describes and provides contact information for available EPA expertise in headquarters, Office of Research and Development laboratories, and issue-specific national workgroups made up of regional, headquarters, and Office of Research and Development staff. EPA also prepared an outreach strategy to promote the tool to headquarters and regional staff.

Since it was launched in October 2018, the website has had over 400 unique EPA users and nearly 4,600 visits. EPA also updated and relaunched Office of Research and Development's Technical Support Center and Superfund Technical Liaisons SharePoint sites to make it easier for EPA staff to request technical support directly from the Office of Research and Development's technical support centers.

How are the accomplishments integrated into the program?

Through continued outreach strategy implementation, EPA will increase regional staff awareness of EPA technical resources' availability through the *TechHub* tool. Headquarters, regional coordinators, and members of national workgroups serve as a critical link to regional staff managing site cleanups. New Superfund staff, who have limited knowledge of EPA's available resources, will acquire training on *TechHub* through requisite CERCLA Education Center training.

How will the accomplishments be sustained?

The Superfund Program intends to maintain and continue to promote *TechHub* use. EPA updates the organizational and contact information in *TechHub* as needed. Demonstrations to regional staff will occur at the August 2019 National Association of Remedial Project Manager training meeting and other upcoming training venues. EPA will also continue tracking *TechHub* usage to help identify where further outreach would be most beneficial.

RECOMMENDATION 11: Review all Third-Party Contracting Procedures, Large EPA-Approved Contractors, and Contracts to Determine Appropriate Use Parameters and Qualification Methods for EPA Contracting

What was accomplished?

To implement this recommendation, EPA created the Remedial Acquisition Framework (RAF), a series of multiple award, indefinite quantity contracts that were competitively awarded in 2018/2019. When RAF becomes fully operational, EPA will expand the pool of vendors available for Superfund remedial program activities. To foster innovation and reduce costs, EPA will compete tasks among the pool of RAF contract holders. Prior to developing RAF, EPA:

- Reviewed all current remedial contracts during the RAF planning stages;
- Completed market research to inform the remedial program's best acquisition approach;
- Signed a remedial acquisition strategy to document the RAF approach; and
- Delivered RAF training in all 10 EPA regional offices.

EPA awarded three RAF contract suites: Environmental Services and Operations; Design and Engineering Services; and Remediation Environmental Services. Site work is starting to be performed under RAF as the regions award task orders amongst RAF contract holders. EPA awarded the first task order on March 7, 2019, to support work at the Sanford Dry Cleaner Superfund Site in Sanford, Florida.

How are the accomplishments integrated into the program?

EPA has updated policies, procedures, and information systems to reflect RAF program management policies. Senior EPA leaders are serving as change champions to drive RAF change management activities across the program. Additionally, each region has a principal point of contact responsible for integrating RAF acquisition, program management, and budget activities.

EPA has identified "Early Adopters" and initial operation task orders for each region, which will be competed as part of the RAF process, and that will be used to validate RAF processes and inform program improvements.

How will the accomplishments be sustained?

EPA will capture lessons learned and will use continuous process improvement to implement refinements; track transition of work to the RAF contracts; use metrics to track cost efficiency, cycle times, and compliance with policy and guidance; and document and share best practices as task orders are competed. EPA will continue to track progress and drive change.

GOAL 2: RE-INVIGORATING RESPONSIBLE PARTY CLEANUP AND REUSE

STRATEGY 1:

ENCOURAGE AND FACILITATE RESPONSIBLE PARTIES' EXPEDITIOUS AND THOROUGH CLEANUP OF SITES TO AFFECT RE-USE MORE QUICKLY

BACKGROUND: First, at sites where responsible parties can be identified, the cost of cleanup is intended to be borne by them. However, utilizing tools and procedures to assist these parties in their efforts is helpful to all stakeholders. Settlement can be reached sooner by providing incentives to performing parties. More importantly, proper use of incentives will reinforce the notion that cooperative parties who settle early will obtain significant benefits by doing so. Second, cleaning up a Superfund site can be completed more quickly and efficiently by using incentives to reach expected milestones in the cleanup work. Third, enforcement authorities can be used to get the cleanup started or to help reach settlement. Fourth, all parties can avoid the increased transaction costs associated with protracted negotiations.

Each of the federal facility agreements at federal facility NPL sites includes a timeline for moving through the dispute process. These timelines were developed to ensure that work at federal facility NPL sites moves efficiently even in the case of disagreements between the parties. The dispute resolution process includes a commitment by the parties to make reasonable efforts to resolve disputes informally before invoking formal dispute procedures.

Informal disputes and each of the stages of formal dispute have specific timeframes built into the federal facility agreements. Reinforcing these timelines to ensure that the dispute resolution timelines are more closely adhered to will ensure that cleanup work is not unreasonably slowed when a disagreement between the federal facility agreement parties arises.

RECOMMENDATION 12: Recommend Consideration and Use of Early Response Actions at Superfund Sites, Particularly Sediment Sites, While Comprehensive Negotiations Are Underway for the Entire Cleanup

What was accomplished?

Along with Recommendation 12, EPA has been addressing the use of early response actions to get cleanup work underway through Task Force recommendations 3, 5, and 8. Recommendation 12 focused on issuing an EPA guidance memorandum that recommends to EPA Regions that they consider using separate settlement tracks for negotiating RD and RA at PRP funded Superfund sites.

On June 21, 2018, the Agency's Superfund Enforcement Program issued a new guidance memorandum titled, "Bifurcating Remedial Design and Remedial Action to Accelerate Remedial Design Starts at PRP-Lead Superfund Sites." Based on lengthy research and analysis – complemented by input from EPA Regions, the national Superfund Program, and the Department of Justice (DOJ) – the guidance recommends a discrete strategy that EPA Regions can use to expedite settlements and accelerate RD starts by PRPs at certain Superfund sites.

The guidance is already being applied and has helped to accelerate RD work by PRPs.

How are the accomplishments integrated into the program?

The guidance was distributed to EPA's Superfund national program managers, regional counsel, the Office of Superfund Remediation and Technology Innovation, and DOJ to use as appropriate in Superfund settlement negotiations.

The guidance recommends that EPA Regions consider using separate settlement tracks for RD and RA when the negotiations for a consent decree addressing both RD/RA are likely to be protracted. In these situations, the guidance encourages EPA Regions to consider approaching the PRPs to perform the RD pursuant to the model CERCLA administrative settlement agreement and statement of work for RD. These models were developed to further standardize and streamline the RD negotiation process.

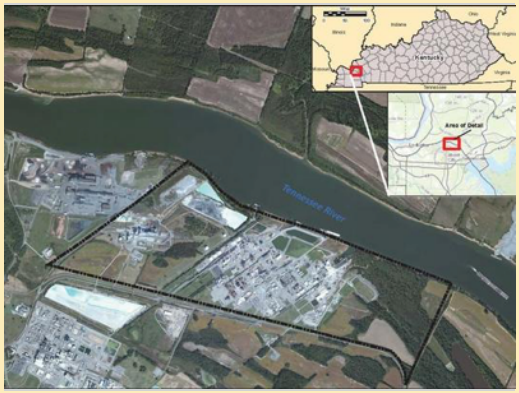
If this separate settlement track is embraced, but negotiations for cleanup using an administrative settlement agreement for RD are unsuccessful, EPA Regions are encouraged to proceed with issuing an order to the PRPs to perform either the RD or both the RD/RA, depending on the case team's assessment of which approach will initiate sooner cleanup of the site.

How will the accomplishments be sustained?

Going forward, the guidance's recommended settlement strategy is intended to be considered by EPA Regions as a matter of national practice. To further ensure its longevity and accessibility, the guidance is publicly available on the Agency's website.

B.F. Goodrich Superfund Site in Kentucky

In September 2018, the Administrator signed the second ROD for cleaning up the B.F. Goodrich Superfund Site. The cleanup remedy will cost more than $100 million. Located along the southern bank of the Tennessee River, the site was on the Emphasis List targeting Superfund sites for immediate and intense action. Since the mid-1950's, chemical manufacturing has occurred at the site and employs more than 500 people.



In April 2019, to accelerate the implementation of the ROD and to expedite the start of RD at the site, EPA negotiated a settlement agreement with PRPs for RD. The agreement allows the settling PRPs to begin designing the cleanup outlined in the second ROD while negotiations continue for the RA phase of the cleanup.

Foster Wheeler Energy Corporation Superfund Site in Pennsylvania

On May 22, 2019, EPA signed a SAA administrative settlement for RD in connection with the Foster Wheeler Energy Corporation (Foster Wheeler)/Church Road Trichloroethylene site. The Foster Wheeler facility operated as a pressure vessel manufacturing plant from 1953 through 1984, which resulted in soil and groundwater contamination. A 2018 interim ROD addresses the contamination as well as contaminated vapors (aka vapor intrusion) emanating from the site.

EPA, the Pennsylvania Department of Environmental Protection, and Foster Wheeler are finalizing the terms of a consent decree for performance of the interim RD/RA for the site. The administrative settlement permits Foster Wheeler to start the design immediately while the parties' complete negotiations and await court entry of the consent decree.

Portland Harbor Superfund Site in Oregon

In January 2017, EPA issued a ROD for the Portland Harbor Superfund Site, which encompasses approximately a 10-mile stretch of the Willamette River that is contaminated from historical industrial operations along the river. The Willamette River is an integral feature of the Portland, Oregon metropolitan area, home to over 500,000 people.

Since ROD issuance, EPA entered into administrative settlements for the following early work:

- Restarted work in June 2017 for early action RD at the Gasco/ Siltronic subsite within the river;
- Entered into an administrative order on consent for site-wide baseline sampling in December 2017;
- Amended an administrative order on consent for early RD at river mile 11E in January 2018; and
- Entered an administrative order on consent in May 2019 with the city of Portland and state of Oregon to provide up to $24 million in incentive funding to PRPs who agree to perform RD work at locations within the site.

San Jacinto River Waste Pits Superfund Site in Texas

On October 11, 2017, EPA signed the ROD for the excavation and removal of dioxin contaminated waste at the San Jacinto River Waste Pits Superfund Site, approximately 15 miles east of downtown Houston, Texas.

The site consists of several contaminated waste ponds, or impoundments, built in the mid-1960s for the disposal of paper mill wastes. The cleanup remedy is estimated to cost $115 million.

On April 9, 2018, EPA and the PRPs, International Paper Company and McGinnes Industrial Maintenance Corporation, entered into an administrative settlement agreement to complete the RD for the site.

At this complicated Site, within less than six months, EPA and the PRPs agreed to initiating design work for the subsequent RA.

Aerial view of San Jacinto Waste Pits Area

San Jacinto River Waste Pits Superfund Site in Texas

RECOMMENDATION 13: Identify Opportunities to Utilize Various Federal and State Authorities to Conduct Response Actions that are Consistent with CERCLA and the National Contingency Plan

What was accomplished?

In response to this recommendation, EPA: (1) reviewed data on NPL-caliber sites that have used or are using approaches other than listing on the NPL; (2) identified and reviewed internal guidelines that highlight opportunities for various statutory authorities to be used in conjunction with, or in lieu of, CERCLA to address hazardous waste sites (e.g., using other Imminent and Substantial Endangerment authorities); (3) evaluated situations where alternate paths, such as Resource Conservation and Recovery Act corrective action, have been used to address NPL-caliber sites; (4) reviewed delegations of authority for other approaches; and (5) examined previous federal and state reviews of opportunities and practices to use other federal and state authorities for cleanup. In 2019, EPA developed a summary report reviewing the various non-NPL approaches suitable for NPL-caliber sites in certain situations ("White Paper: Examine Opportunities to Achieve Protective Cleanup at NPL-Caliber Sites Without Listing on the NPL: Summary of Findings"). The report reviews the basic criteria for using non-NPL approaches and provides data on the historical use of non-NPL approaches.

How are the accomplishments integrated into the program?

EPA transmitted the report to the Regions so that non-NPL approaches may be considered as decisions are made on available options to address a contaminated site. Having this information available in a consolidated, easy-reference format may result in the use of a non-NPL approach at some contaminated sites that may have otherwise been listed on the NPL. The report will also be publicly available.

How will the accomplishments be sustained?

In some situations, discussions among EPA, states, and tribes regarding the cleanup approach that should be taken at a specific site already occur. Going forward, it is anticipated that this summary report will provide a broader understanding of the options available in specific site circumstances and promote and enhance discussions among EPA, states, and tribes when choosing an approach that will address site conditions at a broader universe of sites.

RECOMMENDATION 14: Maximize the Use of Special Accounts to Facilitate Site Cleanup and/or Redevelopment

What was accomplished?

Following a comprehensive review and discussion between EPA and DOJ staff, the Agency issued the Final Guidance on Disbursement of Funds from EPA Special Accounts to Parties Performing CERCLA Response Actions (2018 Disbursement Guidance) in the first year of the Task Force. The updated guidance provides EPA Regions with information on disbursing special account funds to Bona Fide Prospective Purchasers as an incentive to perform cleanup work, as well as to PRPs as an incentive to negotiate a settlement.

In 2019, EPA issued the Updated Consolidated Guidance on the Establishment, Management, and Use of CERCLA Special Accounts (2019 Consolidated Guidance) to clarify to EPA Regions effective ways to manage and use special accounts. This guidance highlights some of the key aspects of EPA special account guidance documents and provides additional guidance on several key areas of special accounts including:

- When to establish a special account;
- Types of funds that can be deposited in a special account;
- Activities that may be funded through a special account;
- Timing for use of special account funds;
- Providing special account funds to external parties to conduct response actions; and
- Management of special accounts.

How are the accomplishments integrated into the program?

As the 2018 Disbursement Guidance and the 2019 Consolidated Guidance are consulted and applied, they will become integrated into EPA's practice of how the Agency established, manages, and uses special account dollars.

How will the accomplishments be sustained?

The 2018 Disbursement Guidance requires EPA Regions to consult with EPA Headquarters before offering special account funds to a Bona Fide Prospective Purchasers as an incentive to perform work. The guidance also requires that EPA Regions request prior written approval from EPA Headquarters prior to making such offers to PRPs. This consultation and approval process ensures national consistency and a level playing field in how special account funds are disbursed to Bona Fide Prospective Purchasers and private PRPs.

The 2019 Consolidated Guidance is the main, comprehensive document for EPA Regions to review when working on any special accounts matter and provides updated URLs and cross-references to related documents. Additionally, the guidance describes the procedures EPA Regions should follow when planning to use special accounts, how to monitor special accounts, and when to provide notifications to EPA Headquarters.

RECOMMENDATION 15: Accelerating Settlements with Federal PRPs

What was accomplished?

Through an internal dialogue among EPA's Superfund Enforcement Program, DOJ, and representatives of other federal agencies, EPA addressed ways to quickly resolve settlement-language disagreements that continue to arise when federal agencies are PRPs at privately-owned Superfund sites and focused on substantive issues arising at specific Superfund sites that are delaying cleanup.

The accomplishments include: 1) reminding EPA Regions to review guidance documents when evaluating the proper treatment of federal PRPs in settlement negotiations and to engage federal PRPs in Superfund negotiations as early as possible, and 2) addressing situations when a federal PRP declines to participate in negotiations and private parties seek to retain their rights against the federal PRPs.

In 2018, EPA, DOJ, and DOD developed language ("model settlement language") to address a common delay in cleanup settlement negotiations that often occurred between EPA and DOD.

In addition, in July 2019, EPA's Superfund Enforcement Program established an elevation process to resolve issues quickly when delays arise due to federal PRP involvement at a site. The model settlement language and elevation process are intended to be used by EPA Regions to expedite settlement negotiations to help cleanups occur faster.

The three case studies associated with this recommendation highlight the practical application of the Agency's efforts through the Task Force.

How are the accomplishments integrated into the program?

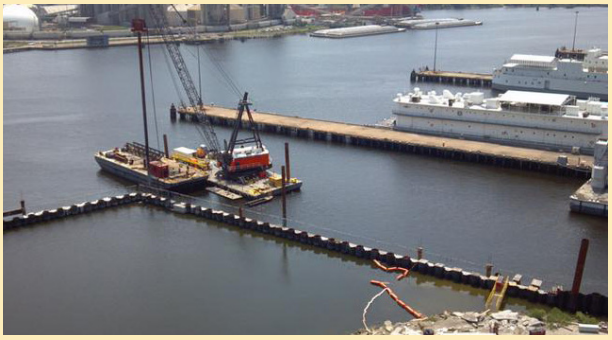
EPA and DOJ are already using the model settlement language in settlements with federal PRPs and the elevation process to avoid delays in negotiations that involve federal PRPs. Going forward, during settlement negotiations with federal PRPs, EPA Regions have been urged to continue to use the model settlement language and elevation procedures to ensure consistency across EPA regional offices.

How will the accomplishments be sustained?

To sustain this accomplishment, EPA plans to include the model settlement language for federal PRPs in the Agency's existing model settlement documents, as well as including the language in new or updated model settlement documents.

Atlantic Wood Industries, Inc. Superfund Site in Virginia

In April 2019, the United States on behalf of the Departments of Defense, under a consent decree negotiated with EPA and DOJ, agreed to pay $55.3 million to EPA and $8.5 million to the commonwealth of Virginia for cleanup costs at the Atlantic Wood Industries, Inc./Atlantic Metrocast, Inc., Superfund Site. An additional $250,000, plus interest, is also being paid to EPA and Virginia by other PRPs. In order to help achieve a settlement, EPA managers met with DOJ managers to discuss common settlement language and resolve disagreements that occur in our CERCLA negotiations. Through these meetings and related follow-up, EPA was able to more quickly resolve a common intra-governmental issue and achieve settlement.



The Atlantic Wood site is adjacent to the Southern Branch of the Elizabeth River and immediately north of the Norfolk Naval Shipyard's Southgate Annex. The site is the former location of a wood treating facility and includes approximately 50 acres of land and 35 acres of River sediments. Since 2010, EPA has been performing a Fund-lead cleanup at the site to clean up hazardous substances and heavy metals present in soils, ground water, and sediments.

West Lake Landfill Superfund Site in Missouri

In May 2019, EPA finalized an administrative order on consent with Bridgeton Landfill, LLC, Cotter Corporation (N.S.L.), and DOE to develop a RD work plan for Operable Unit 1 of the West Lake Landfill Superfund Site. The parties also agreed to pay for EPA's future oversight costs and penalties for failure to meet compliance milestones related to the RD. Additionally, the United States, on behalf of DOE, is paying $1.7 million for EPA's past cleanup work. This early response action agreement allows the design of the cleanup to move forward while the parties negotiate for the RA. Additionally, in order to help achieve this settlement, EPA managers met with DOJ managers to discuss common settlement language and process disagreements that occur in CERCLA negotiations. Through these meetings and related follow-up, EPA was able to more quickly resolve a common intra-governmental issue that occurred in the settlement negotiation at this site.

US Senator Roy Blunt (Missouri); US Congresswoman Ann Wagner (Missouri's 2nd Congressional District) with Administrator Wheeler

Elkton Farm Firehole Superfund Site in Maryland

On December 3, 2018, an agreement was reached among EPA, settling PRPs, DOD, Honeywell and Mack Trucks for reimbursement of EPA's past cleanup costs at the Elkton Farm Firehole Superfund Site. Under the agreement, the private parties will pay $5.5 million, and the United States on behalf of the federal agencies (the departments of the Army and Navy) will pay $6.25 million. To help achieve this settlement, EPA managers met with DOJ managers to discuss common settlement language and process disagreements that occur in CERCLA negotiations. Through these meetings and related follow-up, EPA more quickly resolved a common intra-governmental issue that occurred in this settlement negotiation.

The site was used for the disposal of contaminated wastes generated as part of facility operations during and just after World War II. Waste was collected in drums and disposed of in trench-like areas referred to as fireholes, which were scattered across the site.

RECOMMENDATION 16: Provide Reduced Oversight Incentives to Cooperative, High-performing PRPs, and Make Full Use of Enforcement Tools as Disincentives for Protracted Negotiations, or Slow Performance Under Existing Cleanup Agreements

What was accomplished?

EPA divided this recommendation into two major actions: (16.1) provide reduced oversight incentives to cooperative, high performing PRPs; and (16.2) expedite negotiations and PRP cleanup.

Provide reduced oversight incentives to cooperative, high-performing PRPs (16.1)

EPA completed a compilation of regional practices and charges of indirect costs.

In April 2019, an EPA workgroup finalized a Summary of Findings that included several recommendations on the appropriate level of oversight during Superfund response work ("Summary of Findings: Provide Reduced Oversight Incentives to Cooperative, High Performing PRPs"). EPA believes implementing the recommendation will lead to reduced PRP oversight costs.

Expedite negotiations and PRP cleanup (16.2)

On April 29-30, 2019, EPA Headquarters hosted a national workgroup of EPA Superfund attorneys to review options for streamlining the EPA model RD/RA consent decree. The workgroup drafted modifications to the consent decree that, if adopted in a new model consent decree, are expected to result in a quicker negotiation process for CERCLA cleanup settlements.

In June 2019, EPA issued the "2019 Remedial Design/Remedial Action: Process for Expediting Negotiations and PRP Cleanup Starts" ("2019 RD/RA Negotiations Policy") guidance to encourage EPA Regions to plan for and promptly obtain PRP commitments to begin cleanup actions following remedy selection.

Additionally, as a result of a survey completed by Regional and DOJ staff regarding tools for expediting negotiations and cleanup, EPA determined that a "refresher" reference guide for such guidance documents and other tools was needed; the Agency is currently completing a reference document which identifies numerous CERCLA guidance and policy documents relevant to settlement negotiations and oversight for CERCLA Superfund Program staff.

How are the accomplishments integrated into the program?

Provide reduced oversight incentives to cooperative, high-performing PRPs (16.1)

The Superfund enforcement program is reinforcing previous efforts by EPA to reduce PRP oversight costs and emphasize previously recommended practices, as well as providing additional recommendations developed by the workgroup.

Expedite negotiations and PRP cleanup (16.2)

The enforcement tools will be disseminated to EPA Regions and used to negotiate CERCLA cleanup agreements. Use of these tools is expected to decrease the average amount of time it takes to complete negotiations and get cleanup work implemented.

The streamlined model RD/RA consent decree is undergoing internal review and is expected by the end of calendar year 2020.

How will the accomplishments be sustained?

The 2019 RD/RA Negotiation Policy is available on EPA's website, and Office of Site Remediation Enforcement's Regional liaisons and Branch Chiefs will monitor ongoing negotiations and work with the Regions to ensure that Policy is incorporated into EPA's negotiation practice.

The streamlined model RD/RA consent decree will also be available on EPA's website and will be used as the basis of new consent decrees once the model is issued.

The 2019 memo "Review of EPA Guidance/Memorandum Regarding Negotiating and Implementing CERCLA Response Action Agreements" will be available upon issuance on EPA's website and is anticipated to be the primary resource tool for CERCLA practitioners to help them identify applicable guidance and memoranda when those practitioners are faced with delays in negotiations or implementation of CERCLA response actions.

US Oil Recovery Superfund Site in Texas

The parties performing work at a portion of the site requested that the Region consider them cooperative and technically capable, which under Recommendation 16.1 would potentially entitle them to reduced future oversight. After consulting with headquarters, Region 6 approved the request. The Regional Program Office will be meeting with the performing parties to discuss what specific changes in EPA oversight will be appropriate going forward.

RECOMMENDATION 17: Adjust Financial Assurance Required Under Enforcement Documents to Reduce Cooperating PRP's Financial Burden While Ensuring Resources Are Available to Complete Cleanups

What was accomplished?

EPA evaluated relevant feedback and assessed situations where financial assurance might be adjusted. Also, EPA identified circumstances which posed a higher risk to EPA and the public.

While flexibility in providing financial assurance can contribute to achieving timely settlements with PRPs, the use of that flexibility requires EPA to ensure that implementation does not jeopardize cleanup. Compromises that are made to the scope of financial assurance can have a direct and negative impact on whether adequate financial resources are available to clean up the site should a PRP default or stop performing the cleanup work. While there may be situations where the financial assurance requirements in an enforcement instrument may be adjusted, such adjustments need to be based on the site-specific circumstances and the factors included in the 2015 CERCLA financial assurance guidance (e.g., cost of performing the response action, duration of the response action, nature and extent of contamination, etc.). Due to the variability of each site cleanup and specific circumstances of the case, EPA believes that creating a financial assurance policy regarding flexibility that can be applied generically to all sites is not feasible because each PRP request for flexibility depends on the site-specific circumstances and consideration of the factors in EPA's 2015 financial assurance guidance.

As stated in the July 2018 report, EPA determined to no longer implement this recommendation as written.

How are the accomplishments integrated into the program?

EPA Regions will continue to rely upon EPA's 2015 financial assurance guidance in their negotiations with PRPs. In 2019, EPA also conducted an internal webinar training on CERCLA financial assurance fundamentals for EPA regional office staff involved with cleaning up a Superfund site.

How will the accomplishments be sustained?

The Office of Site Remediation Enforcement's financial assurance team will use the CERCLA financial assurance data management tool to monitor when financial assurance is obtained to ensure cleanup of a site as well as when financial assurance is not obtained and under what circumstances. The team also continues to have ongoing discussions with regional case teams about ensuring adequate financial assurance is secured for site cleanup.

RECOMMENDATION 18: Reinforce the Federal Facility Agreement Informal and Formal Dispute Timelines

What was accomplished?

On September 18, 2018, EPA issued the "Principles for Reinforcing Federal Facility Agreement Informal and Formal Dispute Timelines" ("Principles"). The Principles clarify and reinforce the importance of adhering to agreed-upon federal facility agreement informal and formal dispute timelines and appropriately elevating disputes. Applying the Principles to federal facility agreement disputes can help avoid cleanup delays at federal facility Superfund sites due to the federal facility agreement parties disputing beyond the agreed-upon federal facility agreement dispute resolution timelines. However, because disagreements and disputes are fact-specific, a fluid rather than a one-size-fits-all process may be necessary.

The Principles outline key themes for federal facility agreement parties, including the states, other federal agencies, and EPA, to reinforce adherence to federal facility agreement dispute timelines. States, other federal agencies, and EPA Regions provided critical feedback on both the tools and the Principles document prior to finalization.

EPA also created two tools to meet the Task Force report's recommendation to reinforce adherence to informal and formal dispute timelines in federal facility agreements at NPL federal facility sites. The tools include an informal dispute tracking spreadsheet, which will supplement existing EPA Headquarters tracking of formal disputes, and an audit tool that captures postponed cleanup milestones.

Impact on the Superfund Program: The Principles and tools will improve the way EPA tracks informal disputes, which will help ensure such disputes are not languishing nor potentially delaying cleanups, when they should be elevated. Such timely resolution will help cleanups proceed apace.

How are the accomplishments integrated into the program?

EPA is integrating the tools and the Principles document into the federal facility program, including adding appropriate language in the FY2019 Superfund Program Implementation Manual. EPA has implemented the audit tool during its work-planning discussions with EPA Regions and will work closely with the Regions to implement the informal dispute tracking spreadsheet. In addition, EPA has released the final Principles document to the Regions, states, and other Federal agencies for awareness and integration into dispute resolution discussions.

How will the accomplishments be sustained?

EPA will continue to use the tracking and audit tools as part of its work-planning discussions and will continue to discuss and refine the tools as they are implemented. EPA has and will incorporate the Principles into training it conducts for states, other federal agencies, and EPA remedial project managers and attorneys. EPA will continue to hold discussions on reinforcing the dispute resolution timeframes with groups such as the EPA/DOE/the Environmental Council of the States (ECOS) dialogue and will incorporate lessons learned in its work with other federal agencies.

Paducah Gaseous Diffusion Plant Superfund Site in Kentucky

Since issuance of the Principles memorandum, EPA, along with its federal and state partners, has more actively managed the Federal Facility Agreement dispute resolution process. In accordance with the Principles, Federal Facility Agreement parties have enhanced their communication and paid heightened attention to dispute timeframes to make meaningful progress to resolve disagreements and more timely elevate them when necessary. The Federal Facility Agreement parties have used the Principles to support a variety of common sense problem-solving approaches including: increasing the Parties' reliance on written documents rather than oral communication alone to provide clarity and a common understanding of the issues under dispute and the positions of the disputing parties, applying a "core team" approach to improve the Parties' working together to increase efficiencies and minimize delays, and using technical facilitation to help resolve complex issues and avoid the necessity of formal dispute.

STRATEGY 2:

CREATE OVERSIGHT EFFICIENCIES FOR PRP-LEAD CLEANUPS

BACKGROUND: Cleanup decisions and implementation often take a long time due to the number of people and issues involved. Oversight efficiencies can be realized, and costs can be reduced if responsibility for overseeing cleanup is clarified and better distributed.

RECOMMENDATION 19: Expand Cleanup Capacity by Designating One Agency Lead for Each Project in Order to Reduce Overlap and Duplication

What was accomplished?

Federal Agency Related Efficiencies

EPA's Superfund Enforcement Program held regular discussions with Federal Land Management Agencies, including the Department of Interior's Bureau of Land Management and the U.S. Department of Agriculture's U.S. Forest Service, about the use of Executive Order 12580 (Superfund Implementation) to redelegate CERCLA authorities from one agency to another to create federal government efficiencies at mixed ownership mining sites.

On November 16, 2018, EPA issued an internal memorandum describing the ability of, and the circumstances under which to consider, a redelegation of CERCLA enforcement and cleanup authorities at mixed ownership mining sites from one federal agency to another pursuant to Executive Order 12580. At appropriate sites, this redelegation can avoid duplication of effort and increase federal agency related efficiencies by consolidating CERCLA authority to just one agency, instead of two.

State Related Efficiencies

On November 21, 2018, EPA issued a sample Clean Water Act (CWA)/CERCLA Memorandum of Understanding (MOU) to memorialize intended steps for regional and state coordination and cooperation at contaminated sediment sites. The sample CWA/CERCLA MOU was developed with state and tribal review and input.

In August 2019, EPA issued a model MOU to guide EPA regional offices through the enforcement requirements that arise when a state, relying on its cleanup laws and regulations, assumes responsibility for the enforcement, PRP oversight, and remaining cleanup of a Superfund site where EPA has previously entered into a CERCLA enforcement action. EPA issued a memorandum that highlights a collection of ways EPA Regions are effectively including states in the Superfund response process and furthering EPA regional and state coordination. ("State Cooperative Efforts") EPA researched and received input from EPA regional offices and states on EPA-state cooperative efforts, work planning, and coordination at Superfund sites.

How are the accomplishments integrated into the program?

Federal Agency Related Efficiencies

As a permanent part of the Superfund Program, EPA will actively pursue redelegation instruments with Federal Land Management Agencies at appropriate sites pursuant to the internal memorandum issued on November 16, 2018. The option to redelegate CERCLA enforcement and cleanup authorities to or from EPA will become part of EPA's practice at mixed ownership mining sites in those cases where a redelegation will improve federal coordination and reduce duplication of agency efforts.

State Related Efficiencies

The sample CERCLA/CWA MOU provides a roadmap for EPA and state Water and Cleanup programs to foster communication, collaboration, and coordination at contaminated sediment sites, leading to improved efficiencies at these complex sites. The model Transfer MOU and its transmittal memorandum provide a transparent process for EPA and state officials to use at sites where a state is assuming responsibility subsequent to EPA taking a Superfund enforcement action. Providing a model document for these unique situations will improve the understanding of the enforcement and transfer requirements involved and will ensure the consistency of any comprehensive agreement when transferring cleanup responsibility from EPA CERCLA authorities to state cleanup authorities. Both the sample CERCLA/CWA MOU and the model Transfer MOU will be available and maintained in the Superfund Enforcement Program's models database.

How will the accomplishments be sustained?

Federal Agency Related Efficiencies

EPA will sustain this accomplishment by pursuing redelegation instruments with Federal Land Management Agencies, when appropriate. EPA has already discussed this approach at multi-agency meetings and is currently discussing redelegation instruments with Federal Land Management Agencies at sites around the country.

State Related Efficiencies

In addition to the availability of the sample and model MOUs ("Transfer MOU") Regions and states are encouraged to continue to identify new and effective state engagement practices that further improve EPA regional and state coordination. These practices will be shared with all Regions and states to continue to strengthen the Superfund program.

RECOMMENDATION 20: Identify Opportunities to Engage Independent Third Parties to Oversee Certain Aspects of PRP-Lead Cleanups

What was accomplished?

The Recommendation 20 workgroup conducted research on the six state-licensed site professional programs currently in place. The workgroup obtained and analyzed those states' laws and regulations to determine how the programs worked and the sites that were subject to these programs. As part of this effort, the workgroup held individual conference calls with staff from five of the six states and discussed this recommendation with the Massachusetts' Licensed Site Professionals

Association (not affiliated with the Massachusetts state government). The workgroup researched current federal law and regulations to determine the full effect of EPA's role in oversight at federal Superfund sites and to determine the Agency's ability to have third parties conduct oversight. In addition, the workgroup researched existing and new EPA policies and tools that accomplish the same identified goals as Recommendation 20.

How are the accomplishments integrated into the program?

The workgroup's findings and recommendations were shared with EPA's regional offices and the offices of Site Remediation Enforcement and Superfund Remediation and Technology Innovation at Headquarters. The findings and recommendations were also made publicly available through EPA's Task Force webpage: https://www.epa.gov/enforcement/sftf-report-recommendation-20-findings-third-party-oversight-aspects-prp-lead-cleanups. The workgroup concluded that there are several existing and new EPA policies, guidance documents, and other tools to achieve the same goals under this recommendation without creating a new program or relying on state licensed site professional programs. The workgroup also concluded that using state licensed site professional programs or similar programs for PRP oversight at NPL sites is not necessary or feasible at this point. The workgroup further concluded that because oversight assistance by third parties may complement EPA's oversight role and not substitute it, as a practical matter, retaining independent third parties to perform oversight would likely not result in more efficient or less costly oversight for PRPs.

Through the workgroup's efforts under this recommendation, the Agency issued a memorandum that discusses the use of various kinds of advanced monitoring technologies and approaches to monitor and support long-term stewardship responsibilities at contaminated sites. Most of these advanced monitoring technologies and approaches rely, in part, on the use of third parties to perform certain monitoring activities.

How will the accomplishments be sustained?

The focus of this effort is to remind EPA Regions about existing Agency tools already in place that use, to a limited extent, independent third parties to assist in EPA's oversight (e.g., using independent quality assurance teams during PRP-led RA). This effort will also include informing EPA Regions about the development of more recent tools (e.g., including third party verification provisions in settlement agreements with PRPs where appropriate), as well as new guidance documents (e.g., memo on Advanced Monitoring Technologies and Approaches to Support Long-Term Stewardship). EPA will continue to look for opportunities to create oversight efficiencies for PRP-lead cleanups.

John F. Queeny – Monsanto Chemical Works Facility in Missouri

The John F. Queeny – Monsanto Chemical Works facility operated as a chemical manufacturing facility from 1901 to 2006. On April 12, 2019, Soulard Second Street, LLC entered into a Bona Fide Prospective Purchaser agreement with EPA and DOJ to carry out several cleanup actions at an 8.3-acre parcel of the facility to address polychlorinated biphenyl contamination. One such action was the installation of a vapor mitigation system and a remote, telemetry-based system to monitor the operation of the vapor mitigation system. In entering the Bona Fide Prospective Purchaser agreement with Soulard, EPA determined that this action would provide valuable protection of the remedy and reuse opportunities at the facility.

In July 2018, EPA issued a memorandum titled "Advanced Monitoring Technologies and Approaches to Support Long-Term Stewardship" to provide information on the potential use of advanced monitoring technologies and approaches for monitoring and maintaining institutional and engineering controls at sites and facilities. Vapor intrusion system remote computer monitoring, which automatically detects whether vapor mitigation systems remain operational, is one such technology. The remote, telemetry-based vapor monitoring system included in the Bona Fide Prospective Purchaser agreement is a timely and innovative example of leveraging advanced monitoring to help achieve the cleanup and beneficial reuse of a blighted property.

This agreement is also related to the goals outlined in Recommendations 23, 25, and 26 of this report.

STRATEGY 3:

PROMOTE REDEVELOPMENT/REUSE OF SITES BY ENCOURAGING PRPS TO INVEST IN REUSE OUTCOMES

BACKGROUND: PRPs may resist engaging with third parties to facilitate reuse. To overcome such resistance, EPA should understand and address the legal, financial, and technical burdens that may arise when a third party wants to build on a contaminated site. For instance, some uses may require additional cleanup beyond what is necessary to stabilize a site for protectiveness, while some uses involve a project schedule that differs from the cleanup, and some uses may complicate the long-term maintenance obligations for the property.

RECOMMENDATION 21: Facilitate Site Redevelopment During Cleanup by Encouraging PRPs to Fully Integrate and Implement Reuse Opportunities into Investigations and Cleanups of NPL Sites

What was accomplished?

A workgroup, consisting of staff from EPA Headquarters and EPA Regions 3 and 4, took several actions, which included:

- Developing a list of case studies where PRPs have incorporated reuse considerations throughout the cleanup process.
- Working with EPA Regions to identify examples of effective PRP-driven reuse efforts and previously successful incentives.
- Interviewing PRPs and other developers to identify opportunities for PRP-led cleanups and reuse.
- Hosting a public listening session to inform stakeholders of the workgroup's progress and to solicit input.
- Analyzing site cleanup and reuse data, including reviewing 52 case studies and conducting 19 interviews.
- Drafting an internal memorandum, which (1) discussed why PRPs may or may not pursue reuse; (2) presented an overview of the current NPL reuse landscape; and (3) provided recommendations the Agency may want to implement to encourage PRPs to incorporate reuse earlier in the decision-making process.

How are the accomplishments integrated into the program?

The Agency has issued an internal memorandum summarizing the workgroup's findings and recommendations. The Agency will continue to consider and as appropriate, encourage and engage with PRPs to integrate reuse opportunities into investigations and cleanup at NPL sites.

How will the accomplishments be sustained?

The Agency's Superfund program and enforcement offices will continue to work together with EPA Regions to implement the workgroup's recommendations.

Eagle Mine Superfund Site in Colorado

The Eagle River and several of its tributaries flow through the 235-acre Eagle Mine Superfund site, which is impacted by heavy metal contamination from past mining activities. The site includes an estimated 70 miles of underground mine tunnels, mill workings, the abandoned company town of Gilman, and various mine waste features.

In 2004, a developer, Ginn Battle North, purchased approximately 750 acres of land that included the northern portion of the site to develop a private, residential community. EPA and the Colorado Department of Public Health and Environment worked with the developer to ensure that all necessary investigation and cleanup occurred to prepare the property for residential redevelopment.

In 2018, EPA entered into a settlement agreement for cleanup work at the site with Battle North, LLC (the successor to Ginn Battle North) and Battle South, LLC, which resolved their potential liability at the site and required the companies to pay EPA for the cleanup work and implementation of institutional controls, thereby allowing for future redevelopment.

The Eagle Mine Superfund Site is a good example of how a party can effectively implement reuse opportunities during the cleanup phase of a superfund site. Ginn Battle North and its successor approached cleanup with a reuse plan in mind and worked effectively with federal and state agencies to ensure that all necessary steps are taken to achieve successful implementation of reuse opportunities during cleanup.

GOAL 3: ENCOURAGING PRIVATE INVESTMENT

STRATEGY 1:

USE ALTERNATIVE AND NON-TRADITIONAL APPROACHES FOR FINANCING SITE CLEANUPS

BACKGROUND: Private sector tools and approaches to manage environmental liabilities and risks are important to the cleanup and reuse of contaminated sites. Some PRPs engage in contractual arrangements to pay a premium for unknown risks and transfer responsibilities to environmental remediation companies where the Superfund site cleanup has a fair degree of certainty. These arrangements may be in the form of an insurance policy, annuity, a designated agent, or an agreement to allow a third party to assume all obligations for remediation and legal liability.

However, as provided by CERCLA §107(e)(1), even the most comprehensive arrangement does not legally bar the government from pursuing the PRP at a later date. Such arrangements tend to be reasonably specific to the circumstances of a site, but they can help expedite the cleanup and reuse of a site. EPA recognizes that it should support, where appropriate, innovative approaches to promote third-party investment in cleanup and reuse of contaminated properties consistent with statutory authorities and needs to consider mitigating its retained rights.

RECOMMENDATION 22: Explore Environmental Liability Transfer (ELT) Approaches and Other Risk Management Tools at PRP cleanups

What was accomplished?

Over the past two years, EPA reached out to external stakeholders who invest in contaminated properties, contractually assume Superfund cleanup obligations, and/or issue environmental insurance policies. EPA also received feedback on various business models, products, and the current industry climate for the transfer of cleanup responsibility to analyze the benefits, challenges, and other considerations associated with financial risk management tools at Superfund sites.

In June 2018, EPA held a public listening session with 80 participants on alternative and non-traditional approaches for financing and performing Superfund site cleanups to accelerate Superfund site redevelopment and reuse. During the listening session, EPA received feedback from stakeholders about how, when, and where risk transfer arrangements could be used. Following the listening session, EPA conducted research on settlements at Superfund sites that included settling PRP(s) and third parties assuming the cleanup responsibility where EPA was also a party to the settlement.

In June 2019, EPA held a second public listening session with 30 participants to raise awareness of the Agency's use of "look first" provisions in CERCLA settlements involving third parties assuming cleanup responsibilities at Superfund sites. Under the "look first" approach, EPA agrees to first seek performance, corrective measures, and stipulated penalties from a third party before pursuing the settling PRP(s) for such actions, which provides a degree of certainty to the PRP(s) in the settlement. During the second listening session, EPA received feedback on this settlement approach to further inform and facilitate the use of "look first" provisions in future settlements.

How are the accomplishments integrated into the program?

EPA is in the process of analyzing the remarks received from the June 2019 listening session. After completing the review, HQ plans to issue a memorandum to the Regions on the use of the "look first" approach in CERCLA settlement agreements to promote this approach where appropriate and in the interest of the Superfund Program. This "look first" memorandum will replace the environmental liability transfer pilot program involving related corporate entities that EPA noted it might pursue in the 2018 Update report.

How will the accomplishments be sustained?

EPA plans to issue the "look first" memorandum described above by the end of calendar year 2019. To further ensure its longevity and accessibility, EPA intends to post the memorandum on the Agency's website.

Valley Wood and Coast Wood Preserving Sites in California

On March 1, 2018, two companion consent decrees were approved that ensure the continued cleanup work and payment of past and future response costs at the Coast Wood Preserving site in Ukiah and Valley Wood Preserving site in Turlock. Two small, family-run businesses with common owners held title to the two sites, but they were not capable of performing the response obligations at the sites. Therefore, they entered into agreements to transfer the corporate stock in each company to a new shareholder who assumed completion of the cleanup work and long-term operations and maintenance at both sites. The use of a non-traditional approach to reach a settlement on the responsibility for and financing of the cleanup of these sites assists in getting contaminated sites, that otherwise may remain dormant, cleaned up and back to use.

Prior wood treating operations at these facilities resulted in releases of chromium and arsenic to the soil and groundwater. Cleanup of the sites started in the early 1980s. EPA, with concurrence from the California Department of Toxic Substances Control, selected final cleanup remedies for the contamination at Coast Wood Preserving (1989) and at Valley Wood Preserving (1991). The cleanups are near completion, and once completed, EPA will review the remedies every five years to ensure the long-term protection of human health and the environment.

With the possibility that these sites would not have had a party able to complete the cleanup work, the transfer agreements provided the United States with a viable, responsible, and willing corporate entity that can fund the remaining response work and the long-term oversight and management required at both sites.

Madison County Mines Superfund Site in Missouri

On February 28, 2019, EPA entered into an administrative settlement with Missouri Mining Investments, LLC to conduct removal actions at a portion of Operable Unit 2 of the Madison County Mines Superfund Site. Missouri Mining Investments purchased the property from the previous owner as part of an environmental liability transfer to address mine waste. The settlement will result in the consolidation and capping of on-site mine waste and allow the approximately 1,750-acre property to be redeveloped for future mining of cobalt and other metals. Missouri Mining Investments constructed a new tailings processing facility to recover metals from existing mine waste on site, and production has already begun.

The settlement with Missouri Mining Investments, the party assuming the response obligations, provides the United States with a viable and willing corporate entity that can fund the remaining response work and the long-term oversight and management required at the site. While the removal action is ongoing, EPA will work with the primary mining PRPs to conduct an RI/FS to address all other portions of Operable Unit 2 not addressed by the settlement with Missouri Mining Investments.

Administrator Andrew Wheeler and Representative Jason Smith.

STRATEGY 2:

STREAMLINE THE PROCESS FOR COMFORT LETTERS AND SETTLEMENT AGREEMENTS WITH THIRD PARTIES

BACKGROUND: The 2002 Brownfield Amendments to CERCLA added new landowner liability protections, including the Bona Fide Prospective Purchaser protection, to address the liability concerns that act as a barrier to the cleanup and reuse of contaminated properties.

Congress intended these liability protections to be self-implementing, although some third parties remain concerned about potential liability and the availability of the Bona Fide Prospective Purchaser protection at contaminated properties. As a result, at some sites, a site-specific tool may be needed for third parties to address liability concerns before the third party will move forward with the cleanup and reuse of the site. EPA's primary tools to address the CERCLA liability concerns of third parties are comfort/status letters and settlement agreements. These site-specific tools have enabled cleanup and reuse at some sites on the NPL to move forward where liability concerns posed a barrier.

RECOMMENDATION 23: Ensure Timely Use of Site-Specific Tools When Needed and Appropriate to Address Liability Concerns at Contaminated Sites

What was accomplished?

Under this recommendation, EPA created a national team of internal redevelopment experts to support timely development of site-specific liability clarification tools and approaches.

EPA's Superfund Enforcement Program developed an internal Prospective Purchaser Inquiry tool to help EPA regional staff ask the right questions and use the right tools to efficiently and effectively respond to questions from developers and other third parties interested in acquiring potentially contaminated property. The core of the inquiry tool is a series of suggested discussion topics to guide EPA Regions as they analyze the information necessary to move forward from an inquiry to cleaning up and redeveloping sites. These topics are based on feedback received from EPA Regions on their best practices when addressing inquiries from developers and third parties.

How are the accomplishments integrated into the program?

The internal inquiry tool was distributed to EPA Regions to become integrated into their standard operating procedures for responding to inquiries from third parties interested in cleaning up and reusing contaminated property. As EPA gains experience in using this tool, it may be modified to reflect the experience and knowledge acquired over time.

How will the accomplishments be sustained?

EPA and DOJ will continue to meet regularly to discuss cases, potential revisions to the model prospective purchaser and Bona Fide Prospective Purchaser agreements, and other opportunities to support cleanup and reuse at NPL sites. Success in addressing liability concerns for purchasers and developers of contaminated sites, as well as the ultimate reuse of these sites, will help sustain the consistent use of this tool.

Middlefield-Ellis-Whisman Superfund Site in California

On July 27, 2017, EPA and DOJ entered into a Bona Fide Prospective Purchaser agreement with Warmington Fairchild Associates, LLC at the Middlefield-Ellis-Whisman Study Area. The Study Area is comprised of three NPL sites, which were home to several manufacturing and industrial facilities that released a variety of chemicals, including volatile organic compounds, impacting soil and groundwater. In 2012, contamination was found to have impacted areas not being addressed by the PRPs under the 1989 ROD and 2010 ROD amendment.

Under the Bona Fide Prospective Purchaser agreement, Warmington Fairchild agreed to conduct cleanup actions to rapidly and significantly reduce subsurface contamination at three parcels within the Study Area. The parties' efforts to develop an agreement within a short timeframe that addressed Warmington Fairchild's liability concerns enabled redevelopment, including construction of homes, to move forward in a manner protective of human health for future occupancy.

This agreement is also related to the goals outlined in Recommendations 25 and 26 of this report.

RECOMMENDATION 24: Create and Maintain an OECA Information Repository to Provide Access to Enforcement Information and Tools to Support Third-Party Cleanup and Reuse.

What was accomplished?

EPA established a special collection of comfort/status letters and other enforcement tools in SEMS that EPA staff can access when necessary. EPA Headquarters instructed EPA Regions to upload such documents to SEMS on an ongoing basis.

Additionally, EPA has completed extensive revisions to its enforcement website to inform and facilitate third-party cleanup and reuse. EPA also has created an intranet site to provide EPA staff with general information on comfort status/letters, sample comfort/status letters, and information on the SEMS special collection of comfort/status letters and other enforcement tools.

How are the accomplishments integrated into the program?

Accomplishments are integrated via the SEMS repository, website revisions, and EPA's intranet site. These changes allow both EPA staff and external parties easy access to current information and tools to support third party cleanup and reuse. For example, the repository of comfort/status letters assists EPA Regions in drafting new letters and assists Headquarters offices in promoting national consistency, identifying trends, improving revitalization measures, and assessing the need for updated models and guidance.

How will the accomplishments be sustained?

Accomplishments will be sustained by ensuring EPA Regions continue to upload enforcement documents into SEMS and by regularly reviewing EPA's enforcement website and intranet content to ensure it contains timely material. EPA will continue to seek opportunities to provide access to enforcement information and tools to support third-party cleanup and reuse of NPL sites.

STRATEGY 3:

OPTIMIZE TOOLS AND REALIGN INCENTIVES TO ENCOURAGE THIRD-PARTY INVESTMENT

BACKGROUND: Before the enactment of the Brownfield Amendments to CERCLA, prospective purchaser agreements and comfort/status letters were used by Regions to address the CERCLA liability concerns of parties who wanted to develop and reuse contaminated properties.

Comfort/status letters were developed as an efficient tool to provide prospective purchasers and other parties with the information EPA has about a particular party, EPA's intentions with respect to the property as of the date of the letter, and the liability protections that may be available to the party. (See "2019 Comfort/Status Letter Policy and Models.") After the addition of the landowner liability protections by the Brownfield Amendments, EPA issued enforcement guidance which explained that EPA involvement is no longer necessary in most private party transactions given the self-implementing nature of the protections and that EPA generally will no longer be entering into prospective purchaser agreements. In 2006, in recognition that Bona Fide Prospective Purchasers at some sites might be interested in performing cleanup work beyond what would be expected of them to maintain their Bona Fide Prospective Purchaser liability protection (e.g., conducting cleanup work beyond the statutory requirement to take "reasonable steps" to prevent or limit exposure and stop continuing or threatened releases at the site), EPA issued a model agreement for Bona Fide Prospective Purchasers who are interested in performing Superfund removal work. EPA also has developed a model agreement to resolve an existing or potential "windfall lien" with interested Bona Fide Prospective Purchasers.

RECOMMENDATION 25: Update EPA's Position on the Use of Site-Specific Agreements with Third Parties at NPL Sites

What was accomplished?

On April 17, 2018, EPA and DOJ issued a new policy memorandum titled, "Agreements with Third Parties to Support Cleanup and Reuse at Sites on the Superfund National Priorities List." The memorandum encourages more frequent consideration of Bona Fide Prospective Purchaser agreements and prospective purchaser agreements, when appropriate, to foster cleanup and reuse of NPL sites. The policy memorandum is available on the Agency's website at https://www.epa.gov/enforcement/third-party-agreements-support-cleanup-and-reuse-superfund-npl-sites.

How are the accomplishments integrated into the program?

Regional case teams and the national CERCLA Liability and Reuse Action Team will help to ensure this new policy is integrated into the program and that site-specific agreements are used, where appropriate, to foster cleanup and reuse of NPL sites. In addition, EPA designated a new Headquarters' agreements coordinator to support EPA Regions when they develop site-specific agreements and instituted a case tracking system to monitor case progress.

How will the accomplishments be sustained?

To sustain these efforts, EPA currently is updating its BFPP and PPA model agreements, under Recommendation 26, to aid Regions in their timely development of site-specific agreements and EPA may issue additional guidance regarding the use of these types of agreements. In addition, under Recommendation 33, EPA also has developed a list of Superfund National Priorities List sites with the greatest expected redevelopment potential (Superfund Redevelopment Focus List). EPA is focusing redevelopment training, tools and resources toward the sites on this list. EPA will continue to publicize successful agreements that support cleanup and reuse by third parties on its Civil Cases and Settlements webpage located at https://cfpub.epa.gov/enforcement/cases/index.cfm?templatePage=1.

Gilt Edge Superfund Site in South Dakota

The Gilt Edge Superfund Site is an abandoned gold mine. Historical operations at the 360-acre site caused acidic, heavy metals contamination in surface water and groundwater. EPA implemented an interim cleanup remedy at the site's Operable Unit 2 and will further investigate and address levels of cadmium in surface water that periodically exceed acceptable levels for aquatic life.

Agnico Eagle Mines Ltd., a prospective lessee at the site, approached EPA and the state of South Dakota offering to perform work at Operable Unit 2 in exchange for liability protection. On February 12, 2018, EPA, the state of South Dakota, and Agnico signed an agreement for Agnico to perform additional remedial investigative activities within Operable Unit 2 related to sources of historic mining contamination. These investigations will be used to help define the nature and extent of contamination within Operable Unit 2 and will also gather information on the subsurface geology.

This agreement is also related to the goals outlined in Recommendations 23 and 26 of this report.

RECOMMENDATION 26: Revise EPA's Model Agreements to Create More Opportunities for Settlement with Third Parties Interested in Cleaning Up and Reusing NPL Sites

What was accomplished?

EPA reinstituted its internal cleanup and reuse case tracking system to monitor site-specific progress and identify timely steps to resolve a party's liability using EPA's liability tools. EPA also designated a Headquarters' agreements coordinator to support EPA's regional work and consult directly with DOJ on site-specific agreements in the tracking system.

In addition, EPA conducted outreach to Bona Fide Prospective Purchasers and other third parties to discuss ongoing liability concerns and potential new approaches to facilitate cleanup and reuse of contaminated properties. Based on this outreach and lessons learned from site-specific agreements, the Agency has identified potential revisions to the current model prospective purchaser and Bona Fide Prospective Purchaser agreements.

How are the accomplishments integrated into the program?

EPA reinstituted its internal cleanup and reuse case tracking system to monitor site-specific progress and identify timely steps to resolve a party's liability using EPA's liability tools. EPA also designated a Headquarters' agreements coordinator to support EPA's regional work and consult directly with DOJ on site-specific agreements in the tracking system.

In addition, EPA conducted outreach to Bona Fide Prospective Purchasers and other third parties to discuss ongoing liability concerns and potential new approaches to facilitate cleanup and reuse of contaminated properties. Based on this

outreach and lessons learned from site-specific agreements, the Agency has identified potential revisions to the Bona Fide Prospective Purchaser and prospective purchaser model agreements.

How will the accomplishments be sustained?

In conjunction with the efforts under Recommendation 23, EPA and DOJ will continue to meet regularly to discuss cases, potential revisions to the Bona Fide Prospective Purchaser and prospective purchaser model agreements, and other opportunities to support cleanup and reuse at NPL sites.

RECOMMENDATION 27: Identify Tools for Third Parties Interested in Investment or Other Opportunities Supporting the Cleanup or Reuse of NPL Sites

What was accomplished?

EPA conducted extensive outreach to a variety of stakeholders involved in the cleanup and redevelopment of Superfund sites. The Agency reached out to lenders, investors, purchasers, and other third parties to discuss ongoing liability concerns and the potential for new approaches to facilitate cleanup and reuse.

In June 2018, there were two outreach activities to receive input from external stakeholders. The first was a public listening session, sponsored by EPA, titled, "New Tools to Encourage Private Investment in Cleaning Up and Reusing Superfund Sites." The purpose of the event was to share information and receive feedback from external stakeholders who are involved in the cleanup and reuse of contaminated properties (especially NPL sites) and to identify tools and strategies to facilitate and encourage investment in these sites. Second, EPA attended an in-person meeting with the Environmental Bankers Association that included over 100 interested parties. Both outreach events included a discussion of the goals of Recommendation 27, an overview of EPA's current liability clarification tools, and a discussion of the issues and topics warranting stakeholder input.

How are the accomplishments integrated into the program?

Through these comprehensive efforts, EPA identified revisions to the model comfort/status letters under Recommendation 28 and changes to the Common Elements Guidance under Recommendation 29. EPA will also continue to consider revisions to the Bona Fide Prospective Purchaser and prospective purchaser model agreements under Recommendation 26.

How will the accomplishments be sustained?

The Bona Fide Prospective Purchaser and prospective purchaser model agreements, model comfort/status letters, and the Common Elements Guidance are the core tools used by EPA to address liability issues related to the cleanup and reuse of contaminated sites. Incorporating the accomplishments of this recommendation into those documents will ensure they will be sustained.

RECOMMENDATION 28: Provide Greater "Comfort" in Comfort/Status Letters

What was accomplished?

In FY 2018, EPA's cleanup enforcement office hosted a listening session for external stakeholders on comfort/status letters https://www.epa.gov/enforcement/listening-sessions-superfund-task-force-recommendations. The listening session included a discussion of the Agency's efforts to revise the 2015 Comfort/Status Letter policy to provide a greater level of comfort and solicited feedback from stakeholders on the use of comfort/status letters and the types of standard information stakeholders would like included in a comfort/status letter.

In August 2019, EPA issued the 2019 Policy on the Issuance of Superfund Comfort/Status Letters and attached model letters ("2019 Policy"), which EPA regional staff can use when drafting site-specific letters for parties interested in reusing impacted property.

How are the accomplishments integrated into the program and sustained?

Since 1996, EPA regional staff have issued comfort/status letters to facilitate and assist in the reuse of impacted properties. EPA will continue this practice using the updated model letters. Going forward, EPA will use meetings and conferences, as appropriate, to highlight and discuss the comfort/status letter policy and model letters with stakeholders.

How will the accomplishments of the program be sustained?

The 2019 policy and model letters will continue to facilitate reuse of impacted properties. Under Recommendation 24, the Agency established a special collection of comfort/status letters to allow EPA regional staff easy access to information regarding the use of these letters.

RECOMMENDATION 29: Revise or Develop New Enforcement Guidance to Support the Cleanup and Reuse of Contaminated Sites

What was accomplished?

EPA divided this recommendation into two major actions: 1) propose potential revisions to the 2003 "Common Elements Guidance" based on case law developments and lessons learned by EPA and the private sector; and 2) identify opportunities to expand non-liable party approaches under CERCLA § 107(d) for addressing liability issues and promoting redevelopment.

"Common Elements Guidance"

EPA conducted a comprehensive review and discussion on revisions to the 2003 "Common Elements Guidance." A national EPA workgroup identified changes and improvements to the current guidance. Additionally, EPA's Superfund Enforcement Program sponsored a public listening session to receive feedback and suggestions for improvements to the document.

In July 2019, EPA issued the 2019 "Common Elements Guidance" based on the work of the national workgroup and the feedback from external stakeholders. The 2019 guidance includes major revisions to sections covering requirements to:

- take "reasonable steps" with respect to hazardous substance releases, and
- comply with land use restrictions and not impede the effectiveness or integrity of institutional controls.

There are minor updates to sections on "all appropriate inquiries," affiliation, and the remaining continuing obligations. Further, the revised guidance includes a new section on the requirement that Bona Fide Prospective Purchasers and innocent landowners not dispose of hazardous substances after purchasing property.

CERCLA § 107(d)

To explore expanded third-party participation in rendering care, assistance, or advice in response to a release of a hazardous substance, the Superfund Enforcement Program researched the case law and legislative history of Section 107(d) of CERCLA.

How are the accomplishments integrated into the program?

"Common Elements Guidance"

The 2019 "Common Elements Guidance" assists EPA personnel and third parties with identifying and creating opportunities for new investment in cleaning up and redeveloping contaminated sites. The guidance also serves as the main source of information on the landowner liability provisions and provides clarity on the obligations and liability of third parties as they move toward the cleanup and redevelopment of contaminated sites.

CERCLA § 107(d)

As noted above, EPA researched the case law and legislative history of this statutory section.

How will the accomplishments be sustained?

"Common Elements Guidance"

To sustain the work of the task force and implementation of the 2019 guidance, EPA's Superfund Enforcement Program will provide additional information on the revised document using webinars and in-person presentations at the 2019 Brownfields Conference (December 11-13, 2019) and other external stakeholder forums.

CERCLA § 107(d)

EPA continues to leverage CERCLA § 107(d) in Good Samaritan agreements to enable cleanup actions at certain hardrock and other mining sites.

Upper Columbia River Superfund Site in Washington

The Upper Columbia River Superfund Site starts at the US/Canada border and extends 150 river miles into Washington State. Both the river and uplands areas are contaminated due to discharges from the Teck Cominco lead-zinc smelter in Trail, British Columbia. Although Teck Cominco was held not liable as an arranger for contamination in the uplands portion of the site, it was willing to voluntarily conduct additional removal actions on four residential properties in the uplands portion.

In September 2017, Teck Cominco, EPA, and DOJ signed an administrative settlement agreement, relying on CERCLA § 107(d). Under the settlement agreement, Teck Cominco would be rendering care by voluntarily performing the removals at the four upland residential properties.

RECOMMENDATION 30: Revise Federal Facility Enforcement Guidance

What was accomplished?

EPA issued a revision of the 1997 "Policy Towards Landowners and Transferees of Federal Facilities" ("Transferee Policy") on May 17, 2019 to encourage redevelopment and reuse at federal facilities on the NPL. Originally, the 1997 policy indicated that prospective purchaser agreements would not be necessary for landowners and transferees of federal facilities. In addition, it did not encourage the use of various tools, such as comfort letters, to give transferees confidence that EPA would generally not take CERCLA enforcement action against them.

The revised policy is intended to encourage reuse and redevelopment of federal property. It supports the use of tools such as comfort letters and other agreements to address potential liability concerns of landowners and transferees who acquire federal property and aims to alleviate uncertainty regarding potential enforcement by the Agency for contamination existing as of the date of property acquisition. EPA developed the policy in coordination with two state organizations and other federal agencies.

On July 2, 2019, EPA transmitted for regional use model language for amending federal facility agreements to encourage reuse and redevelopment at NPL federal facilities. The proposed language would place federal facility agreement provisions on hold in instances where a third party, rather than the federal entity, wants to do the cleanup. In response to comments, EPA developed two amendment options. In Option 1, EPA independently selects the remedy. In Option 2, the federal agency participates in remedy selection (DOD prefers this approach). Both of these options are appropriate for the regions' consideration as a starting point for negotiations. In developing these options, EPA provided opportunities for federal agency and state comment.

How are the accomplishments integrated into the program?

EPA will apply the May 17, 2019 Transferee Policy and the July 2, 2019 proposed amendment options to encourage redevelopment and productive reuse at federal facilities on the NPL. Along with distributing to stakeholders, both sets of documents are publicly available from the Agency and FedCenter websites.

How will the accomplishments be sustained?

EPA will sustain its commitment to promoting redevelopment and reuse of federal property on the NPL through the application of the revised Transferee policy and the proposed federal facility agreement amendments. EPA will provide more assurance during Federal transfers where there are opportunities for productive reuse and will share the amendments in an effort to streamline the possibility of a third party performing the cleanup where there is an interest in privatization. EPA will continue to inform the Federal community and the states that EPA supports redevelopment and reuse at Federal facilities through various speaking engagements, meetings, and compliance assistance symposiums and will ensure the availability of the documents through the EPA website and FedCenter.

STRATEGY 4:

ADDRESS LIABILITY CONCERNS OF LOCAL GOVERNMENTS

BACKGROUND: Local governments play an integral role in facilitating the cleanup and reuse of contaminated properties. By acquiring contaminated properties, local governments have the opportunity to evaluate and assess public safety needs and promote redevelopment projects that will protect and improve the health, environment, and economic well-being of their communities. Although local governments may take advantage of the statutory liability protections, these governments continue to raise potential liability concerns about the acquisition of contaminated property as a barrier to reuse. Local government liability concerns at contaminated properties include the timing of and the cost associated with conducting due diligence, the meaning of "involuntary acquisition" in former statutory provisions, and the need for tools specific for local governments.

RECOMMENDATION 31: Develop New Local Government Enforcement Guidance to Address Concerns Raised by the Landowner Liability Provisions Potentially Applicable to Local Governments

What was accomplished?

Local Government Enforcement Guidance

EPA identified revising a 2011 fact sheet, CERCLA Liability and Local Government Acquisitions and Other Activities, as the best tool to address local governments' potential liability concerns. EPA conducted an internal review and comment process on the existing 2011 EPA fact sheet. While the Agency was revising the 2011 fact sheet, the U.S. Congress amended Section 101(20)(D) of CERCLA to expand the liability exemption for state and local governments. EPA has since drafted a revised fact sheet discussing the effect of those CERCLA amendments. Once finalized, it will clarify EPA's position on the liability of local governments that acquire contaminated property and will serve as a more comprehensive guidance document. The revised fact sheet also will serve as a primary resource for local governments evaluating potential CERCLA liability concerns.

The implementation of this recommendation and analysis of the statutory change are almost complete. The draft revised fact sheet addressing local governments' potential liability concerns will be sent out to EPA Regions for review and comment by the end of FY 2019. EPA expects the revised fact sheet to be issued in FY 2020.

How are the accomplishments integrated into the program?

When finalized, the revised fact sheet will be used by EPA Regions, as appropriate, to address liability concerns of local governments that acquire contaminated property and will be publicly available on the Agency's website.

How will the accomplishments be sustained?

EPA will continue to consider policy options, tools, and approaches to address liability concerns of local governments. EPA's Superfund Enforcement Program will provide additional information and solicit stakeholder feedback on the draft revised fact sheet using webinars and in-person presentations at the 2019 Brownfields Conference (December 11-13, 2019) and other external stakeholder forums.

RECOMMENDATION 32: Develop a Model Comfort/Status Letter and Other Tools to Address the Liability Concerns and Other Barriers Unique to Local Governments

What was accomplished?

Addressing liability concerns through model comfort/status letter and other tools

EPA identified a local, government-specific model comfort/status letter as the best site-specific tool to facilitate and support local governments in the acquisition of contaminated properties. EPA is currently drafting this model comfort/status letter and considering policy options and tools to address liability concerns of local governments.

EPA expects the model comfort/status letter to be issued in FY 2020.

How are the accomplishments integrated into the program?

When finalized, the model comfort/status letter will be used by EPA Regions, as appropriate, to address liability concerns of local governments that acquire contaminated property, and it will be publicly available on the Agency's website.

How will the accomplishments be sustained?

EPA will continue to consider policy options, tools, and approaches to address liability concerns of local governments and will revise the model comfort/status letter, as appropriate, based on feedback from EPA Regions and external stakeholders.

GOAL 4: PROMOTING REDEVELOPMENT AND COMMUNITY REVITALIZATION

STRATEGY 1:

FACILITATE SITE REDEVELOPMENT AND SUPPORT ONGOING INFORMATION SHARING

BACKGROUND: Building capacity and providing training to staff from EPA, other federal agencies, state, tribal and local governments, elected officials, and other community-based organizations to facilitate site redevelopment is important. These efforts include training and outreach on: the overall site cleanup process as it relates to redevelopment potential; key components of land use and economic development planning; and funding and financing tools to better support communities and to promote Superfund redevelopment. Local planning departments and elected officials are critical in developing land use alternatives, especially during the RI/FS cleanup phase. Making sure interested parties have training in and basic knowledge of the site cleanup process helps inform future use decisions and helps facilitate interested parties' ability to promote site-specific Superfund redevelopment.

Providing training that identifies specific near-term community actions will help community stakeholders understand a site's market potential and limitations, including how to enhance a site's attractiveness for future development opportunities. Initial community work demonstrates commitment to site reuse and signals to developers that the community is a willing partner.

Reuse is further promoted when the community, including developers, has access to robust information about an individual site and surrounding sites. This information includes knowledge of the site types businesses/industries/developers are potentially interested in redeveloping.

RECOMMENDATION 33: Focus Redevelopment Efforts on 20 NPL Sites with Redevelopment Potential and Identify 20 Sites with Greatest Potential Reuse

What was accomplished?

In January 2018, EPA released the Redevelopment Focus List of 31 NPL sites with the greatest reuse potential. EPA developed this list to promote renewed focus on accelerating Superfund site progress while working to successfully return Superfund sites to productive use in communities across the country. To identify sites, EPA coordinated extensively within the Agency, as well as with state counterparts and site owners. Since the list's release and to publicize site information, EPA has provided training, tools, and resources, including more than 100 new or updated case studies, fact sheets, reports, and online materials about these 31 sites and other regionally identified priority sites. Reuse fact sheets provide site owners, future site users, prospective purchasers, lenders, and developers with site-specific information from both Superfund cleanup and real estate-oriented perspectives while both case studies and fact sheets explore Superfund reuse stories and document which redevelopment strategies worked, acknowledge reuse barriers, and provide understanding as to how communities overcame barriers to create new reuse outcomes. Case studies, fact sheets, and other online materials are available on EPA's Superfund Redevelopment Initiative website at https://www.epa.gov/superfund-redevelopment-initiative.

EPA used the lessons learned from the initial January 2018 Focus List effort to expand support to more sites and to broader redevelopment opportunities. The list of "Redevelopment Opportunity" sites as well as fact sheets for each site, are available at https://www.epa.gov/superfund-redevelopment-initiative/superfund-redevelopment-opportunity-sites. Additionally, EPA developed an interactive tool that highlights Superfund Redevelopment Opportunity sites and helps promote these sites' revitalization. The Superfund Redevelopment Opportunity Sites story map is available at https://arcg.is/vn8H5.

Since July 2017, EPA outreach activities to engage communities, stakeholders, and EPA staff on Superfund redevelopment have included the following:

- Provided tools and resources to Redevelopment Opportunity sites, as well as other priority sites identified by the regions.
- Responded to more than 250 redevelopment-related prospective purchaser inquires for Redevelopment Opportunity sites, in addition to other sites garnering interest.
- Provided site stakeholders, businesses, and developers interested in Superfund site reuse with the requisite information to understand the site cleanup and redevelopment process, including associated liabilities and obligations.
- Delivered training, both in person and via webinar, for site stakeholders, businesses, developers, and the public, as well as for EPA staff across waste programs with a land revitalization interest. Training opportunities included:
    - Conducting seven training webinars for EPA staff and three public webinars. The June 2018 internal webinar, "Redeveloping Contaminated Properties," trained EPA staff in engaging industries, businesses, and developers regarding redevelopment at all EPA cleanup program site types. Two "Introduction to EPA's Superfund Redevelopment Initiative" webinars were held in 2019 to ensure EPA staff have the tools and strategies they need to work with communities on reasonable future land use determinations, which are critical to selecting and implementing remedies that support reuse;
    - Providing two half-day training sessions for EPA and other state and federal agency staff and highlighting reuse at the 25th National Association of Remedial Project Manager training conference in December 2017;
    - Sharing information on reuse planning, training, and redevelopment success stories with attendees of the 2017 National Brownfields Conference. EPA met with community members, developers, contractors, state representatives, and other interested parties to share redevelopment information;
    - Participating in the 2018 Wildlife Habitat Council's Conservation Conference to share redevelopment information and to discuss opportunities for reuse partnerships, ecological revitalization, wetland mitigation, and greener cleanups with conference attendees;
    - Developing materials for the 2018 EPA Community Involvement Training Program to help Superfund community involvement coordinators understand Superfund redevelopment and to ensure they are equipped with the tools to support communities and stakeholders interested in redevelopment; and
    - Delivering redevelopment and enforcement-related training sessions in Regions 7 and 10 for EPA and state agency staff.

How are the accomplishments integrated into the program?

EPA has integrated these accomplishments into the Superfund Redevelopment Initiative and Brownfield programs' routine operations. The activities resulting from the Goal 4 recommendations are consistent with EPA's Superfund Redevelopment Initiative mission – to ensure that effective processes and tools needed to return Superfund sites to beneficial reuse are available to stakeholders, communities, developers, and property owners. EPA will continue to focus on providing direct support and training to EPA regions, as well as site-specific information to communities, stakeholders, and developers interested in site redevelopment. EPA will also continue to share tools and information through a variety of internal and external trainings, meetings, and conferences. Through its training, best practices, and case studies, EPA will stress the importance of understanding future use early in the cleanup process to help ensure realization of a site's redevelopment potential. EPA will continue to provide direct support to communities through technical assistance, and redevelopment experts and regional Superfund Redevelopment Initiative coordinators will continue to provide support to EPA site teams and stakeholders, as needed. As appropriate, redevelopment or reuse is a goal for all sites. The Redevelopment Focus List will be retired, and future EPA efforts will be part of the re-invigorated Superfund Redevelopment Initiative.

How will the accomplishments be sustained?

EPA will continue to prominently post on the Superfund Redevelopment Initiative website site-specific redevelopment information for stakeholders, developers, and businesses. Additionally, the Agency will identify and promote best practices for working with potential developers across EPA's regional offices. EPA will continue to ensure accurate liability tool

information is available to interested parties. These tools can be incorporated into the prospective purchase inquiry toolbox, currently a joint effort between regional Superfund enforcement and cleanup staff. Site redevelopment training will continue to be available to EPA staff to help ensure the Agency stays abreast of techniques for effectively engaging communities on redevelopment. Training will continue to stress the importance of understanding future use early in the cleanup process. EPA will continue to celebrate redevelopment successes by recognizing entities that contribute to them; the Agency will highlight these successes through case studies, fact sheets, and other materials to share both inspiration and lessons learned.

Armour Road Superfund Site in Missouri

At the Armour Road Superfund site, EPA has worked throughout cleanup with North Kansas City and settling defendants to help position the site for redevelopment. Zoned for commercial retail and mixed land uses, the site is in an area of the city undergoing extensive redevelopment. In January 2018, EPA placed the site on the Superfund Redevelopment Opportunity list.

The former Habco building demolished during the first removal action.

EPA developed a site reuse fact sheet to promote its reuse availability. The fact sheet provides photographs and site information such as: size, surrounding population, geographic location, reuse opportunities, cleanup status, zoning information, and contacts for more information. These fact sheets have been instrumental in providing prospective purchasers, residents, interest groups, and future site users with easy-to-understand site information.

EPA has worked to provide additional information to interested parties through the prospective purchaser inquiry process. EPA enforcement and cleanup staff have collaborated to issue comfort letters for the site and surrounding properties when requested. Comfort letters provide the interested party with EPA's property-specific information and potentially applicable Agency policies to help inform the party's acquisition and development decisions. EPA has also served as a critical link, between developers and North Kansas City, the owner of the site, and its surrounding property.

The site's current conditions - a site ready to be developed and repurposed.

Arrowhead Refinery Co. Superfund Site in Minnesota

The 10-acre Arrowhead Refinery Co. Superfund site is a former waste oil recycling facility. The site owner has plans for the property's commercial development. Zoned for commercial uses, the site has excellent highway access and visibility. Utilities and infrastructure connections for electric, water, and sewer are available nearby.

View of land available for development at the site.

Previous EPA efforts entailed reuse assessment support to assist the property owner and local government in evaluating the site's reuse potential. EPA identified the site as a Redevelopment Opportunity site – a site with the greatest expected redevelopment potential. As such, EPA has renewed focus on accelerating site work and progress, while also working to successfully return Superfund sites to productive use in communities across the country.

EPA has worked with the state and the property owner to address reuse barriers and to identify issues related to the site's institutional controls, which are legal and administrative tools that EPA uses to maintain protection of human health and the environment. The site's existing institutional controls unnecessarily restrict the property's development potential. To facilitate these discussions, EPA, in September 2018, compiled a reference tool documenting the site's cleanup, reuse, and institutional controls. The Agency's efforts have identified alternative institutional control approaches, and EPA, the state, and property owner are working to determine how to modify the controls, so they better align with the site's redevelopment goals.

New Bedford Harbor Superfund Site in Massachusetts

From 1938 to the late 1970s, industrial facilities discharged wastes into New Bedford Harbor. Today, EPA is addressing the 18,000-acre site through a cleanup of the estuary system from the upper Acushnet River into Buzzards Bay. After cleanup, the city of New Bedford plans to reuse EPA's cleanup facilities as an intermodal transportation facility. The area, located on the city's working waterfront, will include berthing space for freighters and commercial fishing vessels, a 55,000-square-foot warehouse, and a rail spur that connects to the city's rail yard. In addition, EPA's demolition of the 11-acre Aerovox mill will provide the city with space for future redevelopment along the Acushnet River. EPA Administrator Andrew Wheeler joined community stakeholders and EPA staff for a boat tour (right) of the site's ongoing cleanup in July 2018, as part of activities highlighting Redevelopment Opportunity sites.

EPA developed a reuse fact sheet for the site to promote the availability of the site property for reuse. The fact sheet provides photographs and site information such as size, surrounding population, geographic location, reuse opportunities, cleanup status, zoning information, and contacts for more information. These fact sheets have been instrumental in providing prospective purchasers, local residents, interest groups, and future site users with easy-to-understand information about the site.

RECOMMENDATION 34: Publicize Site Specific Information to Promote Community Revitalization

What was accomplished?

Under this recommendation, EPA focused on developing and providing site-specific information for reuse-ready sites. EPA reorganized the Superfund Redevelopment Initiative website (https://www.epa.gov/superfund-redevelopment-initiative), to reflect Task Force activities and to consolidate information about reuse opportunities into one easily accessible web area, "Promoting Redevelopment." The Agency developed more than 100 new or updated case studies, fact sheets, reports, and online materials to provide site owners, future site users, prospective purchasers, lenders, and developers with site-specific information pertaining to both Superfund cleanup and real estate-oriented perspectives.

EPA developed a prototype Superfund redevelopment interactive map designed to show site information, to outline reuse status and potential, and to provide links to relevant resources. With the map, EPA will communicate timely site information to real estate and land use decision-makers by making Superfund sites and related property assets visible and accessible in a manner akin to a real estate portfolio. Also, making EPA's remedial and institutional control content available spatially will help maximize site redevelopment opportunities. Activities to date have included the following:

- Selected 30 sample Superfund sites for the prototype; the sites cover multiple EPA regions and varied data scenarios.
- Drafted a conceptual plan for the prototype; the plan includes a site search interface, a site area context interface, and a site detail interface.
- Developed sample site detail and area context maps within the GeoPlatform to facilitate discussion.
- Incorporated workshop feedback in a revised concept.
- Developed prototype search interface and national map application featuring data for 30 Superfund sites for internal EPA review.

Sites that have achieved the Agency's Sitewide Ready for Anticipated Use measure are particularly relevant to those interested in reusing Superfund sites or identifying sites that may be able to support additional uses. EPA's Task Force activities to promote reuse at Sitewide Ready for Anticipated Use sites, included the following:

- Ensured that Sitewide Ready for Anticipated Use performance measure information is up-to-date and readily accessible on the Superfund Redevelopment Initiative website;
- Updated the total number of Sitewide Ready for Anticipated Use sites by fiscal year and expanded the list of confirmed Sitewide Ready for Anticipated Use sites to include site reuse status; and
- Updated the Sitewide Ready for Anticipated Use retractions list.

Information on NPL sites achieving the Sitewide Ready for Anticipated Use measure is found at: https://www.epa.gov/superfund-redevelopment-initiative/performance-measures-superfund-sites#SWRAU.

How are the accomplishments integrated into the program?

EPA has integrated these accomplishments into the Superfund Redevelopment Initiative and the Brownfields programs' routine operations. The activities resulting from the Goal 4 Recommendations are consistent with the mission of EPA's Superfund Redevelopment Initiative – to ensure that effective processes and tools needed to return Superfund sites to beneficial reuse are available to stakeholders, communities, developers, and property owners.

Development of the prototype of the Superfund redevelopment interactive map and the sample Superfund site Geographic Information System (GIS) data set displayed within it aligns well with the Agency's concurrent consolidation of Superfund site GIS data within the regions, migration to a standardized data schema, and its eventual presentation in a single nationwide GIS data service. The prototype development process is an opportunity for EPA to evaluate the challenges and considerations for communicating these GIS data to both internal and external audiences, to explore the potential for additional use of the data in the context of other available mapping layers, such as demographic and market-related information, and to assess internal and external information needs that can be supported through the effort.

How will the accomplishments be sustained?

EPA will continue to post site-specific information about sites available for redevelopment prominently on the Superfund Redevelopment Initiative website for stakeholders, developers, and businesses seeking information. Additionally, EPA will identify and promote best practices across the regions for working with potential developers.

Feedback collected during evaluation of the prototype Superfund redevelopment interactive map by the internal EPA geospatial team will help to identify opportunities and challenges and to determine appropriate next steps in the tool's further development. Potential next steps could include, but not are not limited to, adding more sites and collecting more site data, sharing with other internal and external audiences, expanding and refining the data, investigating potential SEMS integration, and more.

Libby Asbestos and Libby Groundwater Contamination Superfund Sites in Montana

The Task Force identified the Libby Asbestos site and the Libby Groundwater Contamination site as Superfund Redevelopment Opportunity sites. This list of sites promotes renewed focus on accelerating work and progress at all Superfund sites while working to successfully return Superfund sites to productive use in communities across the country.

Superfund Redevelopment Initiative -facilitated stakeholder working sessions identified economic development, job creation and recreational tourism opportunities.

The two sites' reuse potential led to their inclusion in EPA's prototype redevelopment-focused interactive mapping tool. The tool provides investors, developers, property owners, and local government agencies with accurate and timely information to inform reuse decision-making.

The Superfund Redevelopment Initiative has supported reuse planning efforts for these sites. A visioning session identified economic development, job creation, and recreational tourism opportunities. Based on outcomes from this first session, EPA Region 8 sponsored a second phase of Superfund Redevelopment Initiative activities to develop strengths, weaknesses, opportunities, and threats analysis as well as holding a second working session with an expanded group of stakeholders and regional economic development experts. This second phase wrapped up in March 2018 with an action plan for the Kootenai Business Park.

Libby's Riverfront Park ribbon-cutting ceremony.

In addition to cleanup restoring neighborhoods and business areas, parts of the sites are now in reuse. Riverfront Park, for example, has river access, pavilions, a memorial, parking, and picnic tables. People put in boats to experience one of the area's many renowned fisheries. At dusk, others take a quiet moment to sit and enjoy the park's mountain views and watch the water flow past. Groups come together for community gatherings and celebrations.

In November 2018, EPA Region 8 recognized the work and collaboration in Libby, Montana, with its Excellence in Site Reuse Award. The Superfund Redevelopment Initiative has developed an in-depth case study and a video documenting cleanup, public health, and revitalization outcomes in Libby.

RECOMMENDATION 35: Build Capacity of EPA and Its Stakeholders on the Broad Community and Economic Development Context for Site Remediation and Redevelopment

What was accomplished?

The Task Force built internal and external capacity to facilitate Superfund redevelopment. Activities included the following:

- Conducted seven training webinars for EPA staff and three public webinars. The June 2018 internal training webinar, Redeveloping Contaminated Properties, trained EPA staff in engaging industries, businesses, and developers regarding redevelopment at all EPA cleanup program site types. Two Introduction to EPA's Superfund Redevelopment Initiative webinars were held in 2019 to ensure EPA staff have the tools and strategies they need to work with communities on reasonable future land use determinations, which are critical to selecting and implementing remedies that support reuse;
- Provided two half-day training sessions for EPA and other state and federal agency staff and highlighted reuse at the 25th National Association of Remedial Project Manager Conference;
- Shared information on reuse planning, training, and redevelopment success stories with attendees of the 2017 National Brownfields Conference. EPA met with community members, developers, contractors, state representatives, and other interested parties to share redevelopment information;

- Participated in the 2018 Wildlife Habitat Council's Conservation Conference to share redevelopment information and to discuss opportunities for reuse partnerships, ecological revitalization, wetland mitigation, and greener cleanups with conference attendees;
- Developed materials for the 2018 EPA Community Involvement Training Program to help Superfund community involvement coordinators understand Superfund redevelopment and to ensure they are equipped with the tools to support communities and stakeholders interested in redevelopment; and
- Delivered training sessions in Regions 7 and 10 for EPA and state agency staff.

How are the accomplishments integrated into the program?

EPA has integrated these accomplishments into the routine activities of the Superfund Redevelopment Initiative and Brownfields programs and expects to deliver future webinars, regional training, and National Association of Remedial Project Manager support. The activities resulting from this recommendation are consistent with the Superfund Redevelopment Initiative's mission. EPA will continue to share tools and information through a variety of internal and external trainings, meetings, and conferences.

How will the accomplishments be sustained?

Site redevelopment training will continue to be available to EPA staff to help ensure the Agency stays abreast of techniques for effectively engaging communities on redevelopment; training will continue to stress the importance of understanding future land use early in the cleanup process.

RECOMMENDATION 36: Engage Superfund Communities in Cleanup and Redevelopment

What was accomplished?

EPA has worked to engage communities affected by cleanup and redevelopment activities by delivering relevant trainings and providing information on the Superfund and Brownfield processes. Specific accomplishments include:

- Developed more than 100 new or updated case studies, fact sheets, reports, and online materials. Case studies and fact sheets explore Superfund reuse stories and document successful redevelopment strategies, acknowledge reuse barriers, and explain community approaches that overcame barriers to new reuse outcomes. Case studies and fact sheets are available at (https://www.epa.gov/superfund-redevelopment-initiative/depth-case-studies-superfund-reuse and https://www.epa.gov/superfund-redevelopment-initiative/superfund-redevelopment-initiative-success-stories.) Other online materials are available on EPA's Superfund Redevelopment Initiative website at (https://www.epa.gov/superfund-redevelopment-initiative).
- Collected and published national economic data for FY 2017 and FY 2018. EPA tracks this economic information to give a general overview of Superfund redevelopment's national beneficial effects. Information on redevelopment economics can be found at https://www.epa.gov/superfund-redevelopment-initiative/redevelopment-economics-superfund-sites.
- Provided trainings and attended meetings, events, and conferences to engage communities and to promote redevelopment.

How are the accomplishments integrated into the program?

EPA has integrated these accomplishments into routine Superfund Redevelopment Initiative activities. EPA regularly publishes case studies, fact sheets, and other online materials to provide examples, tools, and resources for communities and stakeholders to reference when considering site redevelopment. EPA also continues to annually collect and report redevelopment's economic impacts on a national, regional, and site-specific level.

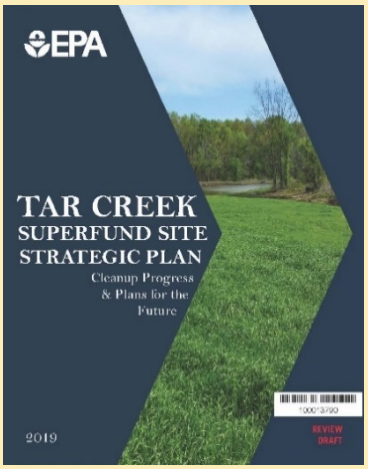
How will the accomplishments be sustained?

EPA will continue to develop site-specific reuse information and to produce material that highlights the processes, best practices, and strategies employed at sites that have been successfully redeveloped. The Superfund Redevelopment Initiative will continue to provide direct support to communities interested in Superfund redevelopment and will continue to ensure that interested parties have key cleanup and redevelopment information.

Tar Creek Superfund Site in Oklahoma

EPA has provided direct support for cleanup and reuse planning efforts at the Tar Creek Superfund site. EPA has developed an innovative strategic plan for the site. The Agency will be cleaning up this large and complicated site for decades and sought to provide all stakeholders, including state and tribal agencies, with a roadmap that outlines a strategic cleanup completion plan. EPA partnered with the Oklahoma Department of Environmental Quality and the Quapaw Nation to develop the plan and related communications materials. This visual roadmap summarizes work done to date, discusses remaining activities, and summarizes EPA's cleanup strategy through 2021, as well as considerations for expediting cleanup over the long term. In March 2019, Region 6 issued a press notice and released the draft Tar Creek Superfund Site Strategic Plan: Cleanup Progress & Plans for the Future document for a 30-day public comment period. A summary document of public comments received will be released with the final strategic plan.

Proposed Bird Dog Pile solar project area at the site.



EPA's draft Tar Creek Superfund Site Strategic Plan: Cleanup Progress & Plans for the Future.

Additionally, EPA has collaborated with the Quapaw Nation Environmental Office and an Oklahoma state power agency, the Grand River Dam Authority, on the development of a solar reuse assessment covering the site portion located on Quapaw Nation tribal lands. The solar reuse assessment's goal is to evaluate the site's solar reuse potential and to define a project location. The solar reuse assessment report, released in April 2019, outlines key agreements to date, project feasibility, economic considerations, RD coordination opportunities, and an action plan to install a 150-megawatt solar photovoltaic installation. Work is ongoing to prepare supplementary financial and land use analysis related to the potential renewable solar energy opportunities.

RECOMMENDATION 37: Recognize and Replicate Local Site Redevelopment Successes

What was accomplished?

In 2019, the Superfund Redevelopment program celebrated 20 years of successfully returning sites to communities for reuse. EPA has focused on awarding more site reuse awards across the regions to recognize redevelopment success and to promote and replicate these successes. EPA developed a 'how-to' guide for EPA staff on planning and issuing site reuse awards. The guide discusses regional reuse award programs and helps EPA staff and site teams explore ways to celebrate achievements and success stories. EPA presented State Excellence in Supporting Reuse awards to three state agencies at the 2017 Association of State and Territorial Solid Waste Management Officials (ASTSWMO) meeting and three state agencies at the 2018 ASTSWMO meeting. Additionally, EPA presented site-specific awards at 12 sites to more than 100 recipients, recognizing community members, local governments, developers, and others for their contributions to site redevelopment successes. Information on sites that received reuse awards is available at https://www.epa.gov/superfund-redevelopment-initiative/superfund-redevelopment-initiative-reuse-awards.

How are the accomplishments integrated into the program?

EPA has integrated these accomplishments into the Superfund Redevelopment Initiative and Brownfields routine program operations. The activities resulting from the Goal 4 Recommendations are consistent with the Superfund Redevelopment Initiative mission – to ensure that effective processes and requisite tools for Superfund sites' beneficial reuse are available to stakeholders, communities, developers, and property owners. EPA will continue to identify redevelopment site successes and to recognize the entities key those successes.

How will the accomplishments be sustained?

EPA will share the 'how-to' guide with the appropriate contacts to help ensure understanding of the reuse awards and attendant award process. The Agency will continue to celebrate redevelopment successes through awards that recognize entities key to those successes. EPA will highlight redevelopment successes in case studies, fact sheets, and other materials to share inspiration and lessons learned.

EPA Reuse Awards Celebrate Local Site Redevelopment Successes

In December 2018, EPA Region 1 participated in a new senior center's ribbon cutting ceremony at the Blackburn & Union Privileges site in Walpole, Massachusetts. During the ceremony, EPA Region 1 presented Excellence in Site Reuse awards to the town of Walpole and to the Walpole Council on Aging for their exceptional leadership and reuse coordination in transforming the site – a former industrial property – into a recreational, educational, and health resource for seniors. Strong community support for the project was evidenced by a $6.8- million contribution from the town of Walpole, $1.4 million raised by private donors, and substantial support from Walpole Co-operative Bank. The new Walpole Co-operative Bank South Street Center is the community's first stand-alone senior center facility.

At the podium: Alex Dunn, Former EPA R1 RA. Right of Alex Dunn: Robin Chapell, Health Director, Town of Walpole; Mark Gallivan, Selectman, Town of Walpole; Jim Johnson, Town Administrator, Town of Walpole; Nancy Barmakian, EPA R1 Acting Director of Land, Chemicals & Redevelopment.

PJP Landfill Superfund Site in New Jersey

Jersey City, New Jersey, has long been a center for heavy industry, and some land uses have contributed to the area's environmental challenges. For example, between 1970 and the mid-1980s, landfilling and illegal waste disposal at the 87-acre PJP Landfill Superfund site, located along the Hackensack River, contaminated soil and groundwater. However, the site's proximity to New York City and major transportation routes has made it attractive to businesses looking for development opportunities in the area.

EPA, the New Jersey Department of Environmental Protection, the city of Jersey City, the PRPs, and the site owner worked together to integrate the site cleanup into the site owner's redevelopment goals. The innovative plan enabled construction of a warehouse on part of the landfill. The remedial cap was incorporated into the construction of a warehouse, transfer station, and associated parking lots.

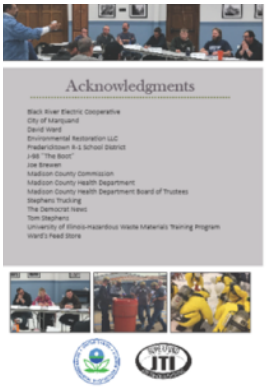
Jersey City Deputy Mayor, Prologis Senior Vice President, and the New Jersey Department of Environmental Protection Deputy Commissioner accept the Excellence in Site Reuse Award for their work at the site.

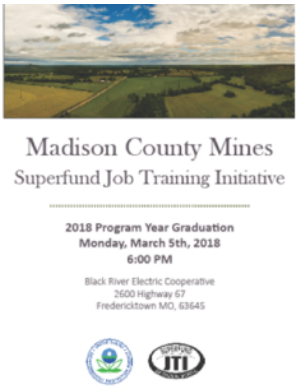
In June 2018, EPA celebrated the remarkable transformation of the site area and recognized stakeholders for their thoughtful work. EPA Region 2 presented Excellence in Site Reuse Awards to the city of Jersey City, the New Jersey Department of Environmental Protection, and Prologis Corporation for their efforts to make the state-of-the-art warehouse and distribution center a reality at the site.

STRATEGY 2:

UTILIZE REUSE PLANNING TO LAY THE FOUNDATION AND SET EXPECTATIONS FOR SITE REDEVELOPMENT

BACKGROUND: EPA can play a significant role in helping communities realize the associated health, economic, and social benefits that accompany Superfund site redevelopment. Cleanup must be coupled with assistance that addresses neighborhood and community redevelopment challenges and expands the community's redevelopment capability. That assistance includes identifying barriers to redevelopment and helping to overcome them.





Additionally, EPA can help communities find ways to enter into partnerships with more public/private organizations and private business organizations, such as real estate professionals, lenders, and developers. Using these partnerships can facilitate reuse by identifying resources, including assistance in connecting sites to potential developers.

RECOMMENDATION 38: Support Community Visioning, Revitalization, and Redevelopment of Superfund Sites

What was accomplished?

As part of the Task Force, EPA focused on providing direct support to communities interested in Superfund redevelopment and ensuring communities have the information they need to plan for site redevelopment. Specific accomplishments include the following:

- Provided or continuing to provide technical assistance to more than 30 communities in all 10 EPA regions through regional seed projects and ongoing regionally funded support. These regional seed projects provide EPA with the opportunity for interactions with a wide range of stakeholders, including property owners, developers, local government officials, state agencies, school districts, community groups, tribes, other federal agencies such as the U.S. Department of Agriculture, development agencies, and other entities;
- Developed technical reuse reports for stakeholders' use to highlight the reuse planning processes and outcomes site specific technical assistance has facilitated;
- Finalized a ready for reuse determination for one site, which communicated land use restrictions and other institutional control information to stakeholders. Such information helps ensure sites are reused safely; also developed or began developing draft ready for reuse determinations as potential tools for three sites;
- Assembled a redevelopment team of EPA experts available to help advise businesses, developers, and stakeholders when needed;
- Conducted regular meetings of regional Superfund Redevelopment Initiative coordinators to discuss regional redevelopment efforts; and
- Supported Superfund Job Training Initiative projects at the Madison County Mines site in Region 7, the Colorado Smelter site in Region 8, and the Fairfax St. Wood Treaters site in Region 4. In March 2018, 24 residents graduated from the Madison County Mines program. During the initial phase of job placement, 18 graduates were placed into positions. In September 2018, 15 residents graduated from the Colorado Smelter program. As of March 2019, seven graduates had been placed into positions on site. In March 2019, 13 residents graduated from the Fairfax St. Wood Treaters program. Eight graduates were hired by remedial contractors into positions on site.

How are the accomplishments integrated into the program?

EPA has integrated these accomplishments into routine Superfund Redevelopment Initiative activities. The activities resulting from portions of this recommendation are consistent with the Superfund Redevelopment Initiative mission – to ensure that effective processes and tools needed to return Superfund sites to productive use are available to stakeholders, communities, developers, and property owners. EPA will continue to provide direct support to communities through

technical assistance. Redevelopment experts and regional SRI coordinators will continue to provide support to EPA site teams and stakeholders, as needed.

How will the accomplishments be sustained?

Superfund will continue to coordinate with Brownfields and other programs to support cross-program efforts where and when appropriate. EPA will continue to provide direct support to communities interested in Superfund redevelopment and to help ensure communities have the requisite site-specific redevelopment information.

Hidden Lane Superfund Site in Virginia

Once a waste disposal facility, the 30-acre Hidden Lane Superfund site is located between two neighborhoods with access to the Potomac River. The abandoned landfill's reuse could provide economic development opportunities, protect wetland areas, and connect communities to an urban waterway. In April 2018, EPA's Superfund Redevelopment Initiative and EPA Region 3 met with local stakeholders, toured the site, and participated in a public meeting to gather comments on the site's interim proposed plan, an EPA document detailing the site's cleanup plan for the site.

The April 2019 public meeting for the Hidden Lane Superfund site in Sterling, Virginia.

Local government representatives noted that exploring redevelopment options for the site aligns well with an update to the local comprehensive plan now underway. The Superfund Redevelopment Initiative conducted a reuse working session with key stakeholders in October 2018 to identify residential and recreational reuse opportunities. A second reuse working session was held in March 2019. A range of site reuse options were confirmed during the working session and subsequently shared at an April 2019 public meeting. Over 50 people attended the meeting to review information about the site's suitability for different types of future use and to provide feedback on use options most suitable with the surrounding area. The Superfund Redevelopment Initiative and EPA Region 3 will continue to work with the Virginia Department of Environmental Quality, Loudoun County, the community, and other stakeholders to ensure redevelopment plans are suitable for the site.

RECOMMENDATION 39: Engage and Facilitate Public/Private Partnerships to Share Information and Resources and Work Toward Advancing and Promoting the Revitalization of the Site.

What was accomplished?

As noted in Recommendation 38, in the past two years, EPA provided or continues to provide technical assistance to more than 30 communities in all 10 EPA regions through regional seed projects and ongoing regionally funded support. These regional seed projects provide EPA with the opportunity for interactions with a wide range of stakeholders, including property owners, developers, local government officials, state agencies, school districts, community groups, tribes, other federal agencies such as the U. S. Department of Agriculture, development agencies, and other entities.

How are the accomplishments integrated into the program?

EPA has integrated these accomplishments into routine Superfund Redevelopment Initiative activities. The activities resulting from portions of this recommendation are consistent with the Superfund Redevelopment Initiative mission– to ensure effective Superfund redevelopment processes and tools are available to stakeholders, communities, developers, and property owners. EPA will continue to provide direct support to communities through technical assistance. Redevelopment experts and regional Superfund Redevelopment Initiative coordinators will continue to support to EPA site teams and stakeholders, as needed.

How will the accomplishments be sustained?

EPA has fully integrated this recommendation into its ongoing mission of helping communities realize their vision for reusing Superfund sites. Building on the past two years of successfully supporting and promoting public/private partnerships, we will continue to work with communities to provide updated site information, reuse assessments, reuse planning support, and visioning workshops. We will continue to encourage the regions to identify sites where seed money

can help leverage additional funds to conduct reuse planning and assessments.

EPA will take the lessons learned from the Task Force to enhance incorporation of redevelopment into the cleanup process, including increasing its focus on building partnerships with property owners, local government officials, state agencies, school districts, community groups, other federal agencies, development agencies, and other entities.

EPA's Superfund Job Training Initiative Provides Skills and Opportunities for Jacksonville, Florida Residents

EPA's Superfund Job Training Initiative is a job-readiness program that provides training and employment opportunities for people living in communities affected by Superfund sites. EPA's goal is to help communities develop job opportunities and partnerships that remain long after a Superfund site is cleaned up. The Superfund Job Training Initiative provides area residents with the technical skills and specialized training needed to work on a broad range of projects in environmental remediation and construction, as well as the cleanup of a Superfund site.

Graduates of Superfund Job Training Initiative pose at the graduation ceremony in Jacksonville.

Community outreach for the Superfund Job Training Initiative project at the Fairfax St. Wood Treaters Superfund site began in December 2018. EPA worked with local partner Northwest Jacksonville Community Development Corporation to advertise the project in newspapers, on the radio, using social media, distributing fliers at area locations, and email blasts. Twenty information sessions were held in the community providing information on the program to interested applicants. After a rigorous screening and recruitment process, 13 trainees were selected to participate in the program. Once selected for the program, the trainees earned three certifications: (1) 40-hour hazardous waste and emergency response, (2) cardiopulmonary resuscitation (CPR)/ first aid and (3) Occupational Safety and Health Administration 10-hour construction safety. Participants also completed coursework in work-readiness training.

A graduate receives his certificate of completion for Superfund Job Training Initiative from Region 4 Superfund Division Director Franklin Hill.

On March 6, 2019, the project's graduation ceremony was held at the Jacksonville Public Library. EPA, site contractors, local partner Northwest Jacksonville Community Development Corporation, representatives of three elected officials, and friends and family of the graduates attended the ceremony. Site contractors have hired eight graduates of the program to work on site.

Rocky Flats Plant Superfund Site in Colorado

This site was home to one of 13 nuclear weapons production facilities in the United States during the Cold War. Managed by DOE, the plant was active from 1952 to 1994. Today, following a $7 billion cleanup and thanks to partnership with DOE, Colorado Department of Public Health and the Environment, and the U.S. Fish and Wildlife Service, part of the site is now home to the Rocky Flats National Wildlife Refuge. Established in 2007, the refuge is managed by the U.S. Fish and Wildlife Service. The 5,237-acre area has striking vistas of the Front Range of the Rocky Mountains and rolling prairie grasslands, woodlands, and wetlands. It is home to 239 wildlife species, including prairie falcons, deer, elk, coyotes, songbirds, and the federally threatened Preble's Meadow jumping mouse. EPA Administrator Andrew Wheeler joined agency officials to celebrate the opening of a new trail system at the refuge in September 2018.

GOAL 5: ENGAGING PARTNERS AND STAKEHOLDERS

STRATEGY 1:

KEY STAKEHOLDER ENGAGEMENT

BACKGROUND: Making the Superfund process more efficient and promoting revitalization to gain long-term benefits for impacted communities must necessarily include building stronger strategic partnerships with key stakeholders across the Superfund process. Such strong partnerships will serve as the underpinnings of this plan's other goals and the basis of relationships going forward.

EPA will deploy an assortment of partnership building activities and engagement opportunities to increase the collaboration with, and impact of, key partners and stakeholders.

RECOMMENDATION 40: Develop a Robust Communications Strategy to Identify and Target Key Stakeholders

What was accomplished?

EPA developed and released a "Partnership and Stakeholder Engagement Strategy" to increase public participation and transparency at Superfund sites and to strengthen EPA's partnerships and engagement with: states, tribal governments, local governments, and regional authorities; environmental and community-based organizations - including Environmental Justice; industry, contractors, and PRPs; land development and banking associations; and other federal agencies.

Photo of EPA's Superfund Task Force Public Participation Opportunities web page linked at https://www.epa.gov/superfund/superfund-task-force-public-participation-opportunities

To implement this strategy, EPA formed an internal stakeholder engagement team to support public participation in the ongoing Task Force recommendations work. The team developed and maintains a web page to inform the public, partners, and stakeholders about the status and results of the Task Force recommendations, including quarterly updates on the status of all recommendations. The Task Force web page can be found at https://www.epa.gov/superfund/superfund-task-force. The web page also features information about events and opportunities for public participation, input, and comment on individual Task Force recommendation activities. EPA also participated in and conducted a series of dialogues via meetings, webinars, and workgroups to strengthen partnerships and engagement to implement the Task Force recommendations.

ECOS formed an ECOS-EPA Superfund Workgroup to work with EPA on implementing the Task Force recommendations. The workgroup holds regular calls with EPA to discuss state comments on Task Force recommendations and provide state input on implementation moving forward. EPA and ASTSWMO developed an approach for providing ongoing state input and to provide regular updates on this work to the ECOS Superfund workgroup. EPA is working with the National Tribal Caucus on a regular engagement process during implementation of the recommendations and moving forward in the Superfund process.

In May and June 2018, EPA's Office of Enforcement and Compliance Assurance hosted nine listening sessions to solicit public and stakeholder input related to specific recommendations and to report on the progress on activities related to the recommendations. More than 680 persons registered to participate in the eight sessions, representing the legal community (private attorneys and law schools); corporations and companies; state, municipal and tribal agencies; environmental and

other non-profit groups including environmental justice organizations; and public citizens. The listening sessions were part of the Agency's efforts to increase public participation and transparency and strengthen communication with stakeholders. The sessions were well received by external stakeholders. During the public remarks section of the sessions, the participants thanked the Agency repeatedly for the opportunity to participate, be part of the process, and provide remarks. Recordings of the listening session can be accessed at: https://www.epa.gov/enforcement/listening-sessions-superfund-task-force-recommendations.

Through the Task Force, EPA has increased its efforts to directly engage communities and stakeholders at Superfund sites. In the first year of the Task Force, senior EPA leaders visited over 40 sites and met with community leaders, local governments, and concerned stakeholders to better understand their issues and options for site cleanup and reuse. EPA senior leaders have also regularly and formally met with stakeholders to discuss the Task Force work and the future of the Superfund Program. For example, on January 24, 2018, they met with representatives from the Center for Health, Environment, and Justice; Texas Environmental Justice Advocacy Service; Texas Campaign for the Environment; Headwater Defense; Local Environmental Action Demanded; Jesus People Against Pollution; United Neighbors Concerned About GE Dewey Loeffel Landfill; Hoosick Falls Support Network; POWER Action Group; Texas Health and Environment Alliance; and San Jacinto River Coalition.

This direct stakeholder engagement with EPA senior leadership and program staff is critical to EPA's mission of protecting human health and the environment around Superfund sites now and over the long-term. Since the inception of the Task Force in 2017 to the third quarter of FY 2019, the Superfund Program has accomplished a number of ongoing outreach activities to engage communities near Superfund sites:

- Held or participated in more than 2,140 public meetings
- Conducted or participated in more than 4,025 in-person meetings or interviews
- Distributed more than 1,250 factsheets, mailings, postcards, ads, or newsletters that reached more than 200,000 people living near Superfund sites

This critical, comprehensive, senior management-to-site management level engagement with affected communities and stakeholders continued and now serves as a standard for EPA efforts throughout the Superfund Program.

EPA refined the goal of Recommendation 40 in 2018 to focus on improving risk communication with communities and stakeholders at Superfund sites, particularly at locations where waste has been left in place and the site requires long-term operation and maintenance and institutional controls (Long-Term Stewardship) (*See* BoRit Asbestos Superfund Site Case Study). EPA has initially focused risk communication evaluations at long-term stewardship sites but expects that the evaluation findings and lessons learned will be directly applicable to all phases of the Superfund cleanup process. By promoting clear and effective risk communications throughout the remedial process, EPA can help communities develop a shared vision for reuse of the site and potentially speed up the cleanup process.

BoRit Asbestos Superfund Site in Pennsylvania

The BoRit Asbestos Superfund site is a legacy of the once robust asbestos manufacturing industry in Ambler, PA. Additionally, the nearby Ambler Asbestos Superfund site holds legacies of its own, including stories of children sliding down its "white mountains" before it became a Superfund site. In comparison, the BoRit site appeared less dramatic, overgrown with vegetation and surrounded by beautiful waterways. But a closer look showed exposed asbestos waste on the site and along the streambanks. A playground sat atop one portion of the site and had to be closed. The houses just across the street would be of most concern for potential exposure. People became concerned about the safety of their community and if the asbestos was going to harm them.

Today, the asbestos waste is capped and the site is ready to be used for recreational or other non-residential purposes. The reservoir portion of the site is currently used as a waterfowl preserve, and the former playground area is expected to become a community park. The asbestos waste portion of the site has been planted with native vegetation to encourage ecological revitalization. The transformation at the site was not only an engineering success but also an example of how the EPA site team worked with the community to understand their concerns and design risk communication strategies to address their specific needs.

The gateway for EPA's risk communication and community involvement activities was the BoRit Community Advisory Group (CAG). Established in 2007, the CAG played an instrumental role in identifying community concerns and disseminating information. Through the CAG, the EPA site team provided neutral facilitation expertise and specialized technical assistance that helped the community understand and comment on EPA's work. Other activities such as open houses, site tours, and community cleanup days were fun and easy ways to get the community involved and helped to build trust. Although the Superfund remedy is now in place, EPA's engagement with the community has only just begun: to build and maintain long-term relationships with local officials and key community members; check and plan for any changing conditions in the community and the site over time; and ensure that the community knows who to contact with questions and concerns.

To accomplish this refined goal, EPA formed an internal team of staff experts and senior leadership (Long-Term Stewardship Risk Communication Team) and charged them to:

- Identify processes, tools, and training for risk communication at long-term stewardship sites that should be enhanced or more effectively used.
- Conduct extensive stakeholder and regulatory partner listening sessions to identify needs, gaps, and weaknesses in risk communications at Superfund sites.
- Develop an action plan and measures for improving risk communication in FY2020

The Team held over twenty meetings with stakeholder groups, advisory committees, regulatory partners, and internal EPA staff groups to listen and get input on: sites and situations that pose significant risk communication challenges; best practices and examples of successful risk communication strategies; and training and technical assistance gaps.

The Team then considered the input from the stakeholder/partner meetings and developed a Superfund Risk Communication Improvement Plan for implementation in FY2020.

Elements of the plan include:

- Evaluate and measure level of community understanding of EPA risk communications at priority, post-construction long-term stewardship sites
- Develop and test communication approaches and tools at the priority sites

- Evaluate how new approaches and tools can be applied early in the Superfund cleanup process
- Continue a national dialogue on improving risk communication at Superfund sites and build and strengthen partnerships to improve risk communication

How will the accomplishments be integrated into the program?

In FY20, EPA will implement the Superfund Risk Communication Improvement Plan. Lessons learned from this effort will be applied across the life-cycle of the Superfund cleanup process.

How will the accomplishments be sustained?

New measures of improvement developed through this plan will be tracked and reported out starting in FY21.

RECOMMENDATION 41: For Federal Facility Sites, Collaborate with Other Federal Agencies to Solicit Their Views on How EPA Can Better Engage Federal Agencies

What was accomplished?

EPA has enhanced its engagement with other federal agencies and states through a multi-step process. First, to examine what was working well, EPA compiled a baseline list of the ways it engages with other federal agencies and states at both the headquarters and Regional levels. Next, EPA incorporated feedback received on this effort and shared the feedback with states and other federal agencies. Finally, EPA prepared and piloted a headquarters-to-headquarters engagement plan with DOD and requested ideas to further refine the plan.

How are the accomplishments integrated into the program?

EPA has regularly-scheduled meetings with other federal agencies and states and has improved these meetings in terms of focus, purpose, and construction through this recommendation. For example, EPA used executive level meetings with DOD and the military components (e.g., Army, Navy, Air Force, and Defense Logistics Agency) to target and resolve critical programmatic issues and site-specific issues at sites like Picatinny Army Arsenal Superfund Site in New Jersey and Hill Air Force Base Superfund Site in Utah. EPA Headquarters staff also participated in regional engagement meetings with states and other federal agencies to discuss national program issues.

How will the accomplishments be sustained?

EPA will continue to seek ways to improve its engagement with other federal agencies and states, emphasizing protective cleanups and recognizing site reuse opportunities and successes. EPA, other federal agencies, and states have committed to continuing early meeting planning and focusing on issues with a problem-solving and action-oriented approach. EPA has invited parties to hold one another accountable to these goals. In addition, EPA will continue to identify best practices and focused engagement opportunities at a national level through organizations like ASTSWMO and ECOS, as well as at a Regional level, through tools like tiered partnering with states and other federal agencies.

RECOMMENDATION 42: Use a Federal Advisory Committee to Work with a Broad Array of Stakeholders to Identify Barriers and Opportunities Related to Cleanup and Reuse of Superfund Sites

What was accomplished?

The National Environmental Justice Advisory Council (NEJAC) was selected to deliver recommendations in response to Recommendation 42. The Office of Environmental Justice worked with the Office of Land and Emergency Management and NEJAC members to develop the charge for Recommendation 42 in two phases: (1) establish the NEJAC Superfund working group and (2) propose guiding principles and recommendations for the final Task Force report.

In establishing the NEJAC Superfund working group, the Office of Environmental Justice worked with NEJAC leadership to develop a diverse array of contamination, remediation, and revitalization experts from across the country representing different levels of government, business and industry, academia, non-profits, and impacted communities. The purpose of the working group was to first provide recommendations for the Task Force final report and second, to provide recommendations on community engagement, integration of remediation and reuse, and risk communication at Superfund sites. A face-to-face meeting of the working group was convened on April 29, 2019. This meeting built upon a series of regular subcommittee meetings in which proposed guiding principles and recommendations were developed.

Proposed guiding principles developed by the working group include: proposed working group recommendations should link to potential actions; the Superfund Program should recognize that impacted communities often have unique concerns; development of trust, adaptation of tools, equitability of engagement and assistance, and clear communication about the Superfund process should all be considered when EPA is working with impacted communities; community enduse goals should be considered from the earliest stages of the process; and Superfund should enable impacted communities to plan for site reuse and community revitalization during the site remediation process.

From the proposed guiding principles, the working group developed a series of draft recommendations. Some examples include: expand Superfund's role beyond cleanup to community asset creation; increase grant resources for reuse planning assistance and community engagement; and expand use of health impact assessments as a planning tool.

How are the accomplishments integrated into the program?

The working group recognized the vital importance of taking prompt action to inform the final Task Force Report and provided recommendations for consideration of Office of Land and Emergency Management and EPA leadership. It also recognized the importance of a longer deliberative process to be completed during the second phase of its work. A major focus of the working group continues to be the development of a case study repository, which would include case examples for Superfund risk communication and community engagement. Another major focus will be the identification of additional resources from across government, private sector, and philanthropy that can advance community revitalization through contaminated site remediation and redevelopment. Finally, the working group will consider whether additional issues related to clean-up and redevelopment of Superfund and other sites should be evaluated for potential recommendations (e.g., legacy contamination, disposal of contaminated materials, emerging contaminants). To inform its analysis during the second phase, the working group will coordinate with EPA to conduct site visits, engage additional technical and community experts, convene dialogues, and take other action.

How will the accomplishments be sustained?

The working group will continue to develop recommendations in accordance with EPA's charge through a series of mechanisms. Contaminated site remediation and redevelopment will be included as a standing item at NEJAC meetings. The Office of Environmental Justice will continue to engage with the Office of Land and Emergency Management's on the implementation of the Superfund Risk Communication Improvement Plan and relevant Task Force performance measures. The working group will observe implementation of Task Force recommendations, conduct site visits, and adapt its recommendations during the second and ongoing phase of its work. The Offices of Environmental Justice and Land and Emergency Management will also engage with NEJAC at a future in-person meeting after completion of the second phase of work to discuss potential implementation of NEJAC's recommendations.

Lacoochee Brownfield Site in Florida

The redevelopment of a brownfield site in rural, unincorporated Northeastern Pasco County, Florida produced environmental, health, and economic benefits for the community of Lacoochee. This clean-up and redevelopment effort serves as a useful example of the NEJAC Superfund working group's recommendations for the Superfund Program.

Speaker of the House, Mr. Will Weatherford, County Commissioner Ted Shrader, US Senator Bill Nelson, Billy E. Brown, CEO, Withlacoochee River Electric Cooperative, Ms. Wansley Walters, Secretary of the Florida Department of Juvenile Justice, State Senator Wilton Simpson

The Lacoochee brownfield site was a former dump that contained elevated polycyclic aromatic hydrocarbons and arsenic in the soil. In 2011, EPA awarded Pasco County a brownfields assessment coalition grant and in 2015, a cleanup grant. A Phase I Environmental Site Assessment Investigation revealed much of the site was used historically as a borrow pit, with evidence that excavated areas were backfilled with undocumented materials. A Phase II Environmental Site Assessment identified and characterized additional areas of potential buried debris. Dozens of Phase I and Phase II environmental site assessments were conducted at brownfields within the coalition partners' target areas from 2011 to 2014. With EPA's cleanup grant, Pasco County excavated and removed contaminated soils to 4 feet below land surface and replaced it with clean soil. Given that EPA brownfields grant recipients work closely with state environmental agencies, the Florida Department of Environmental Protection provided concurrence that the cleanup was complete with institutional controls. In this case, a restrictive covenant will ensure that the future use of the site is limited to a park or recreational uses.

A health impact assessment was deployed to leverage the brownfields grant to develop cleanup plans, conduct public health monitoring, and support community outreach activities. The funding also served to stimulate the cleanup and redevelopment of abandoned and underused sites along regional transportation corridors. The effort resulted in a fully functional, multi-purpose community center which now serves as a community hub for the neighborhood. The 16,000-square-foot center includes a community health center, a Boys & Girls club, a gymnasium with retractable bleachers and indoor basketball court, a Pasco County Sheriff's substation, a library, computer lab and space for job training, a stage for school plays and events, and an industrial kitchen-dining area-concession stand. The community center thus provides access to employment opportunities, social services, recreation, after school/summer programs, at risk youth intervention, and medical services to an area that has been historically underserved. The new community center and parking lot also serve as an engineering control for minor arsenic impacts beneath the area.

Abbreviations

Applicable or Relevant and Appropriate Requirements	ARAR(s)
Association of State and Territorial Solid Waste Management Officials	ASTSWMO
Comprehensive Environmental Response, Compensation, and Liability Act	CERCLA
Clean Water Act	CWA
Department of Defense	DOD
Department of Energy	DOE
Department of Justice	DOJ
Environmental Council of the States	ECOS
Environmental Protection Agency	EPA
Fiscal Year	FY
Geographic Information System	GIS
Memorandum of Understanding	MOU
National Environmental Justice Advisory Council	NEJAC
National Priorities List	NPL
Potentially Responsible Party(ies)	PRP(s)
Remedial Acquisition Framework	RAF
Remedial Action	RA
Remedial Design	RD
Remedial Investigation/Feasibility Study	RI/FS
Record of Decision	ROD
Superfund Alternative Approach	SAA
Superfund Enterprise Management System	SEMS

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