

## APPENDIX A – LEGAL FRAMEWORK

### I. LEGAL BACKGROUND

#### A. CERCLA Requires Cleanups to Be Protective of Public Health

CERCLA establishes a mandatory duty to select remedial actions protecting human health and the environment. 42 U.S.C. § 9621(b)(1), “Cleanup Standards,” states, “The President shall select a remedial action that is protective of human health and the environment.” If the remedy includes leaving residual contamination at the site, the protectiveness of the remedy must be reviewed “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.” 42 U.S.C. § 9621(c).

The mandatory requirement for achieving protectiveness is reiterated many times in CERCLA<sup>1</sup> and in the regulations in the National Contingency Plan (“NCP”). In its Preamble, the NCP states that remedy selection is intended “to ensure that remedies comply with CERCLA’s mandate to be protective of human health and the environment.”<sup>2</sup>

EPA Guidances follow suit. To cite just one example, its October 1988 document, *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, states in Section 1.3.1, “Protective Standards,” that CERCLA remedies are required to be “protective of human health and the environment.”

#### B. CERCLA Establishes Cleanup Procedures

CERCLA describes cleanup standards and procedures at 42 U.S.C. § 6921. The first steps are a Preliminary Assessment (“PA”) followed by a Remedial Investigation (“RI”) and Feasibility Study (“FS”). The Preliminary Assessment is intended to screen out sites that do not pose a threat to public health or the environment, determine if any short-term “removal actions” are necessary, set priorities for a site inspection and gather data to facilitate a fuller site evaluation.

---

<sup>1</sup> For example, 42 U.S.C. § 9621(d)(1) requires that “[r]emedial actions selected under this section . . . shall attain a degree of cleanup . . . at a minimum which assures protection of human health and the environment.”

<sup>2</sup> National Oil and Hazardous Substances Pollution Contingency Plan, 55 Fed. Reg. 8666, 8712 (Mar. 8, 1990). The NCP includes many references to the duty of protectiveness. 40 CFR § 300.430 “Remedial Investigation/feasibility study and selection of remedy,” for example, states CERCLA’s goal: “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.” 40 CFR § 300.430(d), states that remedial investigations are intended to identify “risks” and “threats” to human health. 40 CFR § 300.430(e)(2) requires that “alternatives shall be developed that protect human health and the environment.” 40 CFR § 300.430(e)(9)(iii) sets forth nine criteria that are to be considered in selecting a remedy. 40 CFR § 300.430(f) “Selection of remedy,” categorizes the nine criteria in 3 groups, the first of which is, “overall protection of human health and the environment.” Further, “remediation goals shall establish acceptable exposure levels that are protective of human health and the environment,” 40 CFR § 300.430(e)(2)(i).

The Remedial Investigation (“RI”) characterizes the nature and vertical and horizontal extent of contamination at a site. The Feasibility Study (“FS”) analyzes remedial alternatives, proposes a preferred alternative, and summarizes the data relied upon in selecting the preferred alternative.<sup>3</sup> 40 C.F.R. §300.430 (f)(2) states that a plan must be drafted that, among other things, “describes the remedial alternatives analyzed by the lead agency, proposes a preferred remedial action alternative, and summarizes the information relied upon to select the preferred alternative.”

EPA has issued numerous guidance documents for conducting cleanups including, *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (“RI/FS Guidance”),<sup>4</sup> and *Data Quality Objectives for Remedial Response Activities* (“Data Quality Guidance”).<sup>5</sup> For Superfund sites like HPNS, EPA has issued a multi-volume guidance, *Risk Assessment Guidance for Superfund Sites* (“RAGS”).<sup>6</sup> For radionuclides, there is *Radiation Risk Assessment at CERCLA Sites: Q&A*,<sup>7</sup> *Establishment of Cleanup Levels for CERCLA Sites with Radioactive Contamination*,<sup>8</sup> and *The Multi-Agency Radiation Survey and Site Investigation Manual* (“MARSSIM”).<sup>9</sup>

EPA’s *RI/FS Guidance* defines a remedial investigation as “the mechanism for collecting data to characterize site conditions; determine the nature of the waste; assess risk to human health and the environment; and conduct treatability testing as necessary . . .”<sup>10</sup> The RI consists of several stages of data collection, each of which builds on knowledge developed in the previous stage, eventually forming a comprehensive site characterization.<sup>11</sup>

*Risk Assessment Guidance for Superfund Sites* (“RAGS”) defines site characterization as an analysis of the “nature and extent of threats to human health and the environment.”<sup>12</sup> Under *RAGS, Part A*, lead agencies must determine the potential extent of contamination, including spread of contaminants from their original sources.<sup>13</sup> To accomplish this, the lead agency is required to gather information on what contaminants are present and in what concentrations. It must also consider how “the environmental setting . . . may affect the fate, transport and persistence of the contaminants.”<sup>14</sup> Accordingly, sampling should include “routes of potential

---

<sup>3</sup> 42 U.S.C. § 9621(d)(2)(B)(ii), 40 CFR 300.430.

<sup>4</sup> *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, <https://semspub.epa.gov/work/HQ/100001529.pdf>.

<sup>5</sup> *Data Quality Objectives for Remedial Response Activities*, Appendix C, Sampling Considerations, C-1, <https://nepis.epa.gov/Exe/ZyPDF.cgi/2000A50U.PDF?Dockey=2000A50U.PDF>.

<sup>6</sup> *Risk Assessment Guidance for Superfund (RAGS)*, <https://www.epa.gov/risk/risk-assessment-guidance-superfund-rags-part>

<sup>7</sup> *Radiation Risk Assessment at CERCLA Sites: Q&A*, OSWER 9285.6-20, June 13, 2014, Q3, p. 8-9.

<sup>8</sup> *Establishment of Cleanup Levels for CERCLA Sites with Radioactive Contamination*, August 22, 1997. OSWER 9200-4.18.

<sup>9</sup> *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)*, <https://www.epa.gov/radiation/download-marssim-manual-and-resources>

<sup>10</sup> *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, 1-6, <https://semspub.epa.gov/work/HQ/100001529.pdf>.

<sup>11</sup> *Id.*

<sup>12</sup> *Risk Assessment Guidance for Superfund Part A*, 1-4.

<sup>13</sup> *See id.* at 4-2, 4-3.

<sup>14</sup> *Id.* at 4-2.

transport.”<sup>15</sup> To assure the investigation is comprehensive, the guidance calls for obtaining “data on concentrations of contaminants in each of the source areas and media of concern.”<sup>16</sup> RAGS Part A states that investigation of contamination must also consider whether contamination could be transported around a site.

EPA’s *Data Quality Guidance* calls for comprehensive sampling of the entire site “to ensure that no area of the site is overlooked.”<sup>17</sup> A proper site characterization must “[d]etermine the [n]ature and [e]xtent of [c]ontamination,” considering both historical records and preliminary sampling data.<sup>18</sup> The agency must also consider factors that may have caused contaminants to migrate from the release source and follow a sampling approach that covers contamination in “both vertical and horizontal directions.”<sup>19</sup> To make “general inferences” about a site, the *Data Quality Guidance* requires sampling to “provide complete coverage of the area of interest.”<sup>20</sup>

A Feasibility Study analyzes the practicality of potential remedial alternatives, relying on data generated during the RI.<sup>21</sup> EPA guidance explains that the proposed plan “should clearly describe why the lead agency is recommending the Preferred Alternative.”<sup>22</sup> Remediation must ensure the site will be left clean enough not to pose a short or long-term risk to human health.

For radioactive contamination like that at HPNS, the primary long-term risk is from cancer. EPA has issued guidance on how to assess cancer risk. *Risk Assessment Guidance for Superfund Part B* (“RAGS Part B”) calls for the lead agency to develop Preliminary Remediation Goals (“PRGs”) to use for calculating cancer risk from radiological contamination “during analysis and selection of remedial alternatives.”<sup>23</sup> There are several radiological PRG calculators, the primary ones of interest at HPNS being the PRG calculators for soil and buildings (“BPRG”).<sup>24</sup>

The PRGs implement CERCLA’s requirement that remedies be “protective of human health and the environment.” EPA has set the baseline “point of departure” for protectiveness to be a one-in-a-million risk of excess lifetime cancers (in scientific notation,  $1 \times 10^{-6}$ ).<sup>25</sup> Under

---

<sup>15</sup> *Id.* at 4-11.

<sup>16</sup> *Id.* at 4-3.

<sup>17</sup> *Data Quality Objectives for Remedial Response Activities*, Appendix C Sampling Considerations, C-6, <https://nepis.epa.gov/Exe/ZyPDF.cgi/2000A50U.PDF?Dockey=2000A50U.PDF>.

<sup>18</sup> *RI/FS Guidance*, 2-5, 3-13.

<sup>19</sup> *Id.* at 3-13, 3-17.

<sup>20</sup> *Data Quality Guidance*, Appendix C Sampling Considerations, C-

5, <https://nepis.epa.gov/Exe/ZyPDF.cgi/2000A50U.PDF?Dockey=2000A50U.PDF>.

<sup>21</sup> *See id.* at 4-7.

<sup>22</sup> OSWER, U.S. EPA, *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* §3.4 (1999) (EPA-540-R-98-031), [https://www.epa.gov/sites/default/files/2015-02/documents/rod\\_guidance.pdf](https://www.epa.gov/sites/default/files/2015-02/documents/rod_guidance.pdf).

<sup>23</sup> *Risk Assessment Guidance for Superfund Part B*, 1.

<sup>24</sup> *See generally* Environmental Protection Agency, *PRG Home*, <https://epa-prgs.ornl.gov/radionuclides/>. Note: There is also a vapor PRG calculator, in addition to separate PRG calculators for risk and dose (PRG, DCC, BPRG, BDCC, SPRG, SDCC & RVISL). “PRGs” herein refer to soil PRGs; building PRGs are denoted “BPRGs”.)

<sup>25</sup> *See Risk Assessment Guidance for Superfund Part B*, 34.

some circumstances where site-specific conditions justify it, acceptable risk can fall back from  $10^{-6}$ , but it is not to exceed one-in-ten thousand ( $1 \times 10^{-4}$ ).<sup>26</sup>

Radiological PRGs are “derived initially by determining the total risk posed by each radioactive contaminant,” and each exposure pathway and then calculating a cumulative total risk.<sup>27</sup> The calculation sets a maximum concentration of residual radioactivity, expressed for soil as picograms of radioactivity per gram of soil (“pCi/g”). For buildings, residual contamination is expressed as disintegrations per minute per 100 square centimeters (“dpm/2”).

The PRGs developed during the “scoping phase” are based on default values. They are then modified with site-specific characteristics determined in the RI.<sup>28</sup> *RAGS, Part A*, stresses that “because toxicity information may change rapidly and quickly become outdated, care should be taken to find the most recent information available.”<sup>29</sup> “Priority should be given to those sources of information that are the most current.”<sup>30</sup>

### **C. Five Year Reviews Must Assure Remedial Actions Remain Protective of Human Health and the Environment**

CERCLA sets a strict time limit if five-year reviews are required: “no less often than each 5 years after the initiation of such remedial action.” They must “assure that human health and the environment are being protected by the remedial action being implemented.” 42 U.S.C. § 9621(c).

Neither CERCLA nor the NCP authorize any circumstances under which the deadline for a five-year review may be extended. Nor do they authorize deferral of a protectiveness finding until sometime after the five-year review is due. With five years’ notice, there is no legal or practical justification to miss the statutory deadline.

Caselaw reaffirms the duty to assure protectiveness using the most up-to-date information. In *State of Ohio v. EPA*, 997 F.2d 1520 (D.C. Cir. 1993), the court made this clear:

“The States argue that because all remedies must be ‘protective’ as of implementation, the review will never provide an opportunity for new remedial action. EPA responds convincingly that new action will occur when the review reveals that the remedy is no longer protective – for example, where a remedial technology has failed, or where a newly promulgated standard indicates that the old standard is no longer protective.”<sup>31</sup>

If a five-year review cannot “assure that human health and the environment are being protected by the remedial action being implemented,” CERCLA requires that corrective action be identified, implemented, and reported to Congress. As 42 U.S.C. § 9621(c) states:

---

<sup>26</sup> *Radiation Risk Assessment at CERCLA Sites: Q & A*, May 2014, Q 33 & 34.

<sup>27</sup> See *Risk Assessment Guidance for Superfund Part B*, 34.

<sup>28</sup> See *id.* at 1.

<sup>29</sup> *Risk Assessment Guidance for Superfund Part A*, 7-15.

<sup>30</sup> *Human Health Toxicity Values in Superfund Risk Assessments*, OSWER Directive 9285.7-53 (2003), 3 <https://www.epa.gov/sites/default/files/2015-11/documents/hhmemo.pdf>.

<sup>31</sup> *State of Ohio v. EPA*, 997 F.2d 1520, 1535 (D.C. Cir. 1993).

[I]f upon such review it is the judgment of the President that action is appropriate at such site in accordance with section 9604<sup>32</sup> or 9606<sup>33</sup> of this title, the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

Accordingly, five-year reviews must result in one of two actions: assuring protectiveness or acknowledging a lack of protectiveness, an explanation of exactly how protectiveness will be attained, and reporting it to Congress.

EPA's *Comprehensive Five-Year Review Guidance*, identifies numerous requirements for an adequate review, including determining whether there have been changes in toxicity or other contaminant characteristics which need to be investigated; identifying "recent" toxicity data; revisiting the validity of cleanup levels, and recalculating risk assessment to account for changes in standards and/or toxicity data. It raises three key questions that five-year reviews must answer:

- Question A - Is the remedy functioning as intended by the decision documents?
- Question B - Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?
- Question C - Has any other information come to light that could call into question the protectiveness of the remedy?<sup>34</sup> (Bullet points in original.)

#### **D. CERCLA Sets Forth Requirements for Federal Facilities**

CERCLA requires that all federal facilities comply with its mandatory requirements. 42 U.S.C. § 9620, "Federal facilities," states that all federal agencies, "shall be subject to, and comply with, this chapter in the same manner and to the same extent, both procedurally and substantively, as any nongovernmental entity." 42 U.S.C. § 9620(a)(1).

CERCLA also requires that at NPL (Superfund) sites, federal facilities "shall enter into an interagency agreement with the Administrator for the expeditious completion by such department, agency, or instrumentality of all necessary remedial action at such facility." 42 U.S.C. § 9620(e)(2).

Under 42 U.S.C. § 9620(e)(4), EPA has the ultimate authority over remedial actions at NPL sites. Each interagency agreement must include:

A review of alternative remedial actions and selection of a remedial action by the head of the relevant department, agency, or instrumentality and the Administrator or, if unable to reach agreement on selection of a remedial action, selection by the Administrator.

CERCLA also prohibits federal agencies from inconsistency with EPA guidelines, rules, regulations, and criteria: "No department, agency, or instrumentality of the United States may

---

<sup>32</sup> This section governs removal and remedial actions.

<sup>33</sup> This section governs abatement actions.

<sup>34</sup> *Comprehensive Five-Year Review Guidance*, (June 2001), OSWER 9355.7-03B-P, p. 4-1.

adopt or utilize any such guidelines, rules, regulations, or criteria which are inconsistent with the guidelines, rules, regulations, and criteria established by the Administrator under this chapter.” 42 U.S.C. § 9620(a)(2).

### E. The HPNS Federal Facilities Agreement

On January 22, 1992, the Navy, EPA, and the California Department of Toxic Substances Control (“DTSC”) entered into a *Federal Facilities Agreement for Naval Station Treasure Island – Hunters Point Annex* (“FFA”). Its stated 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.<sup>35</sup>

This provision explicitly establishes that, while guidance documents are generally not mandatory, the parties to the FFA agreed to make them mandatory. They agreed the HPNS cleanup would be implemented “in accordance with . . . Superfund guidance and policy.”

The FFA’s written commitment to follow Superfund guidances is repeatedly ratified throughout the FFA. For example, Section 6, “Work to be Performed,” states “The Parties agree to perform the tasks, obligations and responsibilities described in this Section in accordance with CERCLA and CERCLA guidance and policy . . .”<sup>36</sup> Similarly mandatory language is found throughout the FFA.<sup>37</sup>

Furthermore, a federal agency, including EPA, “must follow its own rules.” *Federal Commc’ns Comm’n v. Fox Television Stations*, 556 U.S. 502 (2009).<sup>38</sup>

The FFA may be enforced by “any person” pursuant to Section 13.1: “Upon the effective date of this Agreement, any standard, regulation, condition, requirement or order which has become effective under CERCLA and is incorporated into this Agreement is enforceable by any person pursuant to CERCLA Section 310,” the provision authorizing citizens’ suits.

---

<sup>35</sup> FFA, Section 1.1(b), 1.

<sup>36</sup> FFA, Section 6.1, 8.

<sup>37</sup> For additional examples where the FFA requires the cleanup to be done “in accordance with . . . CERCLA guidance and policy,” see Section 7.7(b), “Review of Documents,” (requiring “consistency with CERCLA, the NCP . . . **and any pertinent guidance or policy issued by the EPA**”); Section 11.4(b), “Notice and Opportunity to Comment,” subsections (b) and (c) (“**and in accordance with pertinent EPA guidance**”); Section 26, “Public Participation and Community Relations, subsections 26.1 (“**shall comply with . . . relevant community relations provisions in . . . EPA guidances,**” and 26.3 (“**in accordance with** relevant provisions in . . . EPA guidances.”) (Emphasis added.)

<sup>38</sup> See *Bradley v. Weinberger*, 483 F.2d 410, 414 n.2 (1st Cir. 1973) and *United States v. Griglio*, 467 F.2d 572 (1st Cir. 1972).

## **F. CERCLA Requires Public Participation in Decision Making**

CERCLA requires meaningful public participation in the remedy selection process. 42 U.S.C. §9617, “Public Participation,” requires that “a notice and brief analysis of the proposed plan” be published and made publicly available. The public must be provided “a reasonable opportunity for submission of written and oral comments” and an opportunity to attend “a public meeting at or near the facility at issue regarding the proposed plan.”

42 U.S.C. §9617(b) requires, “a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations.”

CERCLA also mandates public participation as to specific parts of the remedy-selection process, such as establishing an administrative record, consideration of alternative remedial options in a RI/FS and the ultimate selection of a remedy in a Record of Decision (“ROD”). For example, 42 U.S.C. § 9613(k) 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.” 42 U.S.C. § 9613(k)(1).

In 40 C.F.R. § 300.430(f)(2), the NCP provides: “the lead agency shall identify the alternative that best meets the requirements in § 300.430(f)(1), above, and shall present that alternative to the public in a proposed plan....” Furthermore:

[t]he purpose of the proposed plan is to supplement the RI/FS and provide the public with a reasonable opportunity to comment on the preferred alternative for remedial action, as well as alternative plans under consideration, and to participate in the selection of remedial action at a site.

Like CERCLA, the NCP requires an opportunity for the public to provide written and/or oral comments, attend a public meeting, and get a “response to each issue.” 40 C.F.R. § 300.430(f)(3)(i).

EPA guidance also states clearly that the RI/FS and proposed remediation plan, along with other information that forms the basis for choosing a cleanup plan, must be included in the Administrative Record to enable public comment.<sup>39</sup>

## **G. CERCLA Authorizes Citizens Suits**

CERCLA provides statutory authority for citizen suits. It authorizes two types of actions. First, under 42 U.S.C. § 9659(a)(1), “any person” may bring an action alleging “a 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.)

---

<sup>39</sup> See U.S. EPA, *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* §3.4, 3-10 (1999) (EPA-540-R-98-031), [https://www.epa.gov/sites/default/files/2015-02/documents/rod\\_guidance.pdf](https://www.epa.gov/sites/default/files/2015-02/documents/rod_guidance.pdf).

Second, 42 U.S.C. § 9659 (a)(2) authorizes “any person” to sue for “a failure” of a public officer “to perform any act or duty under this chapter, including an act or duty under section 9620 (relating to Federal Facilities), which is not discretionary with the President or such other officer.” (Parenthesis in original.)

CERCLA requires 60 days prior notice of intent to file a citizens’ suit. 42 U.S.C. § 9659(d) and (e). Notice must be given to the federal government and the State in which the alleged violation occurs. 42 U.S.C. § 9659 (d)(1). The EPA Administrator must also be notified. 42 U.S.C. § 9659(e).

Once the 60-day notice period elapses, the noticing party may sue, unless the government is “diligently prosecuting” the violations alleged:

No action may be commenced under paragraph (1) of subsection (a) if the President has commenced and is diligently prosecuting an action under this chapter, or under the Solid Waste Disposal Act to require compliance with the standard, regulation, condition, requirement, or order concerned (including any provision of an agreement under section 9620 of this title)<sup>40</sup>. 42 U.S.C. § 9659(d). (Parentheses in original.)

Section 9659 also requires that the 60-day notice required for both types of citizens’ suits “shall be given in such manner as the President shall prescribe by regulation.” The service, content, and timing requirements of the notice are detailed in 40 C.F.R. § 374.1 through 374.6.

In considering the notice required, the Ninth Circuit Court of Appeals relies on *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Foundation, Inc.*, 484 U.S. 49 (1987), which articulated two purposes: “to [1] give [the alleged violator] an opportunity to bring itself into compliance with the Act and thus likewise [2] render unnecessary a citizen suit.”<sup>9</sup> The pre-suit notice must be “sufficiently adequate so that the recipient can identify the basis for the complaint” but it does not have to “list every specific aspect or detail of every alleged violation.” *Sierra Club v. Portland Gen. Elec. Co. (PGE)*, 663 F.Supp.2d 983, 999 (D. Ore. 2009).

## **H. Challenging the Navy’s Cleanup Is Not Barred by 42 U.S.C § 9613**

Citizens may not bring an action under CERCLA challenging an ongoing “remedial action.” 42 U.S.C.A. § 9613(h). However, the Ninth Circuit recognizes an exception to this rule when the challenged remedial action is at a federal Superfund (NPL) site. In that case, the §9613(h) bar does not apply and citizens may sue during the remedial action. *Fort Ord Toxics Project, Inc. v. California E.P.A.*, 189 F.3d 828, 834 (9th Cir. 1999).

CERCLA defines a remedial action as any action intended to be a permanent solution to remedy environmental hazards. This includes but is not limited to “cleanup of released hazardous substances and associated contaminated materials” and the “segregation of reactive wastes.” 42 U.S.C.A. §9601(24).

---

<sup>40</sup> Section 9620 relates to Federal Facilities.



Because the action at HPNS is a remedial action at a federal facility on the NPL, the 42 U.S.C.A. §9613(h) jurisdictional bar does not apply. Greenaction may file a citizens' suit challenging the HPNS cleanup where violations of CERCLA, the NCP and the FFA have occurred, after providing the required 60-day notice and that period has elapsed.