BEYOND BAKE SALES: ENVIRONMENTAL JUSTICE THROUGH SUPERFUND REMOVAL ACTIONS

by Clifford J. Villa

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The Public Interest Environmental Law Conference (PIELC)1 is one of the oldest and the largest conferences of its kind, held every March (pre-pandemic) on the lush green campus of the University of Oregon, in Eugene. It is an excellent place to connect with friends engaged in public interest environmental law or to learn how to howl from a treetop.2 Many years ago, I sat through a PIELC panel about "brownfield sites"³ and how to clean them up. The panelists included folks with some experience applying for brownfields grants from the state. There was also much discussion about the need for community organizations to raise money for site cleanup or cost-sharing requirements.4 After an hour of chat about bake sales and other fundraising ideas, I stood up from the back row during the question-and-answer session and asked if anyone had ever considered engaging with the U.S. Environmental Protection Agency (EPA) and the Superfund removal

Author's Note: Before joining the University of New Mexico (UNM) law faculty in 2015, the author served more than 20 years as an attorney for the U.S. Environmental Protection Agency (EPA), among other things providing legal advice to the Superfund removal programs in EPA Region 8 (based in Denver) and EPA Region 10 (based in Seattle). In August 2022, the author returned to public service as a political appointee to the EPA Office of Land and Emergency Management. Views expressed in this Comment are solely those of the author and do not necessarily represent official views of EPA, UNM, or any other entity.

- 1. See PIELC, Home Page, http://pielc.org/ (last visited Aug. 18, 2022).
- Among the more memorable presenters at PIELC one year was Julia Butterfly Hill, speaking via phone from atop "Luna," a thousand-year-old redwood in northern California. For the full story, see Julia Butterfly Hill, The Legacy of Luna: The Story of a Tree, a Woman, and the Struggle to Save the Redwoods (2001).
- 3. As established by the Small Business Liability Relief and Brownfields Revitalization Act of 2002, the term "brownfield site" means "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §101(39)(A), 42 U.S.C. §9601(39)(A) (2002).
- Under CERCLA \$104(k), 42 U.S.C. \$9604(k)(9)(B)(iii), recipients of brownfields cleanup grants and revolving loans must generally meet requirements for a 20% matching share. CERCLA \$104(k)(9)(B)(iii), 42 U.S.C. \$9604(k)(9)(B)(iii).

program to get a contaminated site cleaned up. Met with blank stares from around the crowded room, I quietly sat back down.

Years later, after leaving EPA to join the legal academy, I continued to notice the same thing. It is not just youthful activists, but also lawyers and law professors with experience in environmental law. Few people outside of EPA seem to be aware of the existence of the Superfund removal program, a program through which millions of dollars are allocated through EPA's 10 regional offices each year for cleaning up contaminated sites that are *not* designated "Superfund" sites.

This Comment will provide a basic introduction to the Superfund removal program, and particularly encourage consideration of Superfund removals to address growing concerns for environmental justice. Part I examines the legal authorities and limitations of the Superfund removal program. Part II provides examples of removal actions in environmental justice communities across the country. Part III considers the requirements of environmental justice and how those requirements may be addressed by the Superfund removal program. Part IV concludes.

I. Superfund Removal Authority and Limitations

The primary federal authority for addressing contaminated sites in the United States is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA),⁵ known popularly as "Superfund." Under Superfund, contaminated sites may be addressed through three major programs: (1) brownfields funding; (2) remedial action; and (3) removal action. In general, the EPA Brownfields Program provides states, tribes, local governments, and nonprofit organizations with funding through grants and loans to assess and clean up contaminated sites within their areas of concerns. 6 Remedial actions are gener-

 ⁴² U.S.C. §§9601-9675, ELR STAT. CERCLA §§101-405. For an excellent overview of the entire CERCLA statute, see JOEL A. MINTZ ET AL., A PRACTICAL INTRODUCTION TO ENVIRONMENTAL LAW Ch. 9 (2017).

See U.S. EPA, Brownfields, https://www.epa.gov/brownfields (last updated May 12, 2022).

ally expensive, multi-year efforts to address large, complex contaminated sites. By contrast, removal actions are generally quicker, less expensive actions to address smaller, less complex sites. Expensive actions to address smaller, less complex sites.

This part will first examine the legal framework establishing where and how removal authorities may be used to clean up contaminated sites. I will then compare removal authorities to both remedial authorities and brownfields funding to identify the relative advantages and disadvantages of each, particularly for underserved communities that may have environmental justice concerns.

A. Removal Framework

As the popular name of "Superfund" suggests, there is indeed a "fund" that EPA may use to investigate and clean up contaminated sites. That fund, known officially as the Hazardous Substance Superfund, allows EPA to receive, hold, and expend appropriated funds from the U.S. Congress, as well as recovered funds from judgments and settlements with responsible parties, for purposes specified in the statute. Authorized uses of the fund include "[p] ayment of governmental response costs incurred pursuant to [CERCLA §104] "¹¹

CERCLA \$104, in turn, provides EPA with its primary authority for cleaning up contaminated sites. Under this provision,

[w]henever (A) any hazardous substance is released or there is a substantial threat of such a release into the environment, or (B) there is a release or substantial threat of release into the environment of any pollutant or contaminant which may present an imminent and substantial danger to the public health or welfare, the President is authorized to act, consistent with the national contingency plan, to remove or arrange for the removal of, and provide for remedial action relating to such hazardous substance, pollutant, or contaminant at any time 12

The authority of "the President" in \$104 is largely delegated to EPA,¹³ and redelegated from the EPA Administrator to EPA regional administrators and designated staff¹⁴ in

See CERCLA \$101(24), 42 U.S.C. \$9601(24) (defining "remedial action" to mean "those actions consistent with permanent remedy," to include "storage, confinement, perimeter protection . . . , neutralization, cleanup . . . , dredging or excavations, . . . incineration, provision of alternative water supplies, and . . . permanent relocation of residents and businesses and community facilities").

the 10 EPA regions.¹⁵ The CERCLA statute defines the term "hazardous substance" to incorporate by reference hazardous materials regulated by other environmental statutes,¹⁶ as well as by a long list of designated "hazardous substances" in the national contingency plan.¹⁷ CERCLA defines the term "pollutant or contaminant" more narrowly, to include just those substances that may pose certain threats, such as "death, disease, behavioral abnormalities, cancer, genetic mutation . . . or physical deformations, in such organisms or their offspring."¹⁸ For both "hazardous substances" and "pollutants or contaminants," CERCLA §104 authorizes EPA to provide for cleanup actions.¹⁹ For example, EPA used CERCLA removal authority to address "pollutants or contaminants" to respond to the anthrax attacks on the U.S. Capitol complex in October 2001.²⁰

Notice that nothing in CERCLA \$104 requires designation of a "Superfund site" before EPA may respond to a release of hazardous substances or pollutants or contaminants. Without designation of a Superfund site, ²¹ EPA may exercise its authority under \$104 to clean up contaminated sites, up to a statutory cap of \$2 million, ²² unless exemptions are invoked. One exemption allows for expenditures above \$2 million in order to "prevent, limit, or mitigate an emergency." This emergency exemption was invoked, for example, to allow EPA to exceed \$2 million for response to the blowout of the Gold King Mine in August 2015, which sent an infamous plume of bright orange mine water down the Animas River in southwestern Colorado. ²⁴

See CÉRCLA §101(23), 42 U.S.C. §9601(23) (defining "removal" to mean "the cleanup or removal of released hazardous substances from the environment, such actions as may be necessary . . . in the event of the threat of release," and other actions to include "temporary evacuation and housing of threatened individuals").

^{9. 26} U.S.C. §9507.

^{10.} See CERCLA \$111, 42 U.S.C. \$9611 ("Uses of Fund").

^{11.} CERCLA \$111(a)(1), 42 U.S.C. \$9611(a)(1).

^{12.} CERCLA \$104(a)(1), 42 U.S.C. \$9604(a)(1).

^{13.} Exec. Order No. 12580, \$2(g), 52 Fed. Reg. 2923 (Jan. 29, 1987).

See U.S. EPA, DELEGATIONS MANUAL delegation No. 14-1-A (1987) (delegating CERCLA removal authority to EPA regional administrators and authorizing redelegation to regional division directors and, for removals up to \$50,000, to EPA on-scene coordinators (OSCs)).

^{15.} For a review of the 10 EPA regions and the geographic areas they encompass, see U.S. EPA, *Regional and Geographic Offices*, https://www.epa.gov/aboutepa/regional-and-geographic-offices (last updated Feb. 7, 2022). EPA Region 10, for example, includes the states of Oregon, Washington, Idaho, and Alaska, along with 271 tribal nations. U.S. EPA, *EPA Region 10 (Pacific Northwest)*, https://www.epa.gov/aboutepa/epa-region-10-pacific-northwest (last updated May 12, 2022).

^{16.} CERCLA \$101(14), 42 U.S.C. \$9601(14).

^{17. 40} C.F.R. tbl. 302.4.

^{18.} CERCLA §101(33), 42 U.S.C. §9601(33).

^{19.} One legal distinction between CERCLA "hazardous substances" and "pollutants or contaminants," of perhaps limited significance for community advocates, is that EPA may pursue actions to recover costs for responding to releases of "hazardous substances," but not for costs in responding to "pollutants or contaminants." See CERCLA \$104(a), 42 U.S.C. \$9604(a). This distinction may be immaterial for most communities, who would not likely be engaged in cost recovery activities of any sort unless they had spent their own money in advance to clean up a contaminated site.

See U.S. EPA REGION 3, FEDERAL ON-SCENE COORDINATOR'S REPORT FOR THE CAPITOL HILL SITE, WASHINGTON, D.C. 1 (2002) (noting that the anthrax response "was unique in threat being a biological agent, rather than a hazardous substance").

^{21.} See infra notes 29-31 and accompanying text (national priorities list).

^{22.} CERCLA \$104(c)(1), 42 U.S.C. \$9604(c)(1). Note that this is only a cap on expenditures from the fund; there is no cap on expenditures from other sources, including expenditures by responsible parties under settlement agreements.

^{23.} CERCLA \$104(c)(1), 42 U.S.C. \$9604(c)(1).

^{24.} See Clifford J. Villa, Gold King Mine Spill: Environmental Law and Legal Protections for Environmental Responders, 2019 UTAH L. REV. 263, 322-23 (2019) (noting that EPA "spen[t] nearly \$30 million in the year that followed [the blowout]").

B. Superfund Removals Versus Remedial Action

Another exemption to the \$2 million cap is spending for remedial actions²⁵ at a designated "Superfund site." The potential for expenditures from the fund above \$2 million is the primary benefit of designating a Superfund site. Superfund sites often require cleanup on the order of hundreds of millions of dollars and take decades to complete. Superfund remedial funding can potentially bring substantial resources to underserved communities, providing job training and employment for local residents.

However, community leaders and private parties have often opposed Superfund designation, fearing the liability or stigma that such designation might entail.²⁸ Superfund designation also requires an often lengthy rulemaking process to formally place a site on the national priorities list (NPL),²⁹ frequently inviting both political opposition and legal challenges.³⁰ Given the length and uncertainty of the NPL listing process,³¹ underserved communities may find the Superfund removal program a much faster and more viable alternative for addressing urgent concerns for contaminated sites in their local areas.

Besides the lengthy NPL listing process, another concern with remedial action is the need for matching funds. Under CERCLA, remedial funding generally requires a 10% match from an affected state.³² This matching requirement poses particular challenges for poor states or states with particularly stingy legislatures. The match requirement also means that a state can effectively veto any remedial action by refusing to provide the matching funds, injecting even greater uncertainty into the remedial cleanup process.

Given all the challenges with remedial actions, it should be no surprise that removal actions are far more common. In fiscal year 2020, for example, while only 14 NPL sites reached full completion of cleanup, 197 removal actions were completed: 14 removal actions for every one NPL sites.³³ While NPL sites such as the infamous Love Canal in New York³⁴ tend to command the most attention,³⁵ removal actions remain far more numerous and available to concerned communities across the country.

C. Superfund Removals Versus Brownfields Funding

Given the fact that removal actions can provide for cleanups of up to \$2 million and are far more numerous than remedial actions at NPL sites, why do communities consider brownfields or bake sales or other ways that they might raise money for cleanup? For one thing, there are a *lot* of brownfields—by one early estimate, perhaps 500,000 of them in the United States,³⁶ far exceeding the 200 or so removal actions that may be completed in any one year. For another thing, there are some significant legal limitations on removal actions.

One of the most important limitations on removal actions is the CERCLA "petroleum exclusion," which excludes from the definitions of "hazardous substance" and "pollutant or contaminant" the universe of "petroleum, including crude oil or any fraction thereof," as well as "natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel." By contrast, "brownfields" under CERCLA explicitly may include sites "contaminated by petroleum or a petroleum product" excluded by the "petroleum exclusion." As such, brownfields funding may be available for cleaning up old gas stations, used car lots, residential properties with heating oil leaks, and other sites potentially contaminated by fuel spills. 39

Another advantage of the Brownfields Program over CERCLA removals is local control. Under EPA's Brownfields Program, local governments and community organizations may identify their own concerns and priorities for contaminated sites in their areas and then apply for a

CERCLA \$104(c)(1)(B), 42 U.S.C. \$9604(c)(1)(B) (exception for "appropriate remedial actions").

For a case study of one such "mega-site" in northern Idaho, where mining contamination may require cleanup exceeding \$1 billion, see Clifford J. Villa, Superfund vs. Mega-Sites: The Coeur d'Alene River Basin Story, 28 COLUM. J. ENV'T L. 255 (2003).

^{27.} See U.S. EPA, Superfund Job Training Initiative, https://www.epa.gov/superfund/superfund-job-training-initiative (last updated May 25, 2022).

^{28.} See, e.g., Villa, supra note 24, n.388 and accompanying text (local stakeholders opposed to Superfund listing for Animas River Watershed until after the blowout of the Gold King Mine). For a summary of studies debunking the notion of "Superfund stigma," see CLIFFORD VILLA ET AL., ENVIRONMENTAL JUSTICE: LAW, POLICY & REGULATION 298 (3d ed. 2020).

^{29.} CERCLA \$105(c)(1), 42 U.S.C. \$9605(c)(1).

^{30.} See, e.g., Sunnyside Gold Corp. v. Environmental Prot. Agency, 715 F. App'x 7, 48 ELR 20040 (D.C. Cir. 2018) (dismissing legal challenge to the NPL site including the Gold King Mine site); United States v. ASARCO, Inc., 214 F.3d 1104, 30 ELR 20654 (9th Cir. 2000) (dismissing challenge to scope of the "Bunker Hill Mining Site").

Note, for example, that the 35th Avenue site in Birmingham, Alabama, discussed in Part II, was proposed for NPL listing in 2014 and still remains unlisted today.

^{32.} CERCLA \$104(c)(3), 42 U.S.C. \$9604(c)(3).

U.S. EPA, Superfund FY 2019 Annual Accomplishments Report 10 (2020).

^{34.} For a quick look at the extraordinary history of Love Canal, where a chemical company buried more than 21,000 tons of hazardous chemicals, contaminating soil and groundwater, and eventually requiring the relocation of some 1,000 families, see the story map available at https://storymaps.arcgis.com/stories/5e028d3cc6314334b2bdc092e20e5a3f (last visited Aug. 18, 2022). For a more thorough, factual background on Love Canal, see United States v. Hooker Chemicals & Plastics Corp., 850 F. Supp. 993, 1004-58 (W.D.N.Y. 1993).

^{35.} As one set of expert commentators aptly observed, "The removal program is the understudy to the remedial program's starring role in Superfund." Martha L. Judy & Katherine N. Probst, *Superfund at 30*, 11 Vr. J. Env'r L. 191, 212 (2009)

^{36.} OFFICE OF TECHNOLOGY ASSESSMENT, U.S. CONGRESS, STATE OF THE STATES ON BROWNFIELDS: PROGRAMS FOR CLEANUP AND REUSE OF CONTAMINATED SITES 2 (1995). See also Joel Eisen, "Brownfields of Dreams"?: Challenges and Limits of Voluntary Cleanup Programs and Incentives, 1996 U. ILL. L. REV. 883 n.29 (1996) (providing multiple estimates of brownfield sites in the United States, up to 500,000).

^{37.} CERCLA \$101(14), (33), 42 U.S.C. \$9601(14), (33).

^{38.} CERCLA §101(39)(D)(ii)(II)(aa), 42 U.S.C. §9601(39)(D)(ii)(II)(aa).

^{39.} As one example of brownfields funding used to help clean up and redevelop petroleum contamination, a former gas station in Southeast Portland, Oregon, with tremendous community support, was converted to a community space known today as Tabor Commons, which, among other things, has hosted a café/play space and school music programs. See SE Uplift, Tabor Commons Welcomes a New Tenant, https://www.seuplift.org/tabor-commons/ (last visited Aug. 18, 2022).

variety of grants to address these concerns. Brownfields grants are available from EPA for purposes including site assessment, cleanup activities, job training, and state and tribal revolving loan programs.⁴⁰ As many commentators have observed, the local decisionmaking and action inherent in the Brownfields Program provides significant opportunities for communities with concerns for environmental justice.⁴¹ Through brownfields, community members themselves may identify their cleanup priorities and then pursue funding to address these priorities.

The pursuit of brownfields funding, however, may present many challenges for communities and community members who already struggle with a lack of resources. For example, applicants for brownfields grants may be limited to certain units of government, including states, municipalities, and federally recognized tribes, and to certain nonprofit organizations.⁴² Brownfields funding may involve a lengthy and uncertain application process.⁴³ Work carried out under a brownfields grant may trigger technical requirements such as development of a quality assurance system,⁴⁴ essential components of a quality cleanup, but potentially exceeding the capacity of some community organizations.

Brownfields cleanup work may further trigger many legal requirements, such as compliance with EPA's "all appropriate inquiries" rule⁴⁵ and compliance with other federal statutes such as the Endangered Species Act (ESA)⁴⁶

40. See generally U.S. EPA, Types of EPA Brownfield Grant Funding, https://www.epa.gov/brownfields/types-epa-brownfield-grant-funding (last updated June 30, 2022)

42. See U.S. EPA, Entities Eligible to Receive Brownfields Multipurpose Grants, Assessment Grants, Revolving Loan Fund Grants, Cleanup and Job Training Grants, and Technical Assistance, Training, and Research Grants, https://www.epa.gov/brownfields/entities-eligible-receive-brownfield-grants#multipurpose (last updated Aug. 8, 2022).

and the National Historic Preservation Act.⁴⁷ Brownfields funding is also limited by dollar amounts, with cleanup grants ordinarily capped at \$500,000.⁴⁸ Finally, as indicated in the introduction to this Comment, brownfields grants and revolving loans often require funding recipients to provide a 20% match,⁴⁹ potentially a significant barrier for poor states and low-income communities.

By contrast, Superfund removal actions have a presumptive cap four times higher, \$2 million,⁵⁰ with no matching requirements imposed upon states, tribes, local governments, or nonprofit organizations, perhaps making CER-CLA removals a more attractive option for low-income communities. CERCLA removal actions are also carried out by authorized federal, state, and tribal agencies, imposing no technical or legal requirements upon community members. Perhaps most importantly, CERCLA removal actions can be carried out *fast*, potentially initiated (and even completed) within days of discovering a problem site.⁵¹

Instead of preparing an application for a brownfields grant (and waiting on the reply), community members concerned about a contaminated site in their area may dial this phone number: 1-800-424-8802. This is the phone number of the National Response Center in Washington, D.C., staffed around the clock by the U.S. Coast Guard. Within minutes, a call to this number will be routed to the appropriate EPA regional office, which may choose to respond directly or notify other appropriate response authorities.⁵²

Under CERCLA, removal actions may take many forms. Removal assessments under CERCLA may include "such actions as may be necessary to assess [or] evaluate" a release of hazardous substances. EPA may conduct emergency responses when urgent response is required "to prevent, minimize, or mitigate damage to the public health or welfare or to the environment. "Time-critical" removal actions may be carried out when response must begin quickly in order to protect human health or the environment, and "non-time critical" removal actions may be carried out "whenever a planning period of at least six months exists before on-site activities must be initiated." ERMOVED REMOVED REMOVE

^{41.} See, e.g., Josephine M. Balzac, Public Engagement "Reach In, Reach Out":
Pursuing Environmental Justice by Empowering Communities to Meaningfully
Participate in the Decision-Making Processes of Brownfields Redevelopment and
Superfund Cleanup, 9 Fla. A&M U. L. Rev. 347 (2014); Gabriel A. Espinosa, Building on Brownfields: A Catalyst for Neighborhood Revitalization,
11 VILL. ENV'T L.J. 1, 29-30 (2000) (concluding that brownfields cleanup
and redevelopment of old Sears site in Chicago succeeded, in part, "by including local interests in the planning stages"); Lincoln L. Davies, Working
Toward a Common Goal? Three Case Studies of Brownfields Redevelopment in
Environmental Justice Communities, 18 STAN. ENV'T L.J. 285, 321 (1999)
(concluding that "when redevelopers actually incorporate citizen input into
the final site plan, the goals of environmental justice are more fully met because such incorporation legitimates public involvement and allows citizens
a great measure of self-determinism").

^{43.} For example, for FY2022, EPA required submission of brownfields grant applications by December 1, 2021, with selected applicants provided notice of their selection by May 2022. See U.S. EPA, Solicitations for Brownfield Grants, https://www.epa.gov/brownfields/solicitations-brownfield-grants (last updated Aug. 31, 2022). See also U.S. EPA, FY 2022 ARC GRANT GUIDELINE OUTREACH WEBINAR Q&A TRANSCRIPT (2021), https://www.epa.gov/system/files/documents/2021-10/fy22-arc-grant-outreach-webinar-qa-transcript_oct-13_final.pdf (identifying October 1, 2022, as date funding becomes available).

^{44.} See 2 C.F.R. \$1500.11.

^{45.} See 40 C.F.R. ch. 1, subch. J, pt. 312. The "all appropriate inquiries" rule generally establishes procedures for investigation into current and historical uses of a property and its current environmental condition in order to obtain protection from CERCLA liability. See generally U.S. EPA, Brownfields All Appropriate Inquiries, https://www.epa.gov/brownfields/brownfields-all-appropriate-inquiries (last updated Jan. 11, 2022).

^{46. 16} U.S.C. \$\$1531-1544, ELR STAT. ESA \$\$2-18.

^{47. 54} U.S.C. §§300301 et seq.

U.S. EPA, Brownfields Cleanup Grants, https://www.epa.gov/brownfields/ brownfields-cleanup-grants (last updated July 21, 2022).

^{49.} See supra note 4. One important exception, however, is Brownfields Cleanup and Revolving Loan Fund grants funded under the Bipartisan Infrastructure Law, Pub. L. No. 117-58, 135 Stat. 429, 1403 (Nov. 15, 2021) ("Provided further, That funds provided under this paragraph in this Act shall not be subject to cost share requirements. . . .").

^{50.} CERCLA \$104(c)(1), 42 U.S.C. \$9604(c)(1).

^{51.} See, e.g., infra notes 85-87 and accompanying text (Balsam Road Abandoned Drums addressed by EPA removal action two days after notice from tribe)

^{52.} For a demonstration of how this system works, see Villa, *supra* note 24, at 268

CERCLA \$101(23), 42 U.S.C. \$9601(23) (definition of "remove" or "removal").

CERCLA \$101(23), 42 U.S.C. \$9601(23). See also U.S. EPA; EPA's Role in Emergency Response, https://www.epa.gov/emergency-response/epas-roleemergency-response (last updated June 27, 2022).

 ⁴⁰ C.F.R. §300.415(b)(4). See also Office of Solid Waste and Emergency Response, U.S. EPA, Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA (1993) (OSWER Dir. 9360.0-32).

actions may include temporary relocation of households and businesses.⁵⁶ Removal actions may be carried out directly by EPA or carried out by a "potentially responsible party" with EPA oversight.⁵⁷

Where CERCLA authorizes EPA to conduct a cleanup action, courts have found such action to constitute a "discretionary function," se so that EPA has no affirmative duty to act. If EPA chooses to respond to a notice of a release, it may deploy an "on-scene coordinator" (OSC) to investigate and potentially oversee a cleanup. OSCs work for EPA regional offices, other federal agencies, as well as state and tribal agencies. OSCs, together with their support teams and contractors, train for cleanup actions. They carry credentials, stockpile supplies, and maintain response vehicles in warehouses across the United States. They have specific statutory authorities to support cleanup, 2 and they have delegated authorities to incur costs.

OSCs want to clean up contaminated sites, and for every removal action they complete, their supervisors collect "beans" when it comes time for reporting at the end of the fiscal year. Dialing the National Response Center will not guarantee that a contaminated site gets cleaned up, of course, but it costs nothing to try. And it may in the end get the job done, without bake sales.

- CERCLA \$101(23), 42 U.S.C. \$9601(23) (definition of "remove" or "removal" includes "temporary evacuation and housing of threatened individuals"). See also U.S. EPA, Superfund Response Actions: Temporary Relocations Implementation Guidance (2002).
- 57. See 40 C.F.R. §300.415(a)(2) ("Where the responsible parties are known, an effort initially shall be made, to the extent practicable, to determine whether they can and will perform the necessary removal action promptly and properly")
- 58. The "discretionary function exemption" appears directly in the Federal Tort Claims Act, 28 U.S.C. §1346(b), which generally waives sovereign immunity for certain tort claims against federal agencies, except where the claim is "based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a federal agency or a [federal] employee." Id. §2680(a). According to the U.S. Supreme Court, for the discretionary function exemption to apply, the federal agency must exercise legal authority that involves "an element of judgment or choice." Berkovitz v. United States, 486 U.S. 531, 536 (1988). Although CERCLA itself does not contain an express discretionary function exemption, commentators have observed that the discretionary function exemption "is one of 'substantial historic ancestry in American law' and is inherent in sovereign immunity analysis." See John F. Seymour, Hardrock Mining and the Environment: Issues of Federal Enforcement and Liability, 31 Ecology L.Q. 795, 879 & n.418 (1993).
- 59. See, e.g., Daigle v. Shell Oil Co., 972 F.2d 1527, 1541, 22 ELR 21486 (10th Cir. 1992) (CERCLA cleanup of the former Rocky Mountain Arsenal Superfund site near Denver, Colorado, "involve[s] the very essence of social, economic, and political decisionmaking—the precise policy choices protected by the discretionary function exception"); New Mexico v. Environmental Prot. Agency, 310 F. Supp. 3d 1230, 1263, 48 ELR 20021 (D.N.M. 2018) (concluding that "CERCLA did not prescribe a specific course of action for government employees to follow in conducting the response action at the Gold King Mine").
- 60. For one dramatic story of an OSC being deployed to investigate a site on the eve of Thanksgiving 1999, and discovering one of the deadliest cases of contamination in U.S. history, see Andrew Schneider & David McCumber, An Air That Kills (2004) (asbestos contamination in Libby, Montana). See also United States v. W.R. Grace & Co., 429 F.3d 1224, 35 ELR 20245 (9th Cir. 2005).
- See National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. §300.120 (OSC designation and responsibilities).
- 62. See, e.g., CERCLA \$107(d)(1), 42 U.S.C. \$9607(d)(1) (providing that "no person shall be liable . . . for . . . rendering care, assistance, or advice . . . at the direction of an onscene coordinator").
- 63. See supra note 14 (authority to conduct removal actions up to \$50,000).

II. Superfund Removals and Environmental Justice

Superfund removal actions are happening all the time. For a quick view of this constant removal activity, visit this public website: https://response.epa.gov. Through this website, you can sort by removal actions in your state and you can reach back in time almost 20 years. At the same time, you can also examine demographics⁶⁴ and environmental indicators⁶⁵ for any location in the United States through EPA's geographic information system tool known as EJScreen, available through this public website: https://ejscreen.epa. gov/mapper/. Through a combination of EJScreen and the removal website, you can see that removal actions are occurring in environmental justice communities66 all across the country. A sampling of EPA removal actions in environmental justice communities appears below, to illustrate the range of environmental concerns that Superfund removal actions may address and the diverse communities that such actions may assist.

Vo-Toys Site, Harrison, New Jersey. The Vo-Toys site in Harrison, New Jersey, is an industrial property covering a full city block and including three unoccupied buildings. Beginning in 1882, the property was used for manufacturing of light bulbs and later radio and television tubes by companies including General Electric (GE) and Radio Corporation of America (RCA). In 2015, the property was purchased for redevelopment into residential use. However, redevelopment was halted by the discovery of extensive contamination with elemental mercury

On state and local levels, the concept of an "environmental justice community" is often expressed in other terms, such as "overburdened community." *See, e.g.*, An Act Concerning the Disproportionate and Public Health Impacts of Pollution on Overburdened Communities, S.B. 232, 2020-2021 Reg. Sess. (N.J. 2020) (defining "overburdened community" to mean:

any census block group . . . in which: (1) at least 35 percent of the households qualify as low-income households; (2) at least 40 percent of the residents identify as minority or as members of a State recognized tribal community; or (3) at least 40 percent of the households have limited English proficiency

Healthy Environment for All Act, S.B. 5141, 2021-2022 Reg. Sess. (Wash. 2021) (defining "overburdened community" to mean "a geographic area where vulnerable populations face combined multiple environmental harms and health impacts").

- U.S. EPA Region 2, Action Memorandum, Enforcement Action Memorandum for the Vo-Toys Site, Harrison, Hudson County, New Jersey (July 1, 2019).
- 68. U.S. EPA REGION 2, COMMUNITY UPDATE: Vo-Toys Site Cleanup (2020).

^{64.} Demographics available through EJScreen include "people of color population," "low-income population," "linguistically isolated population," and "population with less than high school education," among other factors. See U.S. EPA, EJScreen: Environmental Justice Screening and Mapping Tool, https://www.epa.gov/ejscreen (last updated Apr. 1, 2022).

^{65.} Environmental indicators available through EJScreen include "particulate matter," "ozone," "traffic proximity," "proximity to national priorities (NPL) sites," and "lead paint indicator," among other factors. *Id*.

^{66.} While there is currently no federal statute defining "environmental justice community," a useful definition appears in the Environmental Justice for All Act, introduced in 2021 in both houses of Congress. According to this proposed legislation, "environmental justice community" means "a community with significant representation of communities of color, low-income communities, or Tribal and indigenous communities, that experiences, or is at risk of experiencing higher or more adverse human health or environmental effects." Environmental Justice for All Act, S. 872, 117th Cong. (2021), H.R. 2021, 117th Cong. (2021).

on the property.⁶⁹ Investigations revealed mercury contamination in all three vacant buildings, with beads and puddles of mercury observed in at least two of the three buildings.⁷⁰ The neighborhood surrounding the property is densely populated, with more than 5,000 people living within a half-mile of the site.⁷¹ According to EJScreen, this same community ranks nationally in the 94th percentile for "linguistic isolation" and 78th percentile for "people of color."⁷²

Even though the buildings remained unoccupied, the New Jersey Department of Environmental Protection considered the site a threat to the surrounding neighborhood in the event of a fire, and the state agency therefore requested removal assistance from EPA.⁷³ Responding to this request, EPA Region 2 worked with GE and other parties to provide for a time-critical response to the site. On December 21, 2020, EPA and GE signed an administrative agreement requiring GE to remove elemental mercury and asbestos from the buildings and eventually demolish all three buildings on the property.⁷⁴ Demolition work was carried out with continuous air monitoring to ensure protection of the surrounding community. By March 2022, all demolition at this site had been completed.⁷⁵

Waymire Drum Site, Los Angeles, California. The Waymire Drum site is located in a mixed residential and commercial/industrial neighborhood of Los Angeles, California. According to EPA, the surrounding neighborhood within a half-mile of the site is highly diverse, with a minority group population of 99% and a Spanish-speaking population of 89%. EJScreen also clearly indicates that this diverse neighborhood is overburdened with environmental stressors, ranking nationally in the 98th percentile for "particulate matter," in the 96th percentile for "traffic proximity," and in the 87th percentile for "lead paint indicator." and in the 87th percentile for "lead paint indicator."

The Waymire Drum site has a long history of industrial use, including the use of caustic solutions for cleaning and reconditioning industrial steel drums. ⁷⁹ In 2019, EPA Region 9 conducted sampling of soils, soil gas, and groundwater at the site and discovered extremely high concentrations of contaminants including trichloroethylene

69. *Id*.

(TCE), tetrachloroethylene (PCE), and vinyl chloride. 80 In one instance, TCE exceeded the residential screening level by 256,250 times. 81

In response to this identified threat to human health, EPA Region 9 began a time-critical removal action in 2019, \$2\$ which later required invoking an emergency exemption to allow for funding beyond the presumptive 12-month and \$2 million spending caps on removal actions. \$3\$ The exemption authorized EPA to spend up to \$2.7 million for immediate and continuing removal actions, to include installation and maintenance of vapor mitigation systems in more than a dozen residential homes and commercial spaces, as well as construction of a pilot system for in situ treatment of contaminated soils at the site. \$4\$

Balsam Road Abandoned Drums, Lac du Flambeau Reservation. On August 14, 2020, the Lac du Flambeau Band of Lake Superior Chippewa Indians reported the discovery of 14 abandoned drums on tribal property in a remote area near Lac du Flambeau, Wisconsin. The drums, originally reported by a nearby resident, were all described as rusty, with several apparently bulging. The tribe contacted EPA Region 5, which responded two days later, on August 16, 2020, with a crew of EPA contractors. EPA contractors safely opened the drums, sampled the contents, secured the drums in new containers, and removed the drums from the site.

35th Avenue Site, Birmingham, Alabama. The 35th Avenue site is located in Birmingham, Alabama, and includes residential communities in North Birmingham contaminated by a legacy of heavy industrial activity. ⁸⁸ In addition to this industrial legacy, Birmingham also has a long history of racial discrimination and racial violence, ⁸⁹

^{70.} U.S. EPA Region 2, supra note 67, at 3.

^{71.} *Id.* at 9

^{72.} Results of EJScreen standard report for "400 South 5th Street, Harrison, New Jersey," facility address provided by *id.* at 1.

^{73.} See Letter from Edward W. Putnam, Assistant Director, Site Remediation and Waste Management Program, New Jersey Department of Environmental Protection, to John Prince, Acting Director, Emergency and Remedial Response Division, U.S. EPA Region 2 (May 15, 2018).

^{74.} U.S. EPA REGION 2, COMMUNITY UPDATE: Vo-Toys Site (2021).

U.S. EPA, Superfund Site: Former GE/RCA Facility, Harrison, NJ, https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0202929 (last visited Aug. 18, 2022).

U.S. EPA REGION 9, REMOVAL ASSESSMENT REPORT: WAYMIRE DRUM SOURCE ASSESSMENT ES-1 (2020).

U.S. EPA Region 9, Community Involvement Plan: Waymire Drum Vapor Intrusion Removal Site 12 (2020).

Results of EJScreen standard report for "7702 Maie Avenue, Los Angeles, California," facility address provided by U.S. EPA REGION 9, supra note 76, at ES-1.

^{79.} *Id.* at 3-1.

^{80.} U.S. EPA REGION 9, APPROVAL AND FUNDING FOR A TIME CRITICAL RE-MOVAL ACTION AT THE WAYMIRE DRUM VAPOR INTRUSION SITE, LOS AN-GELES, LOS ANGELES COUNTY, CALIFORNIA 6 (2019). Among other health threats posed by these contaminants, EPA reports the following:

TCE is carcinogenic to humans by all routes of exposure. Acute exposure to TCE can potentially affect fetal development, irritate the respiratory system and skin, and cause central nervous system effects.... There is strong evidence that exposure to TCE can cause kidney cancer and some evidence that it causes liver cancer and malignant lymphoma (blood cancer).

Id. at 7.

^{81.} *Id.* at 6 (identifying the TCE residential screening level of 16 micrograms per cubic meter ($\mu g/m^3$), and noting one sample as high as 4,100,000 $\mu g/m^3$).

^{82.} U.S. EPA REGION 9, supra note 80.

^{83.} See U.S. EPA Region 9, Action Memorandum, Request for Ceiling Increase and Exemption From the \$2 Million Statutory Limit, and Exemption From the One-Year Statutory Limit to Continue the Removal Action at the Waymire Drum Vapor Intrusion Site, Los Angeles County, CA (Sept. 3, 2020).

^{84.} *Id.* at 1-2.

^{85.} See U.S. EPA, Balsam Road Abandoned Drums, https://response.epa.gov/site/site_profile.aspx?site_id=14884 (last visited Aug. 18, 2022).

^{86.} Id.

^{87.} Id

See generally U.S. EPA, Superfund Site: 35th Avenue, Birmingham, AL, Cleanup Activities, https://cumulis.epa.gov/supercpad/SiteProfiles/index. cfm?fuseaction=second.Cleanup&id=0410750 (last visited Aug. 18, 2022).

^{89.} Among other notable occurrences of racial violence, Birmingham was the scene of the infamous church bombing in 1963 that killed four young Black girls and wounded more than 20 other Sunday church worshippers. See MICHAEL J. KLARMAN, FROM JIM CROW TO CIVIL RIGHTS: THE SUPREME COURT AND THE STRUGGLE FOR RACIAL EQUALITY (2006).

as well as a more recent history as one of the centers of the Civil Rights Movement of the 1960s. Today, EPA expressly describes North Birmingham as "an environmental justice community," identifying the community as 78% Black, and with an unemployment rate of 52%.

Time-critical removal actions began at the 35th Avenue site after a referral to EPA Region 4's Emergency Response program by another EPA Region 4 office.⁹³ In 2011, the Region 4 Emergency Response program collected soil samples from approximately 1,100 parcels in the area.⁹⁴ The EPA program also collected samples from garden produce and partnered with health agencies to collect data from blood-screening events.⁹⁵ High concentrations of toxic metals, including arsenic and lead, were detected in many areas. The highest concentrations of these contaminants were identified in approximately 50 parcels that were originally targeted for time-critical removal.

In 2013, EPA Region 4 invoked CERCLA's emergency exemption on funding limitations to approve spending of \$3,180,000 for the first phase of time-critical removal actions at the 35th Avenue site. After additional sampling and site characterization, the scope of EPA's removal actions at the 35th Avenue site expanded significantly. In 2019, EPA Region 4 approved a funding increase that would allow for cleanup of a total of some 670 properties, for a total site cost of approximately \$83,919,990.

Medford Housing Authority, Medford, Massachusetts. In April 2014, the Massachusetts Department of Environmental Protection requested that EPA Region 1 evaluate a public housing complex known as the Willis Avenue Apartments, run by the Medford Housing Author-

ity (MHA) in Medford, Massachusetts.⁹⁹ MHA contractors had identified high concentrations of lead in surface soils on the property that could present significant health threats, particularly to young residents. In the summer of 2014, EPA conducted soil sampling throughout the housing complex, including at five playgrounds.¹⁰⁰ In October 2015, EPA began excavating contaminated soil and backfilling with clean soil, with this removal work continuing into 2016 and concluding with landscaping and a new watering program.¹⁰¹

According to EPA, almost 80% of the housing complex population were "classified as minority (Black, Asian, or American Indian)." Of approximately 470 individual residents, the majority were specifically described as "being of Haitian-Creole descent." Residents were also qualified for public housing based upon income levels. Removal actions conducted by EPA at the MHA site directly contributed to protecting the health of minority and low-income residents and to providing residents, including children, with safe places to live and play.

My Garden-West Eugene, Eugene, Oregon. The West Eugene neighborhood of Eugene, Oregon, stands in juxtaposition with the lush green campus of the University of Oregon. West Eugene, on the other side of the railroad tracks, is a diverse residential community surrounded by heavy industry, including railyard operations and wood treatment plants. Of Given the plethora of sources of environmental contamination in this community, residents expressed many concerns, including whether it was safe to grow and consume produce from their own gardens. Of answer this particular question, EPA Region 10 exercised its Superfund authority for removal assessment, working with local partners to plan a community event called "My Garden-West Eugene."

^{90.} Among other things, Dr. Martin Luther King Jr. began leading peaceful demonstrations in the city in 1963, and after his arrest on Good Friday 1963, wrote the famous Letter From Birmingham Jail that inspired a call to nonviolent activism around the world. For discussion of Letter From Birmingham Jail in the particular context of the movement for environmental justice that it helped inspire, see Jonathan C. Augustine, Environmental Justice in the Deep South: A Golden Anniversary Reflection on Stimulus and Change, 47 U.S.F. L. Rev. 399 (2013).

^{91.} U.S. EPA REGION 6, COMMUNITY INVOLVEMENT PLAN, 35TH AVENUE SU-PERFUND SITE 3 (2013).

^{92.} Id. at 5.

^{93.} See U.S. EPA Region 4, Action Memorandum, Request for a Time-Critical Removal Action at the 35th Avenue Site (Sept. 25, 2013) (referral from the EPA Region 4 Resource Conservation and Recovery Act (RCRA) Division/Restoration and Underground Storage Tank Branch (RUST)).

^{94.} Id.

^{95.} *Id*.

^{96.} *Id*.

U.S. EPA Region 4, Action Memorandum, Ceiling Increase Under the Consistency Exemption for the Time-Critical Removal Action at the 35th Avenue Site (May 29, 2019).

^{98.} *Id.* at 5. The 2019 funding approval invoked CERCLA's "consistency" exemption, which allows for continued funding beyond the presumptive \$2 million cap for removal actions that are "consistent with the remedial action to be taken." CERCLA \$104(c)(1)(C), 42 U.S.C. \$9604(c)(1)(C). "Consistency" exemptions are usually associated with removal actions occurring on sites included on the NPL. According to EPA's website, the 35th Avenue site was proposed for NPL listing on September 22, 2014, and its NPL-listing status has not changed since then. *See* U.S. EPA, *35th Avenue, Birmingham, AL, Cleanup Activities—What Is the Current Site Status?*, https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second. Cleanup&tid=0410750#Status (last visited Aug. 18, 2022).

^{99.} See U.S. EPA, Medford Housing Authority, https://response.epa.gov/site/site_profile.aspx?site_id=11227 (last visited Aug. 18, 2022).

^{100.} *Id*. 101. *Id*.

^{102.} See U.S. EPA Region 1, Action Memorandum, Medford Housing Authority Site 3 (July 28, 2015), https://response.epa.gov/sites/11227/files/Action%20Memo%20Signed.pdf.

^{103.} *I*

^{104.} See BEYOND TOXICS & CENTRO LATINO AMERICANO, ENVIRONMENTAL JUSTICE IN WEST EUGENE: FAMILIES, HEALTH, AND AIR POLLUTION (2011-2012). According to EJScreen, the West Eugene community, centered around zip code 97402, ranks statewide in the 88th percentile for "low income" and in the 64th percentile for "linguistic isolation."

^{105.} See Camilla Mortensen, Bad Air Days, Eugene Weekly (Sept. 20, 2012), https://eugeneweekly.com/2012/09/20/bad-air-days/.

^{106.} See U.S. EPA, My Garden: West Eugene, https://response.epa.gov/site/site_profile.aspx?site_id=9457 (last visited Aug. 18, 2022). See also Lisa Arkin, My Garden—West Eugene, BEYOND TOXICS, https://www.beyondtoxics.org/work-2/environmental-justice-2/my-garden-west-eugene/ (last visited Aug. 18, 2022). As an attorney for EPA Region 10 at the time, the author discovered that other EPA regions had independently developed programs for mobile soil sampling in residential areas to promote the benefits of urban agriculture. In Philadelphia, the program came to be known as the "Soil Kitchen." See U.S. EPA, Brownfield/Soil Kitchen, https://response.epa.gov/site/bulletins_list.aspx?site_id=6813 (last visited Aug. 18, 2022). In Oakland, EPA Region 9 helped develop the "Fish Bones" project, which applied phosphate minerals from fish bones to urban soils contaminated with lead in order to immobilize the toxic metals in the urban environment. See Kris S. Freeman, Remediating Soil Lead With Fish Bones, 120 ENV'T HEALTH PERSES. 1 (2012).

Figure 1. My Garden-West Eugene (Oct. 19, 2014)



Source: Photo by the author.

Ahead of the event, 250 citizen sampling kits were assembled and distributed throughout the community, together with illustrated sampling instructions in English and Spanish.¹⁰⁷ On Sunday, October 19, 2014, EPA Region 10 set up a mobile laboratory in the community that was equipped to provide instant analysis of soil samples. Throughout the day, community members brought their soil samples to the mobile laboratory and received free, real-time results—none of which, fortunately, indicated contamination enough to implicate danger from growing and consuming produce from their own gardens.¹⁰⁸

Paguate Village, Pueblo of Laguna. The village of Paguate is located on the Pueblo of Laguna, around 40 miles west of Albuquerque, New Mexico. Between the years of 1952 and 1982, operations at the nearby Jackpile Mine moved approximately 400 million tons of rock, producing about 25 million tons of uranium ore. The decades of uranium mining resulted in substantial radiological contamination in surrounding areas, including residential properties on the pueblo.

To address the massive radiological contamination, the Jackpile-Paguate Uranium Mine was listed on the NPL in 2013. However, four years before the site was listed on the NPL, EPA received a verbal request from the Pueblo of Laguna Environment Department for assistance in evaluating pueblo villages for radiological contamination. Based upon the results of the radiological assessment, in 2011, the Pueblo of Laguna requested EPA assistance in conducting a removal action on affected residential properties. In

2012, EPA agreed to conduct a removal action to address radiological contamination in the village of Paguate. The time-critical removal consisted of "the excavation, consolidation, and removal of radiologically contaminated soil/debris and/or radon abatement at 27 residential restructures" within the village of Paguate, at an estimated cost of \$1,764,087.

Yakima Mercury Release, Yakima, Washington. In this case, EPA Region 10 received notification on April 15, 2007, about a residential property in Yakima, Washington, where two youths, ages 12 and 16, had acquired a one-liter bottle of mercury. The For several months, the two youths and at least two other children in the neighborhood had played with the mercury. As a result of this exposure, the 16-year-old had been hospitalized and diagnosed with mercury poisoning. After initial response by the Yakima Fire Department and other agencies, EPA was called to assist with the investigation and cleanup. EPA deployed an OSC to the scene the next day, eventually supported by a response team of at least 10 EPA staff and contractors. 116

EPA found high mercury vapors outside and inside of the residential home. Over a period of months, EPA expended at least \$400,000 to clean up the residential property, which required demolition, disposal, and replacement of many contaminated house structures, to include flooring, plumbing, kitchen cabinets, and countertops. Decontamination and reconstruction of the house structure also required temporary relocation of the family living in the home. 118

The residential property in the Yakima mercury case was located in a largely Spanish-speaking,¹¹⁹ low-income community.¹²⁰ Fourteen years later, the property had a market value substantially less than half the cost to clean it up.¹²¹ However, had EPA failed to exercise its removal authority to clean up the property, the property would likely still be contaminated and uninhabitable, an "attractive nuisance" for criminal activity or curious neighborhood kids. It would be a classic "brownfield," but one lone house with

^{107.} Cliff Villa, Sampling the Garden Soil (on file with author). See also U.S. EPA, Soil Sampling Guide for the October 19, 2014, West Eugene My Garden Project.

^{108.} Villa, supra note 107.

^{109.} U.S. EPA, Superfund Site: Jackpile-Paguate Uranium Mine, Laguna Pueblo, NM, https://cumulis.epa.gov/supercpad/CurSites/csitinfo.cfm?id=0607033& msspp=med (last visited Aug. 18, 2022).

^{110.} *Id*.

^{111.} U.S. EPA Region 6, Memorandum, Request for a Time-Critical Removal Action at the Oak Canyon Site, Pueblo of Laguna, Cibola County, New Mexico (June 29, 2012).

¹¹² Id at 1 15

^{113.} See U.S. EPA, Yakima Mercury Release, https://response.epa.gov/site/site_profile.aspx?site_id=2910 (last visited Aug. 18, 2022).

^{114.} *Id*. 115. *Id*.

^{116.} *Id*.

^{117.} See U.S. EPA Region 10, Action Memorandum, Request for Ceiling Increase for the Yakima Mercury Release Site, City of Yakima, Yakima County, Washington—Amendment #1 (May 1, 2007), https://response.epa.gov/sites/2910/files/yakima%20mercury%20release%20action%20memo%20 amendment1.pdf.

^{118.} Id. at 2.

^{119.} In order to reach the local Spanish-speaking community, EPA took the unusual (at the time) step of producing a community fact sheet in Spanish. See U.S. EPA, DERRAME DE MERCURIO EN LA CALLE SOUTH 6TH STREET: BOLETÍN INFORMATIVO (2007).

^{120.} A search on EJScreen within one-half mile of the residential property indicated the site ranked in the 99th percentile regionally for "low-income population" and 98th percentile regionally for "people of color population." In addition to the mercury contamination, the site was already clearly overburdened with adverse environmental impacts, ranking in the 98th percentile regionally for "particulate matter," 97th percentile regionally for "ozone," and 99th percentile for "lead paint indicator."

^{121.} A Zillow search in 2021 found the property to have a "Zestimate" of \$153,975.

little visibility may not be the kind of brownfield likely to rally community spirit and energy to address through tools such as EPA's brownfields grants or revolving loans.

III. Environmental Justice in the Superfund Removal Process

Following the Civil Rights Movement of the 1960s and the environmental movement of the 1970s, environmental justice emerged as a national concern in the 1980s and early 1990s.¹²² Since then, attention to environmental justice has waxed and waned on the national level with changes in administrations. Environmental justice appeared on the national agenda during the Bill Clinton Administration, with the issuance of Executive Order No. 12898, making environmental justice part of the mission of all federal agencies. 123 After years of neglect under the Donald Trump Administration, 124 environmental justice returned with the Joe Biden Administration to the top of the national agenda.¹²⁵ On state and local levels, too, environmental justice is a growing concern, with many states taking the lead with recently enacted legislation promoting environmental justice.126

While the concept of "environmental justice" remains open to many understandings, the definition used most commonly is the one established and maintained by EPA. According to EPA, "environmental justice" means "the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."¹²⁷

For purposes of this definition, "fair treatment" and "meaningful involvement" form two pillars of envi-

122. See, e.g., Clifford J. Villa, Remaking Environmental Justice, 66 Loy. L. Rev. 469, 481-89 (2020).

- People have an opportunity to participate in decisions about activities that may affect their environment and/or health;
- The public's contribution can influence the regulatory agency's decision;

ronmental justice. Superfund removal actions can serve the pillar of fair treatment in many ways. For example, Superfund removal actions can help provide relief to low-income communities unable to meet brownfields match requirements. Superfund removals can also provide timely response to diverse communities in states unable or unwilling to meet state match requirements for remedial funding at NPL sites. For the pillar of "meaningful involvement," however, Superfund removal actions present greater challenges.

In general, the more urgent the need for cleanup at a site, the fewer the regulatory requirements for community involvement. For example, "whenever a planning period of at least six months exists before on-site activities must be initiated," EPA may be required to conduct an engineering evaluation/cost analysis (EE/CA),132 allow for a formal public comment period of at least 30 days, and provide a written response to comments.¹³³ When a planning period of less than six months exists, EPA does not need to conduct an EE/CA or hold a formal public comment period, but may still be required to provide other community involvement opportunities, such as conducting community interviews and preparing a community involvement plan, if the removal action will extend more than 120 days.¹³⁴ When the removal action may be completed in fewer than 120 days, there is no requirement for community interviews nor a community involvement plan, and a public comment period only needs to be provided "as appropriate." 135

While community involvement requirements in the CERCLA regulations may be spare, especially for time-critical removals, over time, EPA has improved efforts to implement these requirements. For example, many community involvement plans now provide critical background into the history and demographics of an impacted community, 136 and may now even be available in multiple languages. 137 And, of course, EPA OSCs and other removal officials can and often do more than the regulatory minimum. For example, even for time-critical responses, EPA OSCs can and often do hold public meetings in communities to allow for useful exchanges of information and concerns. 138 In some cases, EPA removal actions may respond

- Community concerns will be considered in the decision making process; and
- Decision makers will seek out and facilitate the involvement of those potentially affected.

Id.

Exec. Order No. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7629 (Feb. 16, 1994).

^{124.} See Uma Outka & Elizabeth Kronk Warner, Reversing Course on Environmental Justice Under the Trump Administration, 54 Wake Forest L. Rev. 393, 400 (2019).

^{125.} See, e.g., Exec. Order No. 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, §1, 86 Fed. Reg. 7037 (Jan. 20, 2021) (directing that "the Federal Government . . . must advance environmental justice").

^{126.} See, e.g., Michael B. Gerrard & Edward McTiernan, Emerging State-Level Environmental Justice Laws, N.Y. L.J. (May 13, 2021), https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3978&context=faculty_scholarship (providing a summary of recent environmental justice legislation in states including Massachusetts, New Jersey, New York, and Washington).

^{127.} U.S. EPA, *Environmental Justice*, https://www.epa.gov/environmental justice (last updated Aug. 5, 2022).

^{128.} EPA defines "fair treatment" to mean "[n]o group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies." U.S. EPA, *Learn About Environmental Justice*, https://www.epa.gov/environmentaljustice/learn-about-environmental-justice (last updated Sept. 22, 2021).

^{129.} EPA defines "meaningful involvement" to mean:

^{130.} See supra note 49 and accompanying text (brownfields match requirements).

^{131.} See supra note 32 and accompanying text (NPL state match requirements).

^{132. 40} C.F.R. §300.415(b)(4)(i). The regulations describe an EE/CA as "an analysis of removal alternatives for a site." *Id.* Given requirements for field sampling, laboratory analysis, engineering evaluation, cost analysis, and other components of an EE/CA, it is not unusual for completion of an EE/CA to take years. *See generally* Office of Solid Waste and Emergency Response, *supra* note 55.

^{133. 40} C.F.R. §300.415(n)(4).

^{134.} Id. §300.415(n)(3).

^{135.} Id. §300.415(n)(2)(ii).

^{136.} See, e.g., U.S. EPA REGION 6, supra note 91.

^{137.} See, e.g., U.S. EPA REGION 9, supra note 77, at 12 (available in English and Spanish).

^{138.} In one case, for example, involving a train derailment on June 3, 2016, along the Columbia River near the town of Mosier, Oregon, EPA held com-

directly to community concerns, such as the specific concerns expressed by residents of West Eugene, Oregon, over safety in consuming produce from their gardens.¹³⁹

IV. Conclusion

For many, if not most, students, lawyers, law professors, and other community advocates, "Superfund" means only designated "Superfund sites," and cleanup of contaminated sites that are *not* designated Superfund sites depends entirely on other resources, such as brownfields grants or community-generated fundraising, bake sales, or otherwise. If you have read this far, however, you now know there is another funding alternative, one that often supports assessment and cleanup of smaller sites, every day,

in communities across the country: Superfund removal actions. Tapping into removal action resources may not be easy for many communities, but accessing these resources could begin with a simple phone call. Removal actions may also begin with referrals from other parties, including state or tribal agencies, as illustrated in the case studies in this Comment.

However this work begins, Superfund removal authority can provide substantial resources for addressing environmental and public health concerns, particularly for environmental justice communities, who may have the least resources but the greatest needs for cleanup. Keep the car washes and bake sales for other community needs. For contaminated sites, you might first try calling EPA.

munity meetings on June 5 and June 9, 2016, and brought in community involvement coordinators to address concerns by community residents, many of whom were required to evacuate their homes. U.S. EPA REGION 10, POLLUTION/SITUATION REPORT, MOSIER OIL TRAIN DERAILMENT (2016). Many members of the community, in a largely agricultural region of Oregon, required Spanish translation during public meetings, which was provided by the author's wife, Angie Zavala, then an employee of EPA Region 10. In another, more infamous case, EPA's emergency response to the Gold King Mine blowout, triggered in August 2015 by EPA's own contractors, was followed by at least nine public meetings in 10 days on the Navajo Nation. See Villa, supra note 24, at 269.

^{139.} See supra notes 104-08 and accompanying text (My Garden-West Eugene).

^{140.} See supra note 52 and accompanying text (phone number for National Response Center).