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UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

GREENACTION FOR HEALTH AND ENVIRONMENTAL JUSTICE, a non-profit corporation, Plaintiff, v. UNITED STATES DEPARTMENT OF THE NAVY, a military department and agency of the United States; UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, a United States government agency, Defendants.	Civil No. 3:24-cv-3899-VC FIRST AMENDED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

I. INTRODUCTION.

1. Greenaction for Health and Environmental Justice ("Greenaction") seeks declaratory and injunctive relief for the U.S. Navy's and U.S. EPA's violations of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. § 9601, *et. seq.*,

the National Contingency Plan ("NCP"), 40 C.F.R. § 300.400, *et. seq*., and the *Federal Facilities Agreement for Naval Station Treasure Island – Hunters Point Annex* ("FFA") relating to the cleanup of the former Hunters Point Naval Shipyard Superfund site ("Shipyard" or "HPNS") in San Francisco, California.

2. Greenaction files this action to redress egregious violations of CERCLA, the NCP, and the FFA by the Navy and EPA. They have failed to perform non-discretionary duties imposed by CERCLA and have acted in a manner that is arbitrary, capricious, an abuse of discretion, and not otherwise in accordance with law.

3. Furthermore, the FFA, mandated by 42 U.S.C. § 9620, requires that the Navy and EPA carry out their respective response actions in the Shipyard cleanup in accordance not only with CERCLA and the NCP, but with EPA CERCLA guidances. The Navy has consistently failed to comply with its agreement, including improperly using non-EPA approved methods. EPA has failed to perform its statutory oversight role and responsibilities to enforce the FFA.

4. The Navy's violations of CERCLA, the NCP and the FFA are compounded by the fact that its radiological cleanup contractor, Tetra Tech EC, Inc. ("TtEC"), committed fraud under the Navy's supervision. The nature and extent of the TtEC fraud means that previously uncontaminated areas may have **become** contaminated. It also means that a complete and accurate understanding of the full nature and extent of contamination throughout the site remains unknown. Accordingly, 100% site characterization must be redone.

5. The Navy defended TtEC's data for six years, starting from discovery of the fraud in 2012. However, in late December 2017, EPA released a devastating analysis which found the data so riddled with fraud and quality assurance/quality control ("QA/QC") deficiencies that it all had to be discarded. In 2018, the Navy agreed to discard it.

6. In the wake of the TtEC fraud and despite strenuous public objection, the Navy and EPA agreed to a plan that called for retesting only a third of TtEC's soil remediation. However, under the approved retesting plans, if the one-third retesting found **any** contamination, that discovery would

trigger 100% retesting.

7. This action is prompted by two current and continuing violations of CERCLA, the NCP and the FFA. First, the Navy has reneged on the retesting agreement. Retesting **has** found contamination in all three parcels that have been retested to date, but the Navy has refused – for three (3) years – to retest 100% of TtEC's work.[1] Accordingly, the First Claim for Relief respectfully requests that the Court enforce the FFA, and the retesting agreements based on the FFA, requiring 100% retesting.

8. Second, the Navy's most recent Five Year Reviews, the *Fourth* and *Fifth Five Year Reviews* ("*Fourth FYR*" and "*Fifth FYR*," respectively), were published well beyond the statutory deadline, without legal or factual justification. They also failed to assure that the remedies are protective, as required by CERCLA, the NCP and the FFA. The Second Claim for relief respectfully requests that the court enforce the FFA and CERCLA's non-discretionary Five Year Review mandates.

9. In additional Claims for Relief, Greenaction seeks to compel the Navy and EPA to comply with the FFA and to perform their non-discretionary duties under CERCLA ensuring the remedies are protective of human health and the environment. Specific necessary actions include timely and faithful implementation of the CERCLA and NCP remedy selection process that was done improperly and should have been redone in response to the TtEC fraud but was not. Claims also seek redress for Navy and EPA actions that were arbitrary, capricious, an abuse of discretion, and not otherwise in accordance with law.

10. The story of the Shipyard cleanup is a long and complicated one. To fully understand the Navy and EPA's CERCLA, NCP and FFA violations, it is necessary to summarize the nature of the CERCLA process and the history of this fundamentally flawed cleanup.

11. CERCLA was designed as an iterative process. It builds on data developed during an initial investigation into the history of contamination and its extent. This data is then used as the model

[1] In July 2024, after Greenaction filed this action, the Navy announced it would retest two of the three Parcels, but to Plaintiff's knowledge the Navy and regulators have not, as of the date of this Amended Complaint, committed to 100% retesting in documents that are enforceable under the FFA.

for all subsequent cleanup planning and execution. If the original investigation is not done properly, those errors impact all future decision-making, affecting the cleanup for years.

12. At HPNS, the Navy's investigation into the historical radiological contamination was badly flawed and left uncorrected. Decisions based on these errors have compromised the cleanup ever since. As such, the violations are repeated and continuing until they are rectified.

13. For example, the remedial goals at HPNS were improperly proposed by the Navy and approved by EPA in 2006. EPA apparently recognized its error and has since asked the Navy to update its remedial goals to reflect modern standards. The Navy has not done as EPA asked. As a result, the Navy's improper 2006 decision continues to corrupt the cleanup in 2024.

14. CERCLA anticipates the possibility that information on which decisions are based may turn out to be inaccurate or become outdated and provides mechanisms for correcting them to ensure an approach that protects human health and the environment. Corrective actions range from Explanations of Significant Differences if errors in Records of Decision ("RODs") are relatively minor, to formal ROD amendments when more extensive corrections are required to address fundamental errors. Five Year Reviews are to be used to identify errors associated with the cleanup, which can then be corrected through a ROD amendment. However, the Navy has failed to use the Five Year Review process to correct its errors.

15. Greenaction respectfully asks this court to require that the Navy and EPA comply with CERCLA, the NCP, the FFA and EPA CERCLA Guidance in conducting the cleanup at the Shipyard.

II. JURISDICTION.

16. This Court has subject matter jurisdiction over this action pursuant to 42 U.S.C. §§ 9659(a)(1) and (a)(2), 42 U.S.C. § 9613(j), and 28 U.S.C. § 1331. This case involves a civil action arising under the laws of the United States including CERCLA, 42 U.S.C. § 9601, *et. seq.*, the NCP, 40 C.F.R § 300.400, *et. seq.*, and the FFA, which was adopted pursuant to 42 U.S.C. § 9620.

17. Jurisdiction is also proper in this Court pursuant to 28 U.S.C. §§ 2201 and 2202, which authorize declaratory and injunctive relief, respectively. This Court is also authorized to grant relief

under 5 U.S.C. § 706, and 28 U.S.C. § 2202.

18. This Court has personal jurisdiction over the defendants pursuant to 42 U.S.C. § 9613(b), which grants exclusive original jurisdiction over all controversies arising under CERCLA to the United States district courts.

19. Plaintiff Greenaction has satisfied the 60-day notice requirement imposed by 42 U.S.C. § 9659(d). Greenaction sent a Notice of Intent to Sue by certified mail, return receipt requested, on December 7, 2023, to all necessary parties. To correct inadvertent omissions, Greenaction sent an Amended Notice to all necessary parties by certified mail, return receipt requested, on January 17, 2024. Copies are attached hereto and incorporated herein by reference as Exhibit 1. The Navy and EPA did not resolve the issues alleged in the Notices between the December 7, 2023, Notice and the filing of this action. Accordingly, there exists an active case and/or controversy over the violations alleged in the 60-day Notice and this Complaint.

III. VENUE.

20. Venue is proper in this District under 42 U.S.C. § 9613(b), 42 U.S.C. § 9659(b), and 28 U.S.C. § 1391(b). The Navy and EPA reside in the Northern District of California for purposes of this action. The release and threatened release of hazardous substances into the environment, which form the basis of Greenaction's claims, occurred in San Francisco County, California. The violations of the FFA and of law, and failure to carry out non-discretionary duties by both agencies, took place within this District. Assignment to the San Francisco Division of the Northern District is proper under Local Rule Civil L.R. 3-2(c)-(d).

IV. PARTIES.

21. Greenaction for Health & Environmental Justice, a 501(c)(3) nonprofit corporation, is a multiracial grassroots organization that partners with low-income and working-class communities to fight for health and environmental justice. Its principal address is 466 Geary Street, Suite 300, San Francisco, CA 94102.

22. Greenaction has advocated for San Francisco's Bayview Hunters Point neighborhood, a

historically Black community overburdened by pollution which abuts the Shipyard, for more than twenty-five (25) years. Greenaction brings this citizen action under 42 U.S.C. § 9659.

23. Greenaction's members, contributors, paid staff, volunteers, constituents, and community of supporters live, work and/or recreate in and around the San Francisco Bay area, including the Bayview Hunters Point neighborhood, abutting the Shipyard. Greenaction's mission is to mobilize community power to win victories that change government and corporate policies and practices to protect health and to promote environmental, social, economic and climate justice. Greenaction furthers its goals through education, community organizing, advocacy, and enforcement of environmental laws on behalf of itself and its members.

24. Greenaction's members include citizens, taxpayers, property owners, and residents, with recreational, health, educational, scientific, conservation, aesthetic, psychological, and/or spiritual interests in the air, soil, and water quality of the Hunters Point community. Greenaction has one or more members who live adjacent to or near the Shipyard and use, explore, research, and recreate in or adjacent to areas impacted by the environmental cleanup process and contamination at the Shipyard. Members of Greenaction have suffered and are currently suffering both actual and imminent recreational, aesthetic, health, psychological, scientific, conservational, or other injuries due to Defendants' unlawful actions and delays in implementing an effective cleanup of the contamination at the Shipyard. Defendants' failure to comply with CERCLA, the NCP, the FFA, and EPA CERCLA Guidance in conducting the cleanup at the Shipyard is resulting in the presence of radiation and other contamination that pose health threats to Greenaction's members and are adversely affecting their interests in securing a healthy and safe environment at the Shipyard and in the Hunters Point community. Thus, the interests of Greenaction and Greenaction's members have been, are being, and will continue to be adversely affected by Defendants' failure to take necessary remedial actions under CERCLA, the NCP, the FFA, and EPA CERCLA Guidance. Greenaction's and its members' injuries-in-fact are fairly traceable to Defendants' conduct. Retesting of the site and cleanup of contamination in accordance with the health-protective guidelines of the aforementioned statutes will redress the

injuries to Plaintiff and its members, constituents and community of supporters.

25. Defendants' failure to abide by their cleanup responsibilities and to promptly clean up contamination at the Shipyard is also subverting Greenaction's mission to protect the Hunters Point community and environment. As a consequence of Defendant's unlawful response actions, Greenaction has been compelled to expend resources (exclusive of this litigation) on alternative means of protecting the community, Hunters Point's environment and its members, which has diverted time and resources that could and would have been spent on other activities that are central to Greenaction's mission.

26. Continuing commission of the acts and omissions alleged herein will irreparably harm Greenaction and one or more of its members, for which harm they have no plain, speedy or adequate remedy at law.

27. The United States Navy ("Navy") is the maritime service branch of the United States Armed Forces. Its principal address is 1000 Navy Pentagon, Washington, DC 20350. The Navy is a "person" as defined by 42 U.S.C. § 9601(21) and is the current owner and operator of the Shipyard within the meaning of 42 U.S.C. § 9607(a)(1).

28. The United States Environmental Protection Agency ("EPA") is an agency of the federal government tasked with protecting human health and the environment. Its principal address is 1200 Pennsylvania Avenue, NW, Washington, DC 20004. The EPA oversees CERCLA cleanups pursuant to 42 U.S.C. §§ 9620 for federal facilities like the Shipyard. The EPA is a "person" as defined by 42 U.S.C. § 9601(21).

V. STATEMENT OF FACTS.

A. The Navy Established the Hunters Point Naval Shipyard.

29. This matter arises out of the Navy's mishandling of the cleanup of the former Hunters Point Naval Shipyard.

30. During World War II, the Navy acquired the Hunters Point Dry Dock in southeastern San Francisco and transformed it from a small private dockyard into Hunters Point Naval Shipyard, a

500-acre naval base.

31. Ship repair resulted in both chemical and radiological contamination of the Shipyard. This action primarily concerns the improper remediation of radiological contamination.

32. In the early 1950s, the Navy used HPNS to decontaminate seventy-nine (79) Navy vessels that were contaminated with radiation during a series of nuclear weapons tests in the South Pacific called, "Operation Crossroads." Because radioactivity cannot be neutralized, decontamination transferred the radioactivity from the ships to the Shipyard.

33. The Navy steam-cleaned and sandblasted the ships' surfaces to remove exterior radioactive contamination. The sandblast sand, known as "grit," became highly radioactive. Much of the radioactive grit was disposed of in barrels dumped in the Pacific Ocean near the Farallon Islands. However, a sizable portion of the contaminated sand was either buried or dumped on the Shipyard. Contaminated grit was also washed from the drydocks in which the contaminated ships were sandblasted onto the ground around the drydocks, into San Francisco Bay, and into the Shipyard's sewer systems, contaminating them. Radioactive sandblast grit was also piled near drydocks and stored in uncovered barrels on site, allowing the area's notoriously strong and swirling winds to scatter it throughout the Shipyard.

34. The Navy also removed radioactive "deck markers" from ships. These objects were painted with glowing radium and were used to illuminate pathways for sailors on decks and in corridors. When workers removed these glow-in-the-dark markers, they treated them as novelties, as they were unaware at the time of the dangers of exposure to the radiation they emitted. Workers and sailors disposed of these radioactive objects throughout the Shipyard including in its landfills, dumpsters, and other trash receptacles. Deck markers were tossed aside along roadways and sailors and workers even took them home.

35. Approximately 610,000 gallons of radioactive fuel from the contaminated ships were incinerated in Shipyard boilers. Like the radioactive grit, wind spread the radioactive smoke throughout the Shipyard.

36. Additional radiological contamination resulted from activities of the Naval Radiological Defense Laboratory ("NRDL"), a research center located on the Shipyard which studied the biological impacts of radiation exposure, decontamination methods, radiation protection, nuclear defense strategies, fire safety, and radiation instrument calibration.

37. The Navy ended Shipyard activities in 1974. From 1976 to 1986, the Navy leased HPNS to a private ship repair company.

38. In 1989, EPA listed HPNS on the National Priorities ("Superfund") List ("NPL").

B. Legal Background: CERCLA Imposes a Mandatory Duty of Protectiveness.

39. In 1980, Congress enacted CERCLA in response to demands for the federal government to oversee the cleanup of the nation's most contaminated sites and safeguard the public from their potential danger.

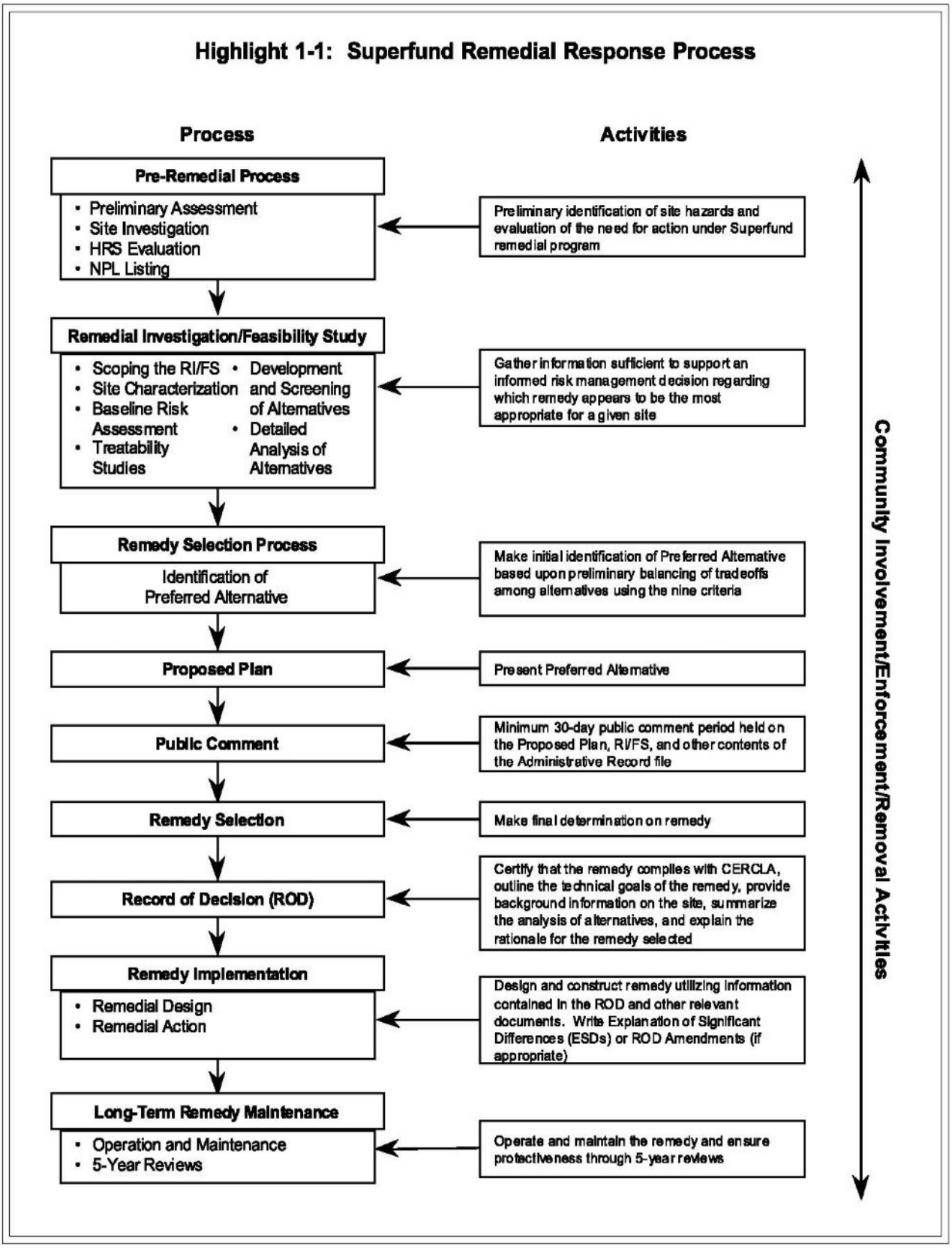
40. In 1986, Congress amended CERCLA through the Superfund Amendments and Reauthorization Act ("SARA"). SARA expanded the original statute and among other things, clarified that federal facilities must adhere to the same cleanup requirements as private entities.

41. CERCLA provides the legal framework for Superfund cleanups. Its primary mandate is protection of human health and the environment. 42 U.S.C. § 9621 imposes a non-discretionary duty on the Navy and EPA to "select remedial actions that protect human health and the environment" at the Shipyard.

42. 42 U.S.C. § 9620 creates a mandatory duty on the Navy and EPA to enter an FFA which governs the cleanup at HPNS, under EPA oversight. Under the statute, the EPA Administrator is the ultimate decisionmaker if there is a dispute between agencies over the cleanup's protectiveness.

43. NCP regulations establish a detailed federal blueprint for CERCLA cleanups, at 40 CFR part 300, subpart E.

44. The following figure depicts a flowchart of the CERCLA cleanup process sourced from the EPA guidance, *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents.*


Highlight 1-1: Superfund Remedial Response Process
Process
Activities
Pre-Remedial Process
• Preliminary Assessment
• Site Investigation
• HRS Evaluation
• NPL Listing
Preliminary identification of site hazards and evaluation of the need for action under Superfund remedial program
Remedial Investigation/Feasibility Study
• Scoping the RI/FS
• Site Characterization
• Baseline Risk Assessment
• Treatability Studies
• Development and Screening of Alternatives
• Detailed Analysis of Alternatives
Gather information sufficient to support an informed risk management decision regarding which remedy appears to be the most appropriate for a given site
Remedy Selection Process
Identification of Preferred Alternative
Make initial identification of Preferred Alternative based upon preliminary balancing of tradeoffs among alternatives using the nine criteria
Proposed Plan
Present Preferred Alternative
Public Comment
Minimum 30-day public comment period held on the Proposed Plan, RI/FS, and other contents of the Administrative Record file
Remedy Selection
Make final determination on remedy
Record of Decision (ROD)
Certify that the remedy complies with CERCLA, outline the technical goals of the remedy, provide background information on the site, summarize the analysis of alternatives, and explain the rationale for the remedy selected
Remedy Implementation
• Remedial Design
• Remedial Action
Design and construct remedy utilizing information contained in the ROD and other relevant documents. Write Explanation of Significant Differences (ESDs) or ROD Amendments (if appropriate)
Long-Term Remedy Maintenance
• Operation and Maintenance
• 5-Year Reviews
Operate and maintain the remedy and ensure protectiveness through 5-year reviews
Community Involvement/Enforcement/Removal Activities

45. Once a site is placed on the NPL, as was done here, a Remedial Investigation ("RI") and Feasibility Study ("FS") are conducted. In accordance with the NCP, 40 CFR § 300.430, the Remedial Investigation's purpose is to "collect data necessary to adequately characterize the site for the purpose of developing and evaluating effective remedial alternatives."

46. In accordance with EPA's *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA,* to characterize the nature and extent of contamination, sampling and analysis should "include the horizontal and vertical extent of contamination in soil, ground water, surface water, sediment, air, biota, and facilities." Further, sampling and analysis should "tak[e] a large number of samples using field screening type techniques and then, based on the results of these samples, taking additional samples – to be analyzed more rigorously – from those locations that showed the highest concentrations in the previous round of sampling."

47. In accordance with the NCP, 40 CFR § 300.430(d)(4), the RI also includes a baseline risk assessment, which is a site-specific assessment that "characterize[s] the current and potential threats to human health and the environment that may be posed by contaminants migrating to ground water or surface water, releasing to air, leaching through soil, remaining in the soil, and bioaccumulating in the food chain." The findings of the baseline risk assessment help develop acceptable exposure levels for remedial options in the Feasibility Study. EPA's *Risk Assessment Guide for Superfund (RAGS) Part A,* explains how to conduct a baseline risk assessment in a manner that fully evaluates potential risks to human health and the environment.

48. In accordance with the NCP and EPA's *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA*, the FS determines, analyzes, and evaluates remedial alternatives. After an initial screening of options, a selected number of alternatives undergo a thorough analysis using nine evaluation criteria outlined in 40 C.F.R. § 300.430(b). Each option under consideration must be protective of human health and the environment.

49. In accordance with the NCP and EPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*, the Proposed Plan for

remediation ("Plan") concisely recaps the alternatives explored during the RI/FS and outlines a Preferred Alternative. The lead agency is required to explain and justify the Preferred Alternative, relying on facts presented in the studies and included in the administrative record, and reasoned analysis.

50. Pursuant to 42 U.S.C. §9617(b), the lead agency is required to share the Plan with the public, solicit public comment and hold a public meeting to facilitate public participation. This section also requires, "a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations." The NCP contains detailed requirements for performing this statutory duty. EPA has also published extensive guidance on how to carry out the public participation requirements mandated by CERCLA and the NCP.

51. The lead agency then makes a final determination on which remedial alternative is chosen. It issues a Record of Decision ("ROD") formally adopting the selected remedy. The ROD must confirm that the remedy selection process was conducted in compliance with CERCLA pursuant to 42 U.S.C. § 9621(a). The ROD sets the cleanup standards, commonly referred to as "remedial goals" ("RGs"), describes technical aspects of the remedy, such as treatment where possible, and describes "institutional controls" limiting future land uses, if they are included in the remedy.

52. CERCLA, the NCP and EPA guidances all recognize that modifications to the ROD are sometimes required. Depending on the nature and extent of the changes, they may be reflected in either an Explanation of Significant Differences ("ESD") or a ROD Amendment, in accordance with 42 U.S.C. § 9617(c) and 40 C.F.R. NCP §§ 300.435(c)(2) and 300.825(a).

53. 42 U.S.C. § 9659 authorizes "any person" to enforce the law if federal agencies do not follow it.

C. The Navy, the EPA, and the State of California Entered into a Federal Facilities Agreement.

54. The HPNS cleanup has been and is being conducted pursuant to 42 U.S.C. § 9620, which governs remediation of federal facilities.

55. As required by 42 U.S.C. § 9620(e)(2), on January 22, 1992, the Navy, the US EPA,

and the State of California, through the Department of Toxic Substances Control, entered into the *Federal Facilities Agreement for Naval Station Treasure Island – Hunters Point Annex* ("FFA").

56. Section 1, "Purposes of the Agreement," declares its purpose is to:

> Establish a procedural framework and schedule for developing, implementing and monitoring appropriate response actions at the Site **in accordance with** the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Contingency Plan (NCP), **Superfund guidance and policy**, the Resource Conservation and Recovery Act (RCRA), RCRA guidance and policy, and applicable State law…. (Emphasis added).

57. The commitment to implementing the HPNS cleanup "in accordance with" CERCLA, the NCP, and EPA guidance is explicitly reiterated throughout the agreement, including but not limited to sections devoted to, "Work to Be Performed," "Review of Documents," "Notice and Opportunity to Comment," and "Public Participation and Community relations."

58. EPA has promulgated multiple CERCLA guidances to help ensure consistent implementation of the federal cleanup program, including but not limited to:

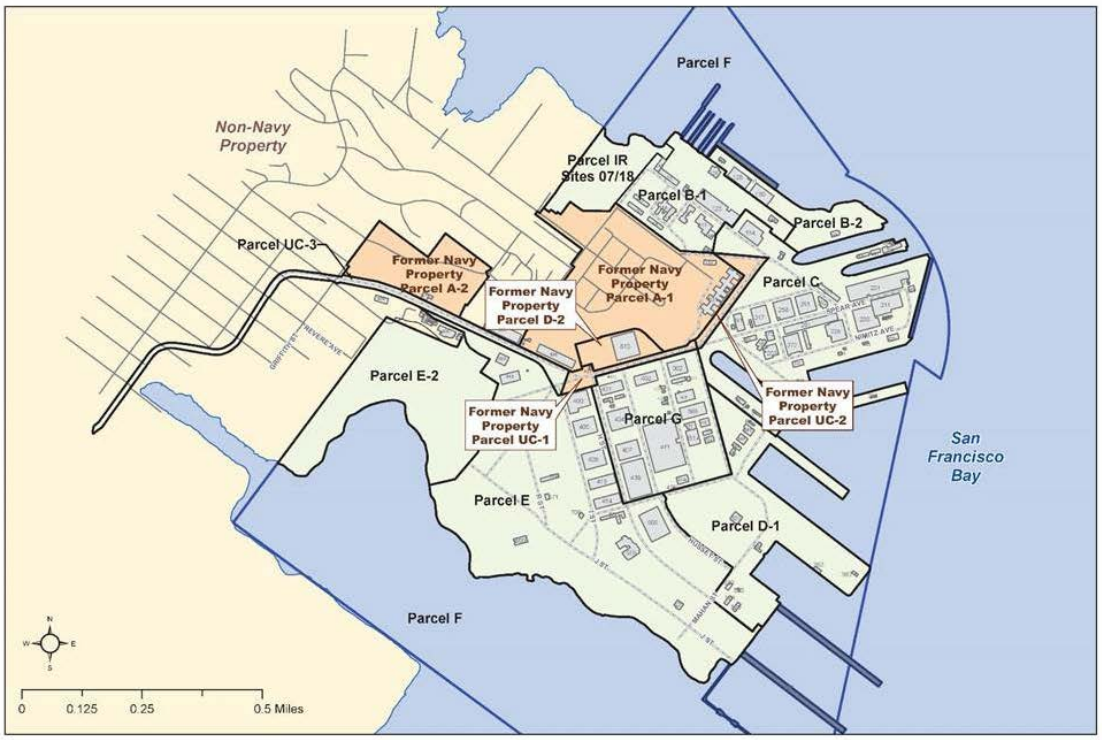
- *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*;
- *Risk Assessment Guide for Superfund (RAGS)*;
- *A Guide to Preparing Superfund Proposed Plans*;
- *Records of Decision, and Other Remedy Selection Decision Documents*;
- *Human Health Toxicity Values in Superfund Risk Assessments*;
- *PRG User's Guide, Land Use Descriptions, Equations, and Technical Documentation*;
- *Preliminary Remediation Goals for Radionuclides;*
- *Superfund Preliminary Remediation Goals for Radionuclides in Buildings (BRPG)*;
- *Land Use in CERCLA Remedy Selection Process*;
- *The Role of Background in the CERCLA Cleanup Program*; and
- *Citizen's Guide to Capping.*

D. The Navy Divided the Shipyard into Parcels.

59. To facilitate the cleanup, the Navy divided the Shipyard into alphabetically designated geographic areas, entitled Parcels A through G. Each parcel represents an area of the shipyard delineated for future commercial, residential, and/or recreational development, except Parcel F, which consists of bay sediment around the Shipyard.

60. Some Parcels have been further subdivided. For example, Parcel B has been divided into Parcels B-1 and B-2. Parcel C was subdivided to create three utility corridors/roadways, entitled Parcels UC-1, UC-2, and UC-3. Parcel D was divided into Parcels D-1, D-2, and G.

61. Following is a diagram depicting the division of the parcels at HPNS.



62. In 2004, the Navy produced its *Historical Radiological Assessment, Volume II, Use of General Radioactive Materials 1939-2003, Hunters Point Shipyard* ("*HRA*") which purports to describe the history of radiological operations conducted by the Navy at the shipyard.

63. The *HRA* indicated Parcel A had not been involved in industrial activities – it was used

primarily for housing. The Navy concluded it was not impacted chemically or radiologically. Accordingly, Parcel A was transferred to the San Francisco Redevelopment Agency in 2004 and then to a developer, which built a housing development there.

64. The Navy originally promised to conduct a full cleanup of all other parcels at the shipyard (except Parcel F), that would meet cleanup standards necessary for unrestricted residential use. This would have required removing all contamination above a remedial goal and not leaving residual contamination at the Shipyard which could preclude the unlimited use of the property, thus obviating the need for long-term monitoring and/or restrictions on future land uses.

65. However, when the Navy began to investigate the contamination on the ground, starting in Parcel B, it found that the *HRA* was inaccurate. Contamination was far more extensive and widespread than the *HRA* described. Cleanup to residential standards would require more work and expense than originally anticipated.

66. As a result, the Navy abandoned its promise to conduct a full cleanup to residential standards. Instead, it changed the fundamental nature of the remedy to include leaving residual contamination behind. To appear to meet CERCLA cleanup standards protective of human health, the Navy's modified remedy called for employing land-use restrictions called "institutional controls" ("ICs"), to prevent future contact with residual contamination it intended to leave behind.

E. The Navy Adopted Improper Remediation Goals for Soils and Buildings.

67. The radiological cleanup at HPNS involved two primary types of contamination: soil and buildings.

68. A large portion of soil contamination was from the sanitary and stormwater systems on the Shipyard, which were thoroughly radiologically contaminated and had to be completely removed. Leaks from these systems contaminated the soil within which they were buried.

69. Existing Shipyard buildings were intended to be decontaminated and repurposed as part of the HPNS redevelopment.

70. The 2004 *HRA* identified 33 "Radionuclides of Concern" at HPNS, that is, radioactive

elements that could cause short- or long-term harm to human health or the environment.

71. The Navy first adopted remedial goals ("RGs") – though it called them "release criteria" – in "Table 1," to its April 21, 2006, *Basewide Radiological Removal Action, Action Memorandum* ("*Basewide Removal Memo*").

72. In accordance with 42 U.S.C. § 9601 (23), a removal action is:

> the cleanup or removal of released hazardous substances from the environment, such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment, such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances, the disposal of removed material, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release.

73. 42 U.S.C. § 9604(a)(2) states, in pertinent part, "Any removal action undertaken by the President under this subsection . . . should, to the extent the President deems practicable, contribute to the efficient performance of any long term remedial action with respect to the release or threatened release concerned."

74. 42 U.S.C. § 9604(c)(1) limits removal actions to those that cost less than $2,000,000 and take up to 12 months to accomplish.

75. In accordance with the NCP, 40 CFR § 300.410, a "removal action" is a short-term remedy to an immediate threat, to be done "as promptly as possible."

76. A "removal action" may be subject to less stringent cleanup standards in the short-term and may need to be followed by "remedial actions" to assure long-term protectiveness.

77. Removal actions are not subject to the public participation provisions of CERCLA and the NCP required for remedial actions.

78. A "remedial action" is defined in 42 U.S.C. § 9601(24), in pertinent part, as:

> those actions consistent with permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment.

79. The NCP defines remedial action in 40 CFR § 300.5. In general, a remedial action is designed to protect public health and the environment permanently. CERCLA remedial actions, like the ones at this site, are subject to the public participation provisions of CERCLA, the NCP and, through application of the FFA, EPA CERCLA guidance.

80. By adopting the "Release Criteria" as part of a "removal action" instead of a "remedial action," the public was not provided with a meaningful opportunity to participate in the remedy selection process, including the development of preliminary and final remedial goals, remedial action objectives and cleanup levels.

81. The *Basewide Removal Memo* adopted RGs for only 11 radionuclides, a third of the 33 "Radionuclides of Concern" identified by the *HRA.* The Navy failed to cite adequate factual or legal justification for excluding two-thirds of the radionuclides of concern.

82. The Navy classified each of 882 shipyard sites as either radiologically "impacted" or "non-impacted." The Navy only classified 91 as "impacted." No further radiological sampling or investigation was conducted for the 791 sites the Navy classified "non-impacted."

83. The Navy's characterization did not consider the radioactive sandblast grit buried or dumped on the base or blown around base by the area's swirling winds. After EPA pointed out this inconsistency, the Navy responded by nominally adding "sediment" as a "potential migration pathway," but not a single site designation changed from "non-impacted" to "impacted" after that change.

84. The Navy also failed to consider the smoke from burning 610,000 gallons of radioactive fuel being blown around the shipyard by the wind.

1. The Soil Remediation Goals Were Adopted Improperly.

85. EPA published a guidance, *Preliminary Remediation Goals for Radionuclides*, for developing Preliminary Remediation Goals ("PRGs"), one of the NCP's critical initial steps in preparing the Feasibility Study. PRGs are used in several ways, including in the consideration of remedial alternatives, in identifying a preferred cleanup alternative, and in determining final

remediation goals selected in a ROD.

86. The Navy has failed to implement the cleanup at HPNS in accordance with the NCP's remedy selection process and associated EPA guidance.

87. EPA's website defines PRGs as "the average concentration of a chemical in an exposure area that will yield the specified target risk in an individual who is exposed at random within the exposure area."[2] In accordance with the NCP and multiple EPA guidances, including *Role of Baseline Risk Assessment in Superfund Remedy Selection Decisions*, EPA has consistently interpreted the CERCLA standard of "protectiveness" to mean remedies that ensure excess lifetime cancer risk is less than one in a million (in scientific notation, $1x10^{-6}$), or if site-specific circumstances justify and regulators allow, not more than one in ten thousand ($1x10^{-4}$).

88. Table 1 of the *Basewide Removal Memo*, which set the RGs, contains footnotes that are key to understanding how the Navy's remediation goals violate the FFA by not being in accordance with CERCLA, the NCP and EPA's CERCLA guidance.

89. Footnote "d" states that its soil release criteria were drawn from "EPA PRGs for two future use scenarios." However, the Navy did not specify what the "two future use scenarios" were or detail the inputs and assumptions associated with them. Nor did it publicly disclose its PRG calculations.

90. The *Basewide Removal Memo* states the soil cleanup goals were "derived" from the EPA's 1991 PRGs but fails to describe how they were "derived."

91. The Navy failed to compare its proposed remedial goals to default soil PRGs published by the EPA in 2004. In some cases, the 2004 EPA default soil PRGs were orders of magnitude more stringent than what the Navy adopted. For example, EPA's default value for europium-152 was .0416 picocuries per gram ("pCi/g"), while the Navy adopted an RG of as .13 pCi/g; the EPA default for europium-154 was .0499 pCi/g, compared to the Navy's RG of .23 pCi/g.

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[2] https://www.epa.gov/risk/calculating-preliminary-remediation-goals-prgs#:~:text=The%20PRG%20is%20the%20average,random%20within%20the%20exposure%20area.

92. Footnote "g," to Table 1 states that the Navy and EPA agreed that the RG for radium would be "1 pCi/g above background." However, neither the Navy nor EPA have ever publicly disclosed the text of this agreement, its factual and/or legal basis, justified it in terms of the CERCLA risk range (1×10^{-6} to 1×10^{-4}), or explained how it accords with the NCP or EPA's CERCLA guidances.

2. The Building Remedial Goals Were Adopted Improperly.

93. In the *Basewide Removal Memo*, The Navy cited two sources for the building RGs, neither of which was in accordance with the NCP and EPA's CERCLA guidance.

94. Footnote "a" to Table 1 cites the Atomic Energy Commission's ("AEC") *Regulatory Guide 1.86*. The cleanup criteria in *Regulatory Guide 1.86* were developed for terminating licenses at nuclear power plants, so plant operators could "show that reasonable effort has been made to reduce residual contamination to as low as practicable levels."

95. "As low as practicable," does not ensure protectiveness of human health and the environment as required under CERCLA. It is not functionally equivalent to the NCP's excess cancer risk range or hazard index, and it is not consistent with EPA's CERCLA guidance. Neither the Navy nor EPA have ever publicly justified why it has been applied to the HPNS cleanup or how it is in accordance with CERCLA, the NCP and/or EPA guidance.

96. *Regulatory Guide 1.86* was more than three decades old when the Navy adopted the HPNS building RGs. And, whereas CERCLA's remedial goals under the national Superfund program are risk-based, the AEG *Regulatory Guide* uses dose-based standards which do not ensure protectiveness of human health and the environment as mandated by CERCLA and the NCP. The *Regulatory Guide* and its dose-based standards are not in accordance with any approved EPA CERCLA guidance. As such, its use violates the FFA.

97. Footnotes "b" and "c" to Table 1 cite "RESRAD-Build Version 3.3," a computer model developed by Argonne National Laboratory and sponsored by the Department of Energy to evaluate doses from residual radioactivity in nuclear power plants.

98. RESRAD-Build was out-of-date when the Navy adopted building RGs in 2006. Footnote "b" states that the building RGs are based on a maximum dose of 25 millirems of radiation per year ("25 mrem/year"). However, in 1997, well before the Navy adopted the HPNS release criteria, EPA issued a CERCLA guidance, *Establishment of Cleanup Levels for CERCLA Sites with Radioactive Contamination*, that explicitly stated that doses above 15 mrem/year, which equates to approximately 3×10^{-4}, were **not** protective of human health as required by CERCLA. Current EPA guidance states that doses above 12 mrem/year are not protective of human health.

99. Like the AEC's *Regulatory Guide,* RESRAD is a dose-based calculation rather than the risk-based one used in the Superfund program in accordance with CERCLA, the NCP and EPA's CERCLA guidance.

100. RESRAD is not an EPA-approved CERCLA method or guidance. Its use does not ensure protectiveness of human health and the environment, as mandated by CERCLA and required by the NCP. As such, RESRAD and its dose-based calculations are not in accordance with an approved EPA CERCLA guidance. The Navy's use of RESRAD violates the FFA.

101. Though the 2006 *Basewide Removal Action Memo* was issued for purposes of a short-term removal action, the Navy applied the RGs adopted in Table 1 to all subsequent long-term remedial actions, including the *Base-wide Radiological Work Plan* in 2007, the RODs for the various parcels, and *Five-Year Reviews*.

102. Despite the deficiencies in the RGs approved by the 2006 *Basewide Removal Action* described above, EPA improperly approved them, though they were not in accordance with CERCLA, the NCP and EPA CERCLA guidance. EPA then ratified its improper approval of the RGs by approving their use in each subsequent Parcel ROD (except Parcel F). EPA has never explained publicly why it took these improper actions.

103. The use of these RGs is not in accordance with CERCLA, the NCP, and EPA guidance. These actions are violations of the FFA, represent failures to ensure protection of human health and the environment, and are arbitrary, capricious, and not otherwise in accordance with law.

3. The Navy Calculated Background Radiation Levels Improperly.

104. The Navy improperly estimated background levels of radiation by failing to adequately demonstrate that the sites selected for background sampling were not radiologically impacted.

105. EPA's 2002 *Soil Background Guidance* states that sampling to determine background in soil should be collected off site, in locations as like on-site conditions as possible.

106. The Navy improperly used a Shipyard site or sites for sampling to determine background levels of radiation. The use of improper background samples in calculating RGs is not in accordance with CERCLA, the NCP, and EPA guidance. These actions are violations of the FFA, represent failures to ensure protection of human health and the environment, and are arbitrary, capricious, and not otherwise in accordance with law.

F. The Navy Issued Records of Decisions for HPNS.

1. Parcel B.

107. The Navy issued its *Hunters Point Shipyard Parcel B Final Record of Decision* ("*Parcel B ROD*"), on or about October 7, 1997.

108. The *HRA* did not identify **any** radiological impact in Parcel B. The *Parcel B ROD* agreed: "Between 1984 and 1991, the Navy performed a series of installation-wide investigations, including ambient air monitoring and radiation investigations, to identify potential sources of contamination at HPS.[3] No air or radiation concerns were identified on Parcel B."

109. Accordingly, the selected remedies in the *Parcel B ROD* dealt exclusively with chemical contamination. There were no radiological remedies considered or selected.

110. However, the *HRA* and the *Parcel B ROD* were wrong, both about the existence of radiological impacts in Parcel B and the extent of chemical contamination there.

111. The model used to investigate chemical contamination was eventually called the "spill model." The term "spill model" was not used in the *HRA* or the *Parcel B ROD*. It was first introduced in the *Amended Parcel B Record of Decision* ("*Amended Parcel B ROD*"). It assumed contamination

[3] The Navy has used both "HPNS" and "HPS" as acronyms for the Shipyard.

resulted from discrete, well-delineated spills rather than there being more widespread general contamination. It also assumed that discrete chemical spills resulted in "high chemical concentrations . . . near the center of the release and concentrations decrease outward." The Navy employed the "spill model" initially to characterize whether Parcel B sites were chemically "impacted" or "non-impacted."

112. "Spill model" is not a term used in, and is not in accordance with, CERCLA, the NCP or any EPA CERCLA guidance.

113. The "spill model" was eventually applied to radiological contamination on all Parcels. However, it was not an appropriate approach to evaluate the scope of radiological contamination and was not in accordance with EPA's guidance, including EPA's *RI/FS Guidance*, among others, because it did not adequately investigate and characterize the vertical and horizontal extent of radiological contamination.

114. Because the Navy did not investigate the full extent of contamination, the Navy and EPA did not implement response actions at HPNS that ensure protectiveness of human health and the environment; as such, the response actions at HPNS are not in accordance with CERCLA, the NCP and EPA CERCLA guidance, they violate the FFA, and they are arbitrary, capricious, and not otherwise in accordance with law.

115. The *Parcel B Amended ROD* states that as to chemical contamination, the Navy "successfully delineated and removed all contaminants at concentrations above cleanup goals at 93 of 106 excavations implemented for the remedial action." However, testing unexpectedly detected much higher levels of heavy metals across a much greater geographic area than anticipated, leading to reevaluation of the remedy at the remaining 13 sites. The "spill model," as applied to chemical contamination in Parcel B, was incorrect more than 10 percent of the time.

116. Confronted with stark differences between what the *HRA* and *Parcel B ROD* claimed and the facts it found on the ground, the Navy altered the *Parcel B ROD* through two Explanations of Significant Differences ("ESDs"), both dealing with chemical contamination. The first ESD altered the depth of excavation. The second ESD updated remedial goals for chemical contamination resulting

from EPA's update of its PRGs for chemically contaminated soil. As discussed below, the Navy has refused to update its radiological PRGs. It has never publicly explained why it was willing to update PRGs for chemical contamination but not for radioactive contamination.

117. The *Parcel B ROD* errors about radiological impacts were too fundamental to allow modification of the remedial action through an ESD. On January 14, 2009, the Navy adopted its *Amended Parcel B ROD*, which identified radiological contamination in the Parcel's soil and structures. Radionuclides of concern included strontium-90 ("Sr- 90"), cobalt-60 ("Co-60"), cesium-137 ("Cs-137"), radium-226 ("Ra-226"), and plutonium-239 ("Pu-239"). The *Amended ROD* called for extensive radiological remediation.

118. Full excavation and removal of chemical and radiological contamination, as the Navy originally promised, would require much more work and expense than its erroneous *HRA* anticipated. As a result, the Navy fundamentally changed its remedy for Parcel B in the 2009 *Amended Parcel B ROD.* It no longer would be cleaned up to unrestricted residential levels without institutional controls ("ICs") that would limit future land uses.

119. EPA defines institutional controls as "non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy."[4]

120. Pursuant to 40 CFR § 300.430(a)(1)(iii)(D), institutional controls cannot substitute for active response measures, like containment and removal of contamination, as the sole remedy "unless such active measures are determined not to be practicable."

121. The selected remedy in the *Amended Parcel B ROD* included "[decontaminating] radiologically impacted structures," excavating storm drains and sanitary sewers and backfilling with clean soil, "[surveying] buildings and building sites," and monitoring groundwater.

122. The remedy also included ICs that substituted for excavation and removal of chemical and radiological contamination. ICs included prohibiting future residents from gardening in native soil.

[4] https://www.epa.gov/superfund/superfund-institutional-controls

Instead, they would be required to grow any fruit, vegetables, or other items for consumption in soil contained in boxes which would, at least theoretically, prevent roots from extending to potentially contaminated soil below.

123. ICs would be enforced through deed restrictions.

124. The introduction of ICs was critically important to the Navy's selection of remedial goals, as it allowed the Navy to "switch off" home-grown produce as a route of radiological exposure, reducing the risk enough to satisfy CERCLA's risk range, at least according to the Navy.

125. However, EPA's *PRG User's Guide, Land Use Descriptions, Equations, and Technical Documentation* allows for exposure pathways to be switched off only if "a route of exposure . . . is considered to be unreasonable at the site, both currently and in the future."

126. It is unreasonable to assume future residents will forever garden only in raised beds if that limitation is enforced merely by deed restrictions. And even if all residents were made aware of the institutional controls and tried to comply, it is unreasonable to assume that raised beds will continue to be protective in perpetuity without an effective program of monitoring and repair in perpetuity.

127. The new remedy also called for constructing "durable covers," over most of the Parcel to prevent exposure to potentially contaminated soil below the covers. These controls are not in accordance with CERCLA, the NCP and EPA guidance, since there are available, practicable engineering controls, including excavation and removal of chemical and radiological contamination.

128. Furthermore, covers must be destroyed to develop the site, as envisioned by the reasonably anticipated future land use of the Shipyard, including thousands of residences. The use of covers under these circumstances are violations of the FFA, represent failures to ensure long-term protection of human health and the environment, and are arbitrary, capricious, and not otherwise in accordance with law.

2. Parcels G and C.

129. The Navy issued its *Final Record of Decision for Parcel G, Hunters Point Shipyard*

("*Parcel G ROD*") on or about February 18, 2009. Radiologically impacted sites identified by the *Parcel G ROD* included buildings formerly used by the Naval Radiological Defense Laboratory ("NRDL"). The radionuclides of concern identified by the *Parcel G ROD* were strontium-90 ("Sr-90"), cesium-137 ("C-137"), cobalt-60 ("Co-60"), plutonium-239 ("Pu-239"), radium-226 ("Ra- 226"), thorium-232 ("Th-232"), hydrogen-3 ("H-3"), and uranium-235 ("U-235").

130. The selected remedies for Parcel G included removing radiologically contaminated storm drains and sanitary sewers, together with associated contaminated soil and backfilling with clean soil. The remedies also included the same institutional controls imposed by the *Amended Parcel B ROD*, including prohibiting gardening except in boxes, and "durable covers."

131. The Navy issued its *Final Record of Decision for Parcel C, Hunters Point Shipyard* ("*Parcel C ROD*") on or about September 30, 2010. The radionuclides of concern identified by the *Parcel C ROD* were strontium-90 ("Sr- 90"), cesium-137 ("C-137"), cobalt-60 ("Co-60"), plutonium-239 ("Pu-239"), radium-226 ("Ra- 226"), thorium-232 ("Th-232"), potassium-40 ("K-40").

132. The selected radiological remedies in Parcel C included "surveying radiologically impacted buildings and former building sites," removing radiologically contaminated soil, building materials, and sewer and storm drains, and surveying excavated areas to ensure that residual radioactivity was below the RGs.

133. As is the case with Parcel B, the actions of the Navy and EPA as to Parcels G and C were not in accordance with CERCLA, the NCP and EPA guidance. As such, these actions are violations of the FFA and represent failures to ensure protection of human health and the environment, and are arbitrary, capricious, and not otherwise in accordance with law.

G. Tetra Tech's Fraud Compromises the Cleanup.

134. The Navy contracted with Tetra Tech EC, Inc. ("TtEC") to perform remediation of radioactive contamination at HPNS. TtEC committed intentional fraud and violated quality assurance and quality control requirements, rendering all its data unusable.

135. The Navy initially discovered evidence of fraud in October 2012, when its Radiological Affairs Support Office identified 36 post-remediation soil sample results that had a significantly

different radiological fingerprint than pre-remediation samples, evidencing possible falsified sampling.

136. The Navy did not investigate. It relied on TtEC to investigate itself.

137. In April 2014, TtEC produced a report titled, *Investigation Conclusion Anomalous Soil Samples at Hunters Point Naval Shipyard* (the "*Anomalous Samples Report*"), claiming it was unable to determine the source of the fraudulent samples or to attribute responsibility.

138. The Navy defended TtEC's data from 2012 until 2018.

139. In 2017, whistleblowers came forward and detailed the breadth of the TtEC fraud in statements signed under penalty of perjury. Whistleblowers stated that the fraud began in 2009, was widespread, included false scans of radioactively contaminated soil and buildings, and was initiated and directed by corporate management.

140. Based on the whistleblowers' sworn statements, on June 28, 2017, Greenaction filed a Petition with the Nuclear Regulatory Commission seeking to revoke TtEC's radioactive materials license. The whistleblowers described six types of fraud:

1. fake sampling, in which thousands of soil samples reported to have been taken at one location were actually taken from another;
2. discarding samples and analytical results that reported results above the clean-up standards;
3. altering scanning data to make them appear radiologically acceptable;
4. conducting fabricated or falsified building surveys;
5. remediating radioactive material in soil improperly, resulting in potentially radioactively contaminated soil being used as backfill for trenches at the Shipyard; and
6. altering Portal Monitor procedures, allowing potentially radioactively contaminated soil to be shipped offsite.

141. The whistleblower testimony led Greenaction to demand the Navy discard all TtEC's data. The Navy refused. Instead, the Navy did a data review intended to **verify** TtEC's data and

"validate previous decisions regarding the property condition."

1. The Tetra Tech Data Is Found to Be Unreliable and Discarded.

142. Starting in September 2017, the Navy released three data reviews, each of which revealed more widespread fraud than the *Anomalous Samples Report* claimed. The first reviewed soil sampling data and building scans from Parcels B and G; the second involved soil sampling data and building scans from Parcels C and E; the third involved the bulk of building surveys basewide.

143. In Parcel B, the Navy found evidence of fraud in: 40% (2 of 5) of current and former building sites; 17.3% (19 of 110) of fill units; and 5.7% (4 of 70) of trench units.

144. In Parcel G, the Navy found evidence of fraud in: 100% (2 of 2) of the current and former building sites; 50.4% (54 of 107) of fill units; and 31.7% (20 of 63) of trench units.

145. In Parcel C, the Navy found evidence of fraud in: 78% (94 of 120) of fill units; 73% (8 of 11) of survey units from the North Pier, and 46% (32 of 69) of trench units.

146. In Parcel E, the Navy found evidence of fraud in: 67% (64 of 96) of fill units; 60% (61 of 102) of current and former building sites; and 46% (26 of 57) of trench units.

147. The building surveys also found "evidence of data manipulation and/or falsification." The review of the building data concluded the TtEC data "could not be used to support a recommendation for radiological release."

148. Regulators conducted an independent review of TtEC's Parcel B and G data. On December 27, 2017, the US EPA, and the California Departments of Toxic Substances Control and Public Health transmitted to the Navy *EPA Final Comments on Draft Navy Radiological Data Evaluation Parcels B & G Report.*

149. The regulators' review of Parcel B data found much more evidence of suspect data than the Navy did. In addition to additional evidence of fraud, it identified significant quality assurance and quality control deficiencies the Navy did not. The regulators determined that 90% of the data from the survey units in Parcel B were suspect.

150. In Parcel G, EPA concluded 97% of survey units contained suspect data. They wrote:

> The data revealed not only potential purposeful falsification and fraud in terms of sample and/or data manipulation, they also reveal the potential failure to conduct adequate scans, a lack of proper chain of custody for ensuring samples were not tampered with, extensive data control issues (including off-site laboratory data) and general mismanagement of the entire characterization and cleanup project.

151. After the regulators' data review, the Navy agreed that TtEC's data was not reliable, had to be discarded, and remediation had to be redone.

2. The Navy and Regulators Agree to a Retesting Plan.

152. The Navy and regulators agreed to a plan for retesting TtEC's work that was memorialized in three (3) related, EPA-approved work plans: the June 2018, *Final Parcel G Removal Site Evaluation Work Plan* ("*Parcel G Retesting Plan*"); the April 2022, *Final Parcel B Removal Site Evaluation Work Plan* ("*Parcel B Retesting Plan*"), and the August 2022, *Final Parcel C Removal Site Evaluation Work Plan* ("*Parcel C Retesting Plan*").

153. Section 3.4, "Radiological Investigation Design," of the *Parcel G Retesting Plan* stated the retesting agreement:

> For Phase 1, 100 percent of soil will be re-excavated and characterized at 33 percent of trench units (TUs) associated with former sanitary sewers and storm drains in Parcel G. Soil sampling and scanning at the remaining 67 percent of TUs will be performed as part of Phase 2 to increase confidence that current site conditions comply with the Parcel G ROD RAO[5]. **The Navy will re-excavate 100 percent of Phase 2 TUs if contamination is identified** in Phase 1 TUs. (Emphasis added).

154. The *Parcel B Retesting Plan* and *Parcel C Retesting Plan* contain the same retesting language.

3. Retesting Found Sr-90 Contamination in Parcel G.

155. The Navy began retesting Parcel G in 2021.

156. Using approved EPA testing methods, it found at least 23 samples from 9 different trench units exceeding the remediation goal for strontium-90 ("Sr-90"), 0.331 pCi/g.

157. The Navy did not acknowledge the Sr-90 exceedances until after Freedom of Information Act ("FOIA") requests disclosed them.

[5] RAO is an Acronym for "Remedial Action Objective."

158. When forced to acknowledge the exceedances, instead of accepting its sampling results and living up to its 100% retesting agreement, the Navy made false claims about the Sr-90 results. These claims included that the results were (1) false positives; (2) within "background" radiation levels; (3) invalid data; and (4) not considered a risk to human health or the environment.

159. In public meetings on October 21, 2021, and August 22, 2022, the Navy presented slides purporting to graphically show the results of the retesting which omitted the Sr-90 exceedances.

4. The Navy and the EPA Disagree on the Sr-90 Testing Results.

160. The Navy's attempts to discredit its own Sr-90 data and renege on the retesting agreement led to a three-year-long dispute with EPA.

161. While the Navy's website claimed that it will use EPA methods for identifying strontium during retesting, it has sought to invalidate the Sr-90 data using a method not approved by EPA known as the "Eichrom method."

162. In a September 23, 2021, email, EPA objected to the Navy's use of the Eichrom method to invalidate the Sr-90 results: "We do not object to reanalyzing previously collected samples but would not support, in the absence of convincing evidence, using the new data to supersede existing results." It added: "[**t**]**he previous strontium-90 results are valid data.** It's inaccurate to suggest the data were not precise enough." (Emphasis added.)

163. At the same time the Navy was attempting to use the Eichrom method to invalidate its own EPA-approved data, the Navy concealed that the Eichrom method actually **confirmed** Sr-90 exceedances. The Navy has not acknowledged this publicly. The following information was obtained through FOIA.

164. According to the FOIA response, the Eichrom method found at least five of eighteen samples — more than 27 percent — **exceeded** the Sr-90 remediation goals.

165. The Navy then sought to invalidate the exceedances by modifying the Eichrom method, but the modified method **again** produced results exceeding remedial goals.

166. The Navy then modified the Eichrom method a second time, to test for "total beta

strontium." This time, the results did not find Sr-90 exceedances. In sum, to obtain the results it wanted, the Navy had to use a method not approved by EPA and had to modify it twice.

167. That the Navy has acted in bad faith in attempting to invalidate its own Sr-90 data is evidenced by the fact it is the exact opposite of the Navy's treatment of TtEC's data. The Navy insisted – for six years – that the **invalid** TtEC data was **valid**. Now, it is attempting to **invalidate** perfectly **valid** data. It is no accident the result would be the same: no additional testing or remediation.

168. On or about September 25, 2024, the Navy released a study entitled, *Final Technical Memorandum: Strontium Analysis, Parcel G,* which purports to demonstrate that the EPA method and the Eichrom method, both of which identified remedial goal exceedances of Sr-90 in Parcel G soil, were not accurate and/or precise, justifying invalidation of those data. However, the Navy has failed to state an adequate factual basis to discard the valid Sr-90 exceedances, violating CERCLA, the NCP and the FFA. Also, as further discussed below, the release of this study **after** the public comment period for the *Draft Fifth FYR* closed on May 7, 2024, precluded public comments to the *Fifth Five Year Review* about the Sr-90 data review, in violation of CERCLA, the NCP and the FFA.

5. Retesting Also Found Radiological Objects on Parcels B & C.

169. In 2023, the Navy found radiological contamination in Parcels B and C. At a public meeting on September 25, 2023, the Navy disclosed that scanning of Parcel C soil, previously "remediated" by TtEC, found an easily identifiable, radioactive "deck marker."

170. At a public meeting on December 4, 2023, the Navy disclosed it also found a radioactive object in Parcel B soil, a glass object contaminated with Radium-226.

171. At a public meeting on July 22, 2024, the Navy stated its intention to retest 100% of soil in Parcels C and B but not in Parcel G. However, as of the date of this Amended Complaint, the Navy has not committed to 100% retesting in Parcels B & C in documents that are enforceable under the FFA.

172. Despite finding contamination in all three Parcels, the Navy's failure to perform 100% retesting in all three parcels reneges on its agreement with federal and state regulators and its public

commitment. Failure to perform 100% retesting means that the vertical and horizontal extent of contamination remains unknown.

173. Without knowing the extent of contamination, the Navy and EPA have not implemented response actions at HPNS that ensure protectiveness of human health and the environment as required by CERCLA. The Navy and EPA have not acted in accordance with CERCLA, the NCP, and EPA guidance as required by the FFA. The actions of the Navy and EPA are also arbitrary, capricious, an abuse of discretion, and not otherwise in accordance with law.

H. The Navy Violated CERCLA, the NCP and the FFA In Its *Fourth and Fifth Five-Year Reviews*.

174. The HPNS remedies leave residual contamination onsite. CERCLA requires a review of the remedy "no less often than each 5 years," "to assure that human health and the environment are being protected by the remedial action being implemented" for "**any** hazardous substances, pollutants, or contaminants remaining at the site." (Emphasis added).

175. The Navy published the *First Five-Year Review ("FYR")* on or about December 10, 2003, setting the trigger date for all subsequent FYRs.

176. The Navy published the *Second FYR* on or about November 11, 2008, within the statutory deadline.

177. The Navy published the *Third FYR* on or about November 8, 2013, within the statutory deadline.

178. The *Fourth FYR* was due no later than November 8, 2018. It was not published within the statutory deadline.

179. Instead, the Navy published the *Fourth FYR* on or about July 31, 2019, nearly nine months late. The Navy did not acknowledge its tardiness or offer any factual or legal justification for violating a Congressionally mandated deadline.

180. The Navy also published a series of *Addenda* to the *Fourth FYR*, further violating the statutory deadline. Its *Draft Addendum to the Five-Year Review, Evaluation of Radiological Remedial Goals for Soil* ("*2019 Soil Addendum*") was released on or about August 8, 2019, approximately nine

months late. The Navy released its *Draft Addendum to the Five-Year Review, Evaluation of Radiological Remedial Goals for Buildings* ("*2019 Building Addendum*"), on or about October 10, 2019, nearly a year after the statutory deadline. Its *Addendum to the Five-Year Review, Evaluation of Radiological Remedial Goals for Soil* ("*2020 Soil Addendum*") was published on or about June 18, 2020, approximately twenty months late.

181. The *Fifth FYR* was due no later than November 8, 2023. The Navy published its *Draft Fifth FYR on* January 26, 2024, more than two months past the deadline. The Navy published the final *Fifth FYR* on August 6, 2024, approximately nine months past the statutory deadline. By these actions, the Navy has improperly granted itself a *de facto* extension – forever into the future – to its FYR deadlines, in violation of CERCLA, the NCP and the FFA.

1. The Navy's *Fourth and Fifth FYRs* failed to Update Its Remedial Goals as Required by the FFA and EPA Guidance.

182. The Navy failed "to assure that human health and the environment are being protected by the remedial action being implemented," in its *Fourth* and *Fifth FYRs*. As described above, the Navy did not properly adopt its 2006 Remediation Goals and then improperly applied them to each subsequent ROD and *FYR*.

183. Since 2006, the Navy has refused to update its cleanup standards despite repeated demands from EPA, significant changes in EPA's radiological PRGs calculators, which make the 2006 RGs even more scientifically unsound, and advances in scientific knowledge about the risks of radiation.

184. EPA's default Preliminary Remediation Goals have been updated, most recently in 2023. Following is a chart comparing the EPA 2023 default soil PRGs and the remedial goals the Navy adopted in 2006 and continues to use. The EPA default PRGs are orders of magnitude more protective than the Navy's remedial goals.

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SOIL RELEASE CRITERIA COMPARISON (Residential)

Radionuclide	HPNS (2006)	EPA 2/20/23
Americium-241	1.36	.4800
Cesium-137	0.113	.0401
Cobalt-60	0.0361	.0285
Europium-152	0.13	.0384
Europium-154	0.23	.0467
Plutonium-239	2.59	.4450
Radium-226	1.0	.00192
Strontium-90	0.331	.00477
Thorium-232	1.69	.00170
Tritium	2.28	no value listed
Uranium 235+D	0.195	no value listed

185. In its *Fourth FYR*, the Navy's violations of the *FFA* include, but are not limited to:

a. Failing to follow CERCLA guidance that requires that risk characterizations use the most current toxicity data to update both soil and building remedial goals. EPA repeatedly asked the Navy to update its radiological PRGs to use current toxicity data; the Navy did not do so;

b. Failing to consider cumulative risk from all radionuclides as a whole, and from radionuclides and chemical contamination combined. The Navy has indefinitely deferred doing so until the property is released for development, some unknown future time; and

c. Failing to justify the use of ICs in light of NCP requirements and failing to provide a realistic plan for the ICs to be "enforced" through deed restrictions. The Navy has failed to provide a realistic plan to monitor, maintain, and repair such controls, thereby failing to demonstrate such ICs will continue to meet the Navy's statutory duty to ensure protectiveness of human health now and in the future. It is unreasonable to assume ICs will be effective if enforced merely by deed notices.

186. EPA commented to the *Draft Fourth FYR* that the Navy's protectiveness determinations were not consistent with EPA guidance. EPA determined that the *Draft Fourth FYR* "cannot support

any conclusions about protectiveness or completeness of the remedy."

187. The Navy did not respond to EPA's requests to correct the *Draft Fourth FYR*'s protectiveness determinations. It merely revised the *Final Fourth FYR* to include a statement that it would "evaluate additional data collected" during retesting to ensure the remedies are protective. It also stated that the Navy was in the "process" of ensuring that the radiological remedies were "being implemented as intended" and "conducting a long-term protectiveness evaluation" of the remedial goals. It "anticipated that the radiological rework will be **completed prior to the next Five-Year Review,**" that is, the *Fifth FYR* (emphasis added).

188. The Navy's actions and inactions in its *Fourth FYR*, described above, are not in accordance with CERCLA, the NCP, and EPA guidance. As such, they violate the FFA and fail to ensure protection of human health and the environment as required by CERCLA and the NCP. In addition, they are arbitrary, capricious, an abuse of discretion and not otherwise in accordance with law.

189. Without acknowledging its *Fourth FYR* failed to comply with CERCLA's requirement to ensure protectiveness of human health and the environment on a continuing basis, in August 2019, without legal authority, the Navy published a series of three *addenda* to the *Fourth FYR* purporting to reevaluate its radiological RGs.

190. However, the a*ddenda* failed to do as EPA requested; they did not recalculate the PRGs using the most current toxicity data.

191. On or about October 10, 2019, the Navy released its *2019 Building Addenda.* It failed to assure that the remedial goals are protective of human health and the environment.

192. On or about August 20, 2020, EPA transmitted *EPA Review of Navy Draft Evaluation of Radiological Remediation Goals for Onsite Building* to the Navy, stating, "[**W]e cannot concur with the Navy's conclusions that the radiological building RGs remain protective of human health**." (Emphasis added.)

193. On or about October 10, 2019, the Navy published its *2019 Soil Addendum*, which relied entirely on RESRAD-Build calculations; it did not reference or use EPA's soil PRG calculator.

194. On or about November 15, 2019, EPA sent the Navy the *EPA Review of the Draft Addendum to the Fourth Five Year Review Evaluating Radiological Remediation Goals for Soil*, a comment letter unambiguously stating the *2019 Soil Addendum* failed to meet its obligation to assure protectiveness: "**[A]t this time, EPA cannot verify that the soil radiological remediation goals are protective of human health for long-term protectiveness**." (Emphasis in original).

195. In direct contradiction, the Navy posted a statement on its website less than two weeks later, on November 26, 2019, stating, "EPA recently concurred on the protectiveness determinations in the Navy's Five-Year Review." This statement was false.

196. Despite its assertion that its soil protectiveness determinations were valid and EPA-approved, the Navy sent EPA the *2020 Soil Addendum* on or about June 18, 2020. It purported to use both RESRAD and the PRG calculator.

197. However, risks calculated with this method were not done in accordance with EPA guidance. For example, the Navy acknowledged that its remedial goal for cobalt-60, 0.0361 pCi/g, translates to an excess lifetime cancer risk of 1.7 in a million. This is nearing twice EPA's "starting point" for protectiveness, 1 in a million. The Navy has not publicly cited any site-specific facts justifying lowering the risk from 1 in a million.

198. The Navy released its *Draft Fifth FYR* on or about January 24, 2024. The Navy publicly released its *Final Fifth FYR* on or about August 6, 2024. The *Fifth FYR* violates the FFA in the same manner as the *Fourth FYR* did, as set forth in paragraph 185 herein. It is not in accordance with CERCLA, the NCP, and EPA guidance, and as such violates the law and the FFA.

2. The *Fourth and Fifth FYRs* Did Not Assure Long-term Protectiveness.

199. The *Fourth* and *Fifth FYRs* failed to comply with CERCLA's straight-forward requirement that the Navy "assure that human health and the environment **are being protected** by the remedial action being implemented." (Emphasis added). An agency regulation or guidance document cannot modify or eliminate this clear statutory mandate.

200. Assurance is binary — either it is protective, or it is not. "Are being protected" means in the present tense, not in some ill-defined future.

201. A completed remedial action is "protective" if it meets EPA-approved remedial goals. RGs are calculated to provide long-term protectiveness for human health and the environment appropriate to the intended use of the property.

202. Not only are the 2006 RGs not protective of human health and the environment, none of the remedies in radiologically impacted Parcels can be considered protective until and unless the Navy retests one hundred percent (100%) of TtEC's fraudulent and QA/QC-deficient work to ensure that the full extent of building contamination and the full horizontal and vertical extent of soil contamination has been reliably determined and remediated.

203. Currently, the Navy is retesting only one-third of TtEC's soil work; that is only one-third of the work necessary to demonstrate the soil remedy ensures protectiveness.

204. In fact, the one-third retesting, as flawed as it is, provides conclusive evidence that the remedy is **not** protective. As stated above, Parcel G retesting using EPA-approved methods found 23 samples from 9 different trench units exceeding the Sr-90 RGs. Remedial goal exceedances are **not** protective.

205. Retesting has also found discrete radioactive objects in Parcels B and C. It is impossible for the Navy to represent that the two-thirds of soil it has not yet retested is free of widespread radiological contamination, as was found in Parcel G, and/or radioactive objects like those found in Parcels B and C, until 100% retesting is completed.

206. The Navy has yet to publicly release any reports on building retesting.

207. The *Final Fourth FYR* stated the radiological remedies would be protective sometime in the future, "upon completion." It failed to document any deficiencies identified during the review. Nor did it recommend specific actions to ensure that the remedy will be protective. Instead, without factual or legal justification, the Navy gave itself a pass, stating it would evaluate protectiveness by the **next** five-year review.

208. However, the *Final Fifth FYR* again fails to state the remedies are protective. Instead, it includes only vague promises that they "will be protective" or they are "short term protective,"

ignoring the long-term. In some Parcels, the Navy has deferred its protectiveness finding until some future, ill-defined time. The Navy has not provided factual, credible protectiveness determinations in accordance with CERCLA, the NCP, and EPA guidance, effectively negating the entire purpose of CERCLA *FYR*s.

209. Refusing to clearly articulate that the remedies for HPNS are **not** protective and require more remediation illustrates the Navy's true position. It considers remedial actions at HPNS to be complete, despite not retesting 100% of TtEC's work. The only way it can do so is to rely on TtEC's discredited data.

210. EPA has failed to enforce CERCLA, the NCP and the FFA regarding the Navy's Five Year Reviews.

211. The actions of the Navy and EPA are not in accordance with CERCLA, the NCP and EPA guidance. These actions are also violations of the FFA, failures to ensure protection of human health and the environment, and are arbitrary, capricious, an abuse of discretion and not otherwise in accordance with the law.

3. The Navy Has Prevented Meaningful Public Comment on Its FYRs.

212. The Navy has consistently failed to act in good faith and has withheld information needed to provide meaningful public comment on its *FYR*s and other aspects of the CERCLA and NCP remedy selection process.

213. TtEC's fraud was discovered in 2012. The *Third FYR* never mentioned it despite being published nearly a year after the fraud's discovery.

214. The *Draft Fourth FYR*, issued on July 9, 2018, continued to mislead the public. It did not include the word "fraud" or reference it. It failed to describe TtEC's investigation, its 2014 *Anomalous Samples Report*, the Navy's data review results, the EPA's data review results, or that all TtEC's data had been discarded.

215. EPA and public comments to the *Draft Fourth FYR* criticized the Navy's failure to address the fraud. For example, a September 21, 2018, EPA comment stated that the *Draft Fourth FYR*

did not adequately discuss the effect of TtEC's "manipulation and/or falsification" on the protectiveness of the radiological remedies.

216. Only after these comments did the Navy include a statement in the *Final Fourth FYR* that a significant portion of the radiological survey and remediation work was unreliable. Even so, the Navy still stated in the *Final Fourth FYR* that the remediation at Parcel G "was completed in 2011." The Navy failed to explain the contradiction between claiming the remediation was "completed" while simultaneously admitting that the data "completion" relied on was unreliable.

217. The *Fourth FYR* misled the public about protectiveness. It claimed the remedy would be protective in future but failed to even acknowledge a retesting effort was necessary.

218. The Navy also violated EPA guidances requiring responses to comments. In 2018, Greenaction submitted significant, detailed comments to the *Draft Fourth FYR* about the improper remedial goals and other radiological remediation deficiencies. Greenaction also submitted significant comments about the Navy's insufficient discussion of the impact global warming will have on the Shipyard remedies.

219. The Navy failed to respond to Greenaction's comments, as well as comments made by other interested parties, in violation of the FFA and EPA guidance.

220. The *Addenda* to the *Fourth FYR* also indicate that the Navy does not take public comment seriously. As there is no legal authorization for *Addenda*, there is also no legal requirement that the Navy respond to comments to *Addenda*. By publishing *Addenda* long after the comment period for *Fourth FYR* closed, the Navy barred the public from making informed comments on the *Fourth FYR*. It also avoided its obligation to respond when parties like Greenaction made comments to the *Addenda.*

221. The Navy's actions in denying full public participation are not in accordance with CERCLA, the NCP, and EPA guidance. They violate the FFA, they violate requirements under CERCLA and the NCP, and are also arbitrary, capricious, an abuse of discretion and not otherwise in accordance with law.

222. Unfortunately, the Navy's *Final Fifth Five Year Review* continued to mislead the public. Among other things, it failed to acknowledge:

a. TtEC's data was discarded.

b. The Navy proposed and EPA approved three (3) retesting workplans that require the Navy to do one-third resampling of TtEC's soil work unless contamination is found, at which point 100% retesting would be required.

c. The Navy found 23 Sr-90 exceedances in Parcel G soil but withheld the information from the public. For example, in public meetings on October 21, 2021, and August 22, 2022, the Navy presented slides omitting the Sr-90 exceedances, denying the public information to make meaningful comments on the remedial action.

d. The Navy is attempting to invalidate the valid Sr-90 sampling results using a method not approved by EPA, which the Navy has had to modify twice.

e. On or about September 25, 2024, the Navy released a study entitled, *Final Technical Memorandum: Strontium Analysis, Parcel G*, which purports to demonstrate that the EPA method and the Eichrom method, both of which identified remedial goal exceedances of Sr-90 in Parcel G soil, were not accurate and/or precise, justifying invalidation of those data. However, the Navy has failed to state an adequate factual basis to discard the valid Sr-90 exceedances, violating CERCLA, the NCP and the FFA. The release of this study **after** the public comment period for the *Draft Fifth FYR* closed on May 7, 2024, precluded public comments to the *Fifth Five Year Review* about the Sr-90 data review, in violation of CERCLA, the NCP and the FFA. Without this study, members of the public did not have the information they needed to provide meaningful comments on the protectiveness of remedial actions.

f. The Navy found radioactive objects found in Parcels B and C soil. It has stated an

intention to do 100% soil retesting, but to Plaintiff's knowledge has not committed itself to do so in documents enforceable under the FFA.

223. The *Fifth FYR* is not in accordance with CERCLA, the NCP and EPA guidance, and violates the FFA.

4. The *Fourth* and *Fifth FYRs* Did Not Properly Account for Climate Change.

224. The Navy did not properly consider or address climate change in its *Fourth FYR* and *Fifth FYR*. It used outdated sea-level rise, Bay-level rise and groundwater rise data which underestimated their impact on the selected remedies.

225. For example, the *Fourth FYR* estimated three future greenhouse gas emission scenarios. The first estimated that in 2100, the likely sea-level rise would range from 1.6 to 3.4 feet. The second estimated sea level rise ranging from 1.2 to 2. 7 feet. The third estimated seal level rise ranging from 1.0 to 2.4 feet. Based on these estimates, the *Fourth FYR* considered "a contingency of up to a 3-foot increase in sea level" in designing the "crest elevation" for Parcels E and E-2, the industrial landfill. "No other information has been identified to suggest that the remedies may not be protective of human health or the environment," the *FYR* concluded.

226. Up-to-date data evidenced much greater sea-level rise than the Navy considered. For example, according to the 2018 *State of California Sea-Level Rise Guidance*, "Sea level rise will reach 5.7 to 6.9 feet by 2100 under the medium to high risk aversion scenario," and may reach as much as 10.2 feet by 2100 under another scenario.

227. The San Francisco Bay Conservation and Development Commission's ("BCDC") *Adapting to Rising Tides Bay Area Sea Level Rise Analysis and Mapping Project* outlined a range of likely sea level rise scenarios. The upper bound of these scenarios was 5.5 feet sea level rise by 2100. It also considered a 100-year extreme tide. A 5.5 feet sea level rise with a 100-year extreme tide would create a tide 9 feet above Mean Higher High Water ("MHHW," the average of the high-water mark of each tidal day observed over the National Tidal Datum Epoch).

228. The Navy also did not discuss how the cap and slurry walls at Parcel E-2 will be

adequate to ensure protection of human health and the environment given these rising sea, Bay, and groundwater levels.

229. Accordingly, the risk of remedy failure caused by sea-level rise is significantly higher than the unreasonably low assumptions made by the Navy. Rising Bay water and the concomitant rise in groundwater may inundate contamination left on the Shipyard, mobilizing, and spreading it and potentially allowing it to contaminate the Bay itself and impact recreational and commercial fishing. This is particularly dangerous in Parcel E-2.

230. The *Fifth FYR* suffers from similar climate-study infirmities as the *Fourth FYR*, including but not limited to using outdated global warming data, deferring studying climate impacts beyond 2065, and deferring study of site-specific impacts, all without proper factual and/or legal justification.

231. The Navy's failure to consider up-to-date climate data and its deferral of studying climate impacts are not in accordance with CERCLA, the NCP, and EPA guidance. The Navy's actions and inactions violate the FFA, fail to ensure protection of human health and the environment as mandated by CERCLA, and are arbitrary, capricious, an abuse of discretion and not otherwise in accordance with law.

I. The Navy Has Not Properly Established an Administrative Record at HPNS.

232. CERCLA requires that the Navy establish an administrative record of documents, including "the documents that form the basis of a response action." It must be accessible to the public "at or near" the site.

233. The NCP contains regulations detailing preparation of the administrative record and how it is to be made available to the public to facilitate meaningful participation in the remedy selection process, at 40 CFR § 300.430.

234. EPA has published detailed guidance on preparation of the administrative record and promoting meaningful public participation in CERCLA actions, including the 2010 guidance, *Revised Guidance on Compiling Administrative Records for CERCLA Response Actions*.

235. The Navy has failed to properly establish an administrative record "at or near" the HPNS clean-up. There once was an administrative record located "at or near" the Shipyard, which the Navy referred to as "the Shipyard Site Trailer." However, on a date unknown to Greenaction, the Navy removed that location and did not replace it.

236. The Navy currently states the administrative record is located at the San Francisco Public Library, Government Information Center, at 100 Larkin Street, approximately five (5) miles from the Shipyard. However, it is haphazardly organized, making location of specific documents difficult. It does not include all the documents the Navy has relied on in making decisions regarding its response actions at HPNS.

237. These Navy actions violate CERCLA, the NCP, the FFA, and EPA guidance. Such violations fail to meet CERCLA's requirements for public participation and are arbitrary, capricious, an abuse of discretion and not otherwise in accordance with law.

FIRST CLAIM FOR RELIEF

Violations of 42 U.S.C. § 9569(a)(1) – Violations of the Retesting Agreements; Conditions, Requirements, and/or Orders Which Have Become Effective under the FFA

238. Greenaction incorporates by reference all paragraphs of this Complaint set out above as if fully set forth herein.

239. Greenaction is a "person" as defined by 42 U.S.C. § 9601(21).

240. The Navy and EPA are "persons" as defined by 42 U.S.C. § 9601(21).

241. Citizen suits are authorized under 42 U.S.C. § 9659(a)(1) for "violation of any standard, regulation, condition, requirement, or order which has become effective pursuant to this chapter (including any provision of an agreement under section 9620 of this title, relating to Federal facilities)." (Parenthesis in original.)

242. The Navy proposed and EPA approved three related work plans to retest TtEC's work: the June 2018, *Final Parcel G Removal Site Evaluation Work Plan;* the April 2022, *Final Parcel B Removal Site Evaluation Work Plan;* and the August 2022, *Final Parcel C Removal Site Evaluation Work Plan* (collectively, the "*Retesting Work Plans*").

243. The *Retesting Work Plans* are conditions, requirements, and/or orders, as defined by 42 U.S.C. § 9659(a)(1), which have become effective pursuant to the FFA required by 42 U.S.C. § 9620, relating to federal facilities.

244. The *Retesting Work Plans* each require retesting one-third of the soil "remediated" by TtEC, with the proviso that 100% soil retesting would be required if the one-third retesting found **any** contamination.

245. Retesting has identified contamination in all three Parcels. In 2021, using EPA approved analytical methods, twenty-three (23) strontium 90 (Sr-90) samples from nine different trench units in Parcel G exceeded the Parcel G ROD remediation goals. However, without proper factual basis, the Navy has invalidated these findings and refuses to perform 100% retesting in violation of the FFA. EPA has wrongfully approved the improper invalidation of the Sr-90 exceedances and the Navy's decision to not perform 100% soil retesting in Parcel G.

246. Radioactive objects were discovered in Parcels B and C soil in 2023. In July 2024, the Navy stated its intention to retest 100% of the soil in Parcels B and C, but to Plaintiff's knowledge has not committed itself to do so in documents enforceable under the FFA.

247. The discovery of contamination in all three parcels establishes a non-discretionary duty to conduct 100% retesting of TtEC's soil and building "remediation" in all parcels.

248. The Navy has reneged on the *Retesting Work Plans* by finding contamination but not committing itself to retest 100% of TtEC's soil work in documents that are enforceable under the FFA, in violation of the *Retesting Work Plans*, CERCLA, the NCP and the FFA.

249. EPA has failed to enforce the *Retesting Work Plans*, in violation of its oversight role and responsibilities as established by the FFA and 42 U.S.C. § 9620.

SECOND CLAIM FOR RELIEF

Violations of 42 U.S.C. § 9621 – Violations of the CERCLA Five Year Review Deadlines

250. Greenaction incorporates by reference all paragraphs of this Complaint set out above as if fully set forth herein.

251. Greenaction is a "person" as defined by 42 U.S.C. § 9601(21).

252. The Navy and EPA are "persons" as defined by 42 U.S.C. § 9601(21).

253. If a remedy includes leaving residual contamination at the site, CERCLA requires five-year reviews, "no less often than each 5 years after the initiation of such remedial action," to "assure that human health and the environment are being protected by the remedial action being implemented" for "any hazardous substances, pollutants, or contaminants remaining at the site." 42 U.S.C. § 9621(c). This is a non-discretionary duty under CERCLA.

254. The Navy published its *Third FYR* on or about November 8, 2013. The *Fourth FYR* was due no later than November 8, 2018.

255. The *Fourth FYR* was not published within the statutory deadline.

256. The Navy violated 42 U.S.C. § 9621(c) and 40 C.F.R. § 300.430 by:

a. Publishing the *Fourth FYR* on or about July 31, 2019, approximately nine (9) months after the statutory deadline of November 8, 2018.

b. Publishing its *Draft Addendum to the Five-Year Review, Evaluation of Radiological Remedial Goals for Soil* on or about August 8, 2019, approximately nine (9) months after the statutory deadline.

c. Publishing its *Draft Addendum to the Five-Year Review, Evaluation of the Radiological Remedial Goals for Buildings* on or about October 10, 2019, nearly a year after the statutory deadline.

d. Publishing its *Addendum to the Five-Year Review, Evaluation of Radiological Remedial Goals for Soil* on or about June 18, 2020, approximately twenty (20) months after the statutory deadline.

257. The *Fifth FYR* was due no later than November 8, 2023. The Navy published a *Draft Fifth FYR* on or about January 26, 2024. The Navy publicly released the *Final Fifth FYR* on or about August 6, 2024. The Navy's failure to publish its *Fifth FYR* by the November 8, 2023, deadline violated the clear non-discretionary deadlines in 42 U.S.C. § 9621(c), as well as the FFA, by not being

in accordance with CERCLA, the NCP, and EPA guidances.

258. By repeated and continuing violations of the law, the Navy has effectively granted itself a *de facto* extension – forever into the future – to its *FYR* deadlines, which violate the clear non-discretionary deadlines in 42 U.S.C. § 9621(c), as well as violating the FFA.

259. The Navy has never publicly asserted any factual or legal basis for violating CERCLA Five Year Review deadlines.

THIRD CLAIM FOR RELIEF

Violations of 42 U.S.C. § 9659(a)(2) - Violations of Non-Discretionary CERCLA Duties

A. The Navy and EPA Violated CERCLA and the NCP by Selecting and Approving Remedies Not Protective of Human Health and the Environment.

260. Greenaction incorporates by reference all paragraphs of this Complaint set out above as if fully set forth herein.

261. Greenaction is a "person" as defined by 42 U.S.C. § 9601(21).

262. The Navy and EPA are "persons" as defined by 42 U.S.C. § 9601(21).

263. The Navy and EPA are officers of the United States as used in 42 U.S.C. § 9659(a)(2).

264. Greenaction may commence a civil action against any officer of the United States where there is "a failure of the President or of other such officer to perform any act or duty under this Act, including an act or duty under § 120 (relating to federal facilities), which is not discretionary," pursuant to 42 U.S.C. § 9659(a)(2) (parenthesis in original).

265. The Navy and EPA have failed to perform non-discretionary duties under CERCLA.

1. CERCLA Establishes a Non-Discretionary Duty that Cleanups Must Be Protective of Human Health and the Environment.

266. CERCLA establishes a mandatory duty that cleanups be protective of human health and the environment. 42 U.S.C. § 9621(b)(1) states, "The President **shall** select a remedial action that is protective of human health and the environment." (Emphasis added.)

267. The NCP, at 40 C.F.R. § 300.430(a)(i), reiterates this duty: "The national goal of the remedy selection process is to select remedies that are protective of human health and the environment,

that maintain protection over time, and that minimize untreated waste."

268. The NCP, at 40 C.F.R. § 300.430(e)(2)(i), requires, "Remediation goals shall establish acceptable exposure levels that are protective of human health and the environment."

269. Pursuant to 40 C.F.R. § 300.430(f)(1)(ii)(A), "Each remedial action selected shall be protective of human health and the environment."

270. Through their actions and inactions, the Navy and EPA have failed to take response actions which:

a. ensure protection of human health and the environment;

b. accurately characterize the extent of contamination at HPNS; and

c. select protective remedial goals.

2. The Navy Violated CERCLA By Not Preparing the Administrative Record in Accordance 42 U.S.C. §§ 9613 and 9617.

271. 42 U.S.C § 96113(k)(1) states, "The President shall establish an administrative record upon which the President shall base the selection of a response action. The administrative record shall be available to the public at or near the facility at issue."

272. Pursuant to 40 C.F.R. § 300.800, a responsible party "shall establish an administrative record that contains the documents that form the basis for the selection of the response action. The lead agency shall compile and maintain the administrative record in accordance with this subpart."

273. The Navy violated administrative record requirements, including but not limited to CERCLA, 42 U.S.C. § 9613(k), and the NCP, 40 C.F.R. §§ 300.800. Among other violations, the Navy violated administrative record requirements by failing to:

a. "Compile and maintain" an administrative record "at or near" the Shipyard, pursuant to 42 U.S.C. § 9613(k) and 40 C.F.R. § 300.805.

i. The Navy failed to establish a complete administrative record that provides the public with the information on which the Navy and EPA "base[d] the selection of a response action" pursuant to 42 U.S.C. § 9613(k) and 40 C.F.R. § 300.810.

ii. The Navy failed to provide a public comment period on the selection of the remedial action, including accepting comments, responding to them, and including them in the administrative record as required by 42 U.S.C. § 9613(k)(2)(B) and 40 C.F.R. § 300.815(b).

iii. Since the Navy adopted remedial goals in a removal action rather than a remedial action, it precluded comments to the 2006 remedial goals and prevented commenters from obtaining responses to comments, in violation of 40 C.F.R. § 300.430(f)(3).

b. Consider comments submitted after the close of the comment period that "could not have been submitted during the public comment period and substantially support the need to significantly alter the response actions" pursuant to 42 U.S.C. 9613(k)(2)(B) and 40 C.F.R § 300.825(c).

i. The Navy failed to address comments from EPA and the public concerned about the impacts of TtEC's fraudulent data on the remedial action.

ii. The Navy failed to address comments from EPA and the public concerned with the ROD's out-of-date remedial goals for buildings and soil.

FOURTH CLAIM FOR RELIEF

Violations of 42 U.S.C. § 9659(a)(1) - Violations of the Federal Facilities Agreement (FFA)

A. The Navy Failed to Act in Accordance with CERCLA, the NCP and EPA CERCLA Guidances, Violating the FFA.

274. Greenaction incorporates by reference all paragraphs of this Complaint set out above as if fully set forth herein.

275. Greenaction is a "person" as defined by 42 U.S.C. § 9601(21).

276. The Navy and EPA are "persons" as defined by 42 U.S.C. § 9601(21).

277. Citizen suits are authorized under 42 U.S.C. § 9659(a)(1) for "violation of any standard,

regulation, condition, requirement, or order which has become effective pursuant to this chapter (including any provision of an agreement under section 9620 of this title, relating to Federal facilities)." (Parenthesis in original.)

278. 42 U.S.C. § 9621 mandates that the President "shall select appropriate remedial actions" which are "in accordance with this section and, **to the extent practicable, the national contingency plan**." (Emphasis added.)

279. Section 6.1 of the FFA states:

> The Parties agree to perform the tasks, obligations and responsibilities described in this Section **in accordance with CERCLA and CERCLA guidance and policy; the NCP**; pertinent provisions of RCRA and RCRA guidance and policy; Executive Order 12580; applicable State laws and regulations; **and all terms and conditions of this Agreement** including documents prepared and incorporated in accordance with Section 7 (Consultation). (Parenthesis in original, emphasis added.)

280. CERCLA response actions by the Navy and EPA at this site, described above, which violate CERCLA and the NCP, constitute violations of the FFA in that they are not "in accordance with" CERCLA and not in accordance, "to the extent practicable," with the NCP.

1. CERCLA Establishes a Non-Discretionary Duty that Sites Must Be Characterized Through Remedial Investigation and Feasibility Study (RI/FS).

281. CERCLA and the NCP establish a mandatory duty to conduct a Remedial Investigation and Feasibility Study (RI/FS) to characterize the site and select an appropriate remedy. 40 C.F.R. § 300.430(d)(1) states:

> The purpose of the remedial investigation (RI) is to collect data necessary to adequately characterize the site for the purpose of developing and evaluating effective remedial alternatives. To characterize the site, the lead agency shall, as appropriate, conduct field investigations, including treatability studies, and conduct a baseline risk assessment.

282. 40 C.F.R. § 300.430(d)(2) states, "The lead agency **shall** characterize the nature of and threat posed by the hazardous substances and hazardous materials and gather data necessary to assess the extent to which the release poses a threat to human health or the environment. . .." (Emphasis added.)

283. EPA CERCLA guidances, including but not limited to its *RI/FS Guidance*, require

characterization of the full vertical and horizontal extent of hazardous contamination, which does not overlook any possible contamination.

2. The HPNS RI/FS Failed to Characterize the Full Horizontal and Vertical Extent of Contamination.

284. Rather than characterize the breadth and depth of contamination through a comprehensive RI/FS, as required by EPA guidance and the FFA, the Navy applied a "spill model" to all Parcels.

285. The "spill model" was not then and is not now authorized under CERCLA, the NCP, the FFA, or EPA guidance.

286. The "spill model" assumed contamination resulted from discrete, well-delineated spills rather than assuming there might be widespread general contamination. These assumptions violated EPA guidances, including but not limited to its *RI/FS Guidance*. The Navy has cited no factual or legal justification for substituting the "spill model" for full vertical and horizontal characterization of contamination required by EPA guidance.

287. Without delineating the full vertical and horizontal extent of contamination, the Navy cannot assure it has identified and remediated all contamination above a remedial goal, violating CERCLA's mandatory duty that the cleanup be protective of human health and the environment, and violating the NCP, and the FFA.

3. The Navy Improperly Limited the Radionuclides to Be Studied, Violating CERCLA, the NCP and the FFA

288. The Navy violated 40 C.F.R. § 300.430(d)(2), by among other things:

a. Adopting remedial goals for only 11 radionuclides in the 2006 *Basewide Removal Memo,* one third of the 33 "Radionuclides of Concern" identified by the HRA, without sufficient factual and rational basis for excluding them.

b. Failing to fully and accurately characterize the site as "impacted" or "non-impacted."

c. Continuing to employ the "spill model" as the basis of site characterization,

despite it being demonstrably wrong at a significant number of sites.

d. Failing to consider that radioactive sandblast grit and smoke from burning radioactive fuel blown around base by the Bay area's swirling winds contributed to radioactive contamination.

e. Improperly estimating background levels of radiation. The Navy failed to demonstrate the sites it selected for background sampling were not radiologically impacted.

f. The Navy and EPA improperly agreed to treat radium-226 differently than all other radionuclides, setting the remedial goal for radium-226 at "1 pCi/g above background." This is not a risk-based remedial goal, as required by CERCLA, the NCP and the FFA. Neither the Navy nor EPA have stated any facts or any rational basis for this agreement. This agreement violates CERCLA, the NCP and the FFA.

4. The Navy Failed to Use EPA's PRG Calculators and Improperly Adopted Remedial Goals Not Protective of Human Health and the Environment; EPA Improperly Approved

289. The NCP authorized EPA to set a CERCLA "risk range." EPA set the "starting point" of risk to be a lifetime excess cancer risk below 1 in a million people, or in scientific notation, 1×10^{-6}. Under certain site-specific conditions, EPA may approve a risk as high as one excess cancer in 10,000, or 1×10^{-4}, making the CERCLA risk range between $1x10^{-6}$ and $1x10^{-4}$.

290. EPA established a system for calculating risk from cancer-causing contaminants to human health, called the Preliminary Remediation Goal ("PRG") Calculators; one for soil and another for buildings. EPA guidance requires using PRG Calculators to set remedial goals within the CERCLA risk range.

291. The Navy improperly adopted remediation goals in its 2006 *Basewide Removal Action Memorandum* that were not protective of human health and the environment, in violation of CERCLA, the NCP and the FFA.

292. The Navy failed to use EPA PRGs to establish remedial goals for soil within the CERCLA risk range. It failed to support remedial goals with substantial factual evidence and reasoned analysis. For example, the Navy stated its soil remedial goals were drawn from "EPA PRGs for two future use scenarios," but failed to describe them, let alone demonstrate the scenarios were applicable to HPNS.

293. The Navy failed to use EPA's Building PRG Calculator in setting remedial goals for buildings, as required by EPA guidance. Instead, the Navy used non-EPA-approved methods, including the AEC's *Regulatory Guide 1.8*, and RESRAD-Build Version 3.3. Both used toxicity data that was outdated in 2006. For example, RESRAD was based on a maximum dose of 25 millirems of radiation per year ("25 mrem/year"), whereas since 1997, EPA guidance has stated that doses above 15 mrem/year were not protective under CERCLA.

5. The Navy and EPA Applied the Improper RGs To All Subsequent Remedial Actions.

294. The Navy and EPA applied its improperly calculated RGs from the *2006 Basewide Removal Action Memorandum* to all subsequent **remedial** actions at the Shipyard, constituting repeated and continuing violations of CERCLA, the NCP and the FFA. RODs are required to confirm that the selection was conducted in compliance with CERCLA and, as much as practicable, with the NCP pursuant to 42 U.S.C. § 9621(a). The Navy proposed and EPA approved repeated and continuing violations of CERCLA, the NCP and the FFA by applying improper RGs to all subsequent remedial actions without regard to each Parcel's individual characteristics and without stating any factual or rational justification for doing so. Nor did they describe why compliance with the NCP was not practicable.

6. The Navy Failed to Update the Improper PRGs In All Subsequent Cleanup Documents, Including *FYRs*

295. Since 2006, the Navy has failed to update radiological PRGs, including for the 2008, 2013, and 2019 *FYR*s, in violation of 42 U.S.C. § 9621. Among other violations, the Navy failed to:

a. Respond to EPA's repeated demands that it update the building and soil PRGs. For example, EPA commented to the *Draft Fourth FYR* that the Navy's

protectiveness determinations were not consistent with EPA guidance.

b. Rather than complying, the Navy improperly delayed its protectiveness determination, stating, "It is anticipated that the radiological rework will be completed prior to the next Five-Year Review," i.e., the *Fifth FYR*.

c. The *Fifth Five Year Review* failed to update the PRGs, improperly relying instead on the inadequate *Addenda* to the *Fourth FYR*.

296. EPA failed to enforce the *FFA* regarding updating PRGs.

297. The Navy violated 40 C.F.R. § 300.430(a)(1)(iii). Among other things, the Navy:

a. Improperly included institutional controls in its remedy. They are inadequate to ensure long-term protectiveness, as the Navy has failed to include any plan to enforce the controls in future through inspection and maintenance.

b. Improperly used these controls to turn off inputs for home grown produce in its risk calculation.

c. Improperly adopted the use of "durable covers," as they will have to be destroyed to develop the Shipyard. The Navy has ignored this fact in its risk calculations, violating CERCLA, the NCP and the FFA.

298. Despite the above-described deficiencies, EPA improperly approved the 2006 remedial goals and their application to subsequent RODs, constituting repeated and continuing violations of CERCLA, the NCP and the FFA.

B. The Navy Failed to Act in Accordance with the FFA By Not Complying with EPA Guidances.

299. The Navy committed repeated and continuing violations of the FFA by failing to act "in accordance with" EPA CERCLA guidances, including but not limited to:

a. *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*. Among other violations, the Navy failed to:

1. Conduct a proper site characterization to determine the nature and extent of contamination considering the historical record, relying instead on the

HRA's incorrect and uncorrected description of the facts. As a result, the Navy sampled only approximately 10% of the Shipyard's 882 sites.

2. Follow a sampling approach that defined contamination in "both vertical and horizontal directions."

3. Consider factors that may have caused contaminants to migrate from the release source, such as the Shipyard's swirling winds, which spread radioactive sandblast grit and radioactive smoke around the Shipyard, contributing to contamination.

b. *Data Quality Objectives for Remedial Response Activities, Appendix C Sampling Considerations.* Among other violations, the Navy failed to:

1. Conduct comprehensive sampling of the entire site "to ensure that no area of the site is overlooked."

2. Conduct sampling to "provide complete coverage of the area of interest," before making "general inferences" about the site.

c. *Risk Assessment Guide for Superfund, Part A.* Among other violations, the Navy failed to:

1. Perform a site characterization that fully analyzed the "nature and extent of threats to human health and the environment."

2. Determine the potential extent of contamination, including spread of contaminants from their original sources.

3. Gather information on what contaminants are present in what concentrations, considering how "the environmental setting . . . may affect the fate, transport and persistence of the contaminants."

4. Conduct sampling that considers "routes of potential transport" of contamination.

5. Assure investigation of contamination is comprehensive, obtaining "data

on concentrations of contaminants in each of the source areas and media of concern."

6. Recognize that "because toxicity information may change rapidly and quickly become outdated," decision making must be based on "the most recent information available," and instead using outdated toxicity data in making decisions.

7. Accurately estimate the nature, extent, and concentration of contaminants.

8. Use "the hierarchy for obtaining toxicity values" for risk based PRGs.

d. *Risk Assessment Guidance for Superfund, Part B.* Among other violations, the Navy failed to:

1. Assess the cancer risk for soil and buildings using EPA's Preliminary Remediation Goals Calculators during analysis and selection of remedial alternatives.

2. Meet the level of protectiveness required for lifetime cancer risk, 1×10^{-6} (one in a million) and if site specific circumstances justify and regulators approve, between 1×10^{-6} and 1×10^{-4} (one in 10,000).

3. Derive total risk posed for each radioactive contaminant and for each exposure pathway and then calculate cumulative total radiological risk.

4. Derive total risk for all contaminants and pathways by summing the risk of chemical and radiological contamination.

5. Develop PRGs during the "scoping phase" using default values and then modifying the PRGs based on site-specific characteristics determined in the Remedial Investigation.

6. Calculate risk based on excess lifetime cancer risk. Instead, the Navy calculated risk based on dose.

7. Use EPA's Building PRG Calculator ("BPRG") as the basis for calculating building remedial goals. Instead, the Navy used *AEC Regulatory Guide 1.86* and RESRAD, methods not approved by EPA.

e. *Human Health Toxicity Values in Superfund Risk Assessments*. The Navy failed to update Preliminary Remediation Goals ("PRGs") with the most current toxicity data.

f. *PRG User's Guide, Land Use Descriptions, Equations, and Technical Documentation*. The Navy violated the allowance for exposure pathways to be switched off in PRG calculations only if "a route of exposure . . . is considered to be unreasonable" at the site, "both currently and in the future."

g. *Radiation Risk Assessment at CERCLA Sites: Q & A*. Among other violations, the Navy failed to:

1. Select a remedy consistent with the NCP risk range (1×10^{-4} to 1×10^{-6} lifetime excess cancer risk).

2. Follow EPA's direction that "dose recommendations (e.g., guidance such as DOE orders and NRC regulatory guides) should **not** be used as to-be considered materials," when setting remediation goals. (Parenthesis in original, emphasis added.)

h. *Superfund Preliminary Remediation Goals for Radionuclides in Buildings (BPRG)*. The Navy failed to update remedial goals for buildings using the EPA's BPRG.

i. *Citizen's Guide to Capping*. Among other violations, the Navy failed to:

1. Plan for and implement regular inspections, maintenance, and repair to assure that "durable" covers are not damaged by weather, plant roots, and human activity.

2. Assess radiological risk to construction workers during development of

the Shipyard and to future residents since "durable covers" must necessarily be removed to develop the Shipyard.

j. *Draft Technical Guidance For RCRA/CERCLA Final Covers*. The Navy failed to assume a 30-year lifetime for proposed covers and failed to plan to monitor and maintain covers for that lifetime.

k. *Comprehensive Five-Year Review Guidance*. Among other violations, the Navy failed to:

1. Determine whether there have been changes in toxicity or other contaminant characteristics that need to be investigated; and failed to identify "recent toxicity data and their sources."

2. Investigate whether the exposure assumptions, toxicity data, and cleanup levels are still valid.

3. Recalculate risk assessment to account for changes in standards and/or toxicity data.

4. Investigate the question, "Has any other information come to light that could call into question the protectiveness of the remedy?"

C. The Navy Violated CERCLA's Public Participation Requirements

300. 42 U.S.C. § 9617 states, in pertinent part:

> Before adoption of any plan for remedial action to be undertaken . . . the President or State, as appropriate, shall take both of the following actions:
>
> (1) Publish a notice and brief analysis of the proposed plan and make such plan available to the public.
>
> (2) Provide a reasonable opportunity for submission of written and oral comments and an opportunity for a public meeting at or near the facility at issue regarding the proposed plan and regarding any proposed findings under section 9621(d)(4) of this title (relating to cleanup standards).

301. This section continues, "The notice and analysis published under paragraph (1) shall include sufficient information as may be necessary to provide a reasonable explanation of the proposed plan and alternative proposals considered."

302. Pursuant to 40 C.F.R. § 300.430, responsible parties like the Navy "shall" conduct community relations activities to support the selection of the remedy.

303. Pursuant to 40 C.F.R. § 300.430(f)(2), the agency "shall prepare a proposed plan" describing the remedial alternatives, proposing a preferred alternative, and summarizing the information relied on in making the selection. The purpose of the proposed plane is to "provide the public with a reasonable opportunity to comment on the preferred alternative for remedial action."

304. Among other violations, the Navy failed to perform its non-discretionary duty to facilitate public involvement on its remedial actions by selecting its 2006 remedial goals without properly identifying, proposing, soliciting, and responding to public comments in accordance with the NCP, subparts E and I, in violation of 42 U.S.C. § 9617(b). The Navy committed repeated and continuing violations of CERCLA, the NCP and the FFA by failing to allow the public to provide comments and to receive meaningful, credible responses on the selection of the remedial actions, including all RODs and Five Year Reviews approved after the 2006 remedial goals were adopted, as required by CERCLA, 42 U.S.C. § 9617 and the NCP, 40 C.F.R. § 300.430(f).

FIFTH CLAIM FOR RELIEF

Violations of 42 U.S.C. § 9613(j)(2) – Actions That Were Arbitrary, Capricious, and Not in Accordance with Law

305. Greenaction hereby realleges and incorporates by reference each allegation contained in the preceding paragraphs as if fully set forth herein.

306. Greenaction is a "person" as defined by 42 U.S.C. § 9601(21).

307. The Navy and EPA are "persons" as defined by 42 U.S.C. § 9601(21).

308. 42 U.S.C. § 9613(j)(2) authorizes the court to grant relief if "the objecting party can demonstrate, on the administrative record, that the decision was arbitrary and capricious or otherwise not in accordance with law."

309. To the extent that the Navy's and EPA's decisions in selecting and/or approving response actions, as described above, were discretionary, they were arbitrary, capricious, and not in accordance with CERCLA, the NCP and the FFA.

SIXTH CLAIM FOR RELIEF

Violations of the Administrative Procedure Act (APA)

310. Greenaction hereby realleges and incorporates by reference each allegation contained in the preceding paragraphs as if fully set forth herein.

311. The Navy and EPA are each an "agency" as defined by 5 U.S. Code § 551(1)(E).

312. Pursuant to 5 U.S.C. § 706(2)(A), agency actions, findings, and conclusions must not be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.

313. As described above, the actions and inactions by the Navy and EPA at HPNS were arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. To the extent their decisions, actions, and inactions in selecting response actions, as described above, were discretionary, they were arbitrary, capricious, and not in accordance with CERCLA, the NCP and the FFA.

314. EPA, as an administrative agency, is required to adhere to its own rules, regulations, long-standing published national policies, guidances and procedures when making oversight and remedy selection-related decisions under CERCLA and the NCP, pursuant to the FFA, and when generally enforcing federal environmental laws it is authorized to administer.

315. In violation of its own guidance document, *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA,* EPA approved the Navy's unlawful and inadequate Remedial Investigation and Feasibility Study (RI/FS).

316. In violation of its own guidance document *Radiation Risk Assessment at CERCLA Sites: Q & A; Risk Assessment Guidance for Superfund, Part B;* and the NCP, 40 C.F.R. § 300.430(e)(2)(i), EPA approved the unlawful, outdated remediation goals the Navy adopted.

317. In violation of its own guidance document, *Human Health Toxicity Values in Superfund Risk Assessments, Superfund Preliminary Remediation Goals for Radionuclides in Buildings,* EPA failed to enforce the FFA to redress the Navy's failure to update the remediation goals since 2006.

318. The EPA's failures to adhere to its own rules, and its deviations from long-standing

published national policies, guidances and procedures without any reasoned explanation, were arbitrary, capricious, and constituted an abuse of discretion, in violation of 5 U.S.C. § 706(2)(A) of the APA.

319. Pursuant to 5 U.S.C. § 706(2)(A), a declaratory judgement may be issued that EPA's failure to enforce the FFA by, among other things, approving the Navy's 2006 remedial goals and not requiring the Navy to update them since they were adopted was unlawful and should be set aside.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff, Greenaction for Health & Environmental Justice, respectfully requests that this Court:

A. Enter a declaratory judgment in favor of Greenaction and against the Navy and EPA regarding the cleanup of the former HPNS Superfund site for: (1) the Navy's and EPA's violations of CERCLA, the NCP and the FFA; (2) for their failure to perform non-discretionary duties under CERCLA (42 U.S.C. 9601, et. seq.); and (3) for actions and inactions that are arbitrary, capricious, an abuse of discretion, and not otherwise in accordance with law.

B. Issue an injunction ordering the Navy and EPA to conduct the HPNS cleanup in compliance with CERCLA, the NCP, and EPA's CERCLA guidance and policy as required by the FFA, including but not limited to:

a. Implementing the work plans requiring 100% retesting of the work done by the Navy's radiological remediation contractor, Tetra Tech, EC, Inc.;

b. Redrafting the inaccurate Historical Radiological Assessment ("HRA") to correct its errors, so subsequent cleanup planning is based accurate information;

c. Faithfully implementing the CERCLA and NCP remedy selection process established in 40 CFR § 300.430 and its associated procedures for all contaminated Parcels at this site;

d. Conducting a new Remedial Investigation and Feasibility Study ("RI/FS") based on previously unconsidered information, including the facts of the

Tetra Tech fraud and its impact on the cleanup, and including a new baseline risk assessment;

e. Calculating updated PRGs using EPA's PRG Calculators, adopting Remedial Goals ("RGs") based on the most up-to-date toxicological data, and replacing the remedial goals adopted in 2006;

f. Preparing and publishing new proposed plans to amending the RODs for all Parcels in accordance with the NCP, including 40 CFR subparts E and I, to account for new circumstances and information revealed by the new RI/FS process; and

g. Considering up-to-date climate change data, including current sea-level and groundwater rise data, in evaluating the protectiveness of the selected remedies in each Parcel, and updating of the PRGs and RGs to account for climate change.

C. Issue an injunction to the Navy requiring it to comply with CERCLA's Five Year Review process to:

a. assure that its remedy is protective of human health and the environment and uses the most recent risk calculations and toxicity data via EPA-approved methods;

b. correct the deficiencies on the *Fourth* and *Fifth FYRs* alleged herein;

c. meet a deadline, to be set by this Court, to correct the deficiencies in the *Fourth* and *Fifth FYRs;* and

d. meet the statutory five-year deadline for each subsequent review on a date to be set by this Court, but in any case, not beyond a November 8, 2028, deadline for the *Sixth FYR*, and continuing for each successive Review not less than every five years thereafter.

D. Enter a declaratory judgment, pursuant to Section 706(2)(A) of the APA, 5 U.S. Code § 706 (2)(A), that the Navy and EPA violated properly promulgated federal agency rules and the APA; and that EPA's actions and inactions, including its approval of the 2006 remedial goals, was unlawful and will be set aside.

E. Award Greenaction its costs and attorney's fees in this action; and

F. Grant Greenaction such other and further relief as this Court may deem appropriate.

Dated: October 16, 2024

Respectfully Submitted,

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