



Natural Resource Damage Assessment: Preassessment Screening and Integration With CERCLA Ecological Evaluations

BACKGROUND:	Section 107(a)(4)(C) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, imposes responsible party liability for residual damages resulting from the injury, loss, or destruction of natural resources when environmental restoration activities incompletely correct such injuries due to a release of CERCLA hazardous substances. CERCLA Section 107(f) indicates that such liability shall be to the United States, States, and Indian tribes; CERCLA Section 120 also extends natural resource damage liability to federal facilities, including the Department of Energy (DOE). CERCLA Section 107(f), Executive Order (E.O.) 12580, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) also authorize DOE, as a federal Natural Resource Trustee, to act in the public interest with regard to natural resources under its jurisdiction. Natural resources include land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other resources belonging to, managed by, or held in trust by the United States or any State or local government or Indian tribe. When "residual damages" exist, a Trustee may perform a Natural Resource Damage Assessment (NRDA) to calculate monetary damages. Natural resource damage claims by State and Indian tribe Trustees may also be made against parties responsible for damages. Pursuant to CERCLA Section 301(c), the United States Department of the Interior (DOI) has published NRDA regulations at 43 CFR 11. Briefly, the NRDA process encompasses four phases: (1) Preassessment Screen (PAS), (2) Assessment Plan, (3) Assessment, and (4) Post-Assessment. Parts of 43 CFR 11 were remanded to DOI for revision by the U.S. Court of Appeals in 1989. DOI has subsequently published proposed revisions to 43 CFR 11 (56 FR 19752, April 29, 1991). The requirements for the PAS, however, are not expected to change.
STATUTE:	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Sects. 107, 120, and 301.
REGULATIONS:	43 CFR 11; 40 CFR 300.
REFERENCES:	DOE Order 5400.4, <i>Comprehensive Environmental Response, Compensation, and Liability Act Requirements</i> ; DOE Environmental Guidance Program Reference Book on CERCLA; EH-231 Guidance Document, <i>Natural Resource Trusteeship and Ecological Evaluation for Environmental Restoration at Department of Energy Facilities</i> (DOE/EH-0192, June 1991); EPA Guidance Documents <i>Risk Assessment Guidance For Superfund, Vol. II Environmental Evaluation Manual</i> (EPA 540/1-89/001, March, 1989) and <i>Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA</i> (EPA 540/G-89/004, October, 1988).

What is the Preassessment Screen of the NRDA?

The NRDA Preassessment Screen (43 CFR 11, Sect. 11.20) is used to determine whether the release of a hazardous substance and its subsequent effect on natural resources justifies a full NRDA. This screening phase is viewed as a "snap-shot" review of existing data and involves a minimal amount of field work. The PAS uses the following criteria, as defined by NRDA regulations at 43 CFR 11, Sect. 11.23(e), to decide whether to continue with a full NRDA:

- a discharge or release of oil or a CERCLA hazardous substance occurred in a quantity or concentration sufficient to potentially cause injury,
- the natural resources under trusteeship have been or are likely to be adversely affected by the discharge or release,
- data sufficient to support an assessment are readily available or likely to be obtainable at a reasonable cost, and

- any response actions carried out or planned will not sufficiently remedy the injury to natural resources without further action.

Why is a PAS necessary?

A PAS is needed in order to allow a trustee to make a determination that a release, for which there is natural resource damage liability under CERCLA Sect. 107, has occurred. Such a release may result in "residual damages" (i.e., damages resulting from injuries that will not or cannot be addressed by the planned or completed actions). If the criteria listed above are met at the completion of the PAS, a full NRDA should be considered. If however, the PAS results in a determination that a full NRDA is not appropriate, then no further assessment actions need to be taken.

When does a PAS need to be done?

It is recommended that in *all* instances involving potential natural resource injuries, DOE facilities should consider performing or coordinating a PAS,

preferably in conjunction with the scoping activity and baseline risk assessment performed for a CERCLA Remedial Investigation/Feasibility Study (RI/FS). There are, however, certain natural resource damages that are excluded from liability under CERCLA. Sections 107(f),(i), and (j) of CERCLA and Sect. 11.25(b) of the NRDA regulations list the following conditions that are excluded from liability:

- ❑ the damages resulting from the discharge or release were specifically identified as an irreversible commitment of a natural resource in an environmental impact statement or other comparable environmental analysis, the decision to grant a permit or license authorizes such commitment of natural resources, and the facility or project was otherwise operating within the terms of its permit or license;
- ❑ the release **and** the damages resulting from the release occurred wholly before the enactment of CERCLA (December 11, 1980);
- ❑ the damage resulted from the application of a pesticide registered under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 *et seq.*); or
- ❑ the damage resulted from any other federally permitted release, as defined in CERCLA Sect. 101(10).

The DOE Field Organization managing the facility where the damages have occurred would normally make the determination whether or not the release(s) in question fall under one or more of these categories. A PAS may or may not be conducted as part of this determination.

How is the PAS similar to the ecological assessment phase of CERCLA's RI/FS?

CERCLA and the NCP require that selected remedies for cleanup of contaminated sites must be protective of human health and the environment [CERCLA Sect. 104(a); 40 CFR 300]. An ecological assessment, which is part of the RI/FS, is used to provide information on threats to the environment and natural resources that could result from exposure to the released contaminants or from the actions proposed to remedy the threats posed by the contamination [40 CFR 300; EPA 540/G-89/004, October 1988; EPA 540/1-89/001, March 1989]. The ecological assessment would identify contaminants of concern; quantify the release, migration, and fate of the contaminants; identify potentially exposed habitats and populations associated with those habitats; and identify ecological effects resulting from exposure to the contaminants in question. The type of information required for the ecological assessment will, in most cases, satisfy the information needs of a PAS.

Can the ecological assessment of the RI/FS be substituted for a PAS?

Although the CERCLA ecological assessment is not specifically mentioned as a substitute for a PAS, the NRDA regulation at 43 CFR 11, Sect. 11.25 does allow that if a "Federal or State trustee already has a process similar to the preassessment screen, and the requirements of the preassessment screen can be satisfied by that process, the processes may be combined to avoid duplication." Therefore, when DOE is both the lead agency in a CERCLA response action and the authorized Trustee for the natural resources affected, DOE facilities are encouraged to use the CERCLA ecological assessment process, which is already mandated by CERCLA and the NCP, as an alternative to the PAS to avoid duplication. When DOE is not responsible in any way for the release and resulting injury to natural resources and DOE is the authorized Trustee of the natural resources affected, then only a PAS, along with a full NRDA, if required, would be used to develop DOE's claim against the responsible party.

What guidance is available for conducting PAS's and RI/FS's?

DOE's Office of Environmental Guidance, RCRA/CERCLA Division (EH-231), has recently published a guidance document entitled *Natural Resource Trusteeship and Ecological Evaluation for Environmental Restoration at Department of Energy Facilities* (DOE/EH-0192, June 1991), which can be ordered from the Office of Scientific and Technical Information, P.O. Box 62, Oak Ridge, TN 37831, FTS 626-8401 or (615) 576-8401. EPA has also published two guidance documents concerning CERCLA ecological assessments. Entitled *Risk Assessment Guidance for Superfund, Vol. II Environmental Evaluation Manual* (EPA 540/1-89/001, March 1989) and *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (EPA 540/G-89/004, October 1988), these documents can be ordered from EPA's Center for Environmental Research Information, 26 West Martin Luther King Drive, Cincinnati, OH 45268-1072, (513) 569-7562.

Questions of policy or questions requiring policy decisions will not be dealt with in EH-231 Information Briefs unless that policy has already been established through appropriate documentation. Please refer any questions concerning the subject material covered in this Information Brief to John Bascietto, RCRA/CERCLA Division, EH-231, (202) 586-7917.