

# THE APPLICABILITY OF CERCLA AND SARA TO RELEASES OF RADIOACTIVE MATERIALS

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## ABSTRACT

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), (1) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), (2) covers the cleanup of "releases" of radioactive materials from federal and private facilities into the environment. In addition, certain provisions of SARA that do not amend CERCLA also apply to radioactive materials. This dialogue explores the extent to which these laws apply to radioactive materials and the limited exemptions for such materials in these statutes. In addition, the growing overlap between CERCLA and the other federal and state laws that apply to radioactive materials is discussed.

### CERCLA'S APPLICABILITY TO RADIOACTIVE MATERIALS

CERCLA applies to "releases" of "hazardous substances" into the environment." The term "hazardous substance" is defined in Sec. 101 (3) to include substances considered to be hazardous under any one of the enumerated federal environmental laws, including the Clean Air Act. (4) The term "environment" is also defined in Sec. 101 and includes air, water, and soil.

A release of radioactive material that is considered to be hazardous in one medium is considered to be hazardous in all other media. CERCLA is not media specific. Consequently, since radioactive materials are listed as hazardous under Clean Air Act Sec. 112, (5) they are considered hazardous substances under CERCLA, and thereby considered to be hazardous wherever they are released, e.g., to soil or water.

CERCLA Sec. 101 defines "release" to include any leaking, spilling, emitting, etc. However, there are two exceptions from the definition of release for radioactive materials where CERCLA does not apply. The first exception includes releases of "source," "special nuclear," and "byproduct material" resulting from a "nuclear incident" subject to financial protection requirements established by the Nuclear Regulatory Commission (NRC) under Sec. 170 of The Atomic Energy Act. (6) The other exception includes releases from uranium mill tailings sites being cleaned up by the U.S. Department of Energy (DOE) under Title I of the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA). (7) these releases are exempt from CERCLA "for the purposes of section 104...or any other response action." (8)

CERCLA also contains limited exceptions which exempt certain releases of radioactive materials from its reporting requirements. The reporting requirements (9) provide that "persons," including federal agencies and private parties that are "in charge of" an onshore or offshore facility must report releases of hazardous substances in excess of reportable quantities to the National Response

Center as soon as the person has knowledge of the release. Section 111(g) (10) requires information concerning such releases to be published in local newspapers. The failure to promptly report these releases can subject the responsible persons to criminal penalties under Sec. 103(b). (11) "Federally permitted releases," (12) i.e., releases permitted under other federal environmental laws, are, however, exempted from the reporting requirements. These releases include releases of "source," "special nuclear," or "byproduct material" in compliance with legally enforceable licenses, permits, and orders issued pursuant to the Atomic Energy Act.

Since the exemptions to CERCLA are based upon legal factors rather than technical considerations, it is possible that two adjoining radioactive waste sites, or two sites containing identical kinds of radioactive waste, may be treated entirely differently under CERCLA; one site may be exempted from CERCLA's coverage while the other site is included. For example, while inactive uranium mill tailings sites that are being cleaned up by DOE under Title I of UMTRCA are exempt from CERCLA, active uranium milling sites, where the cleanup of identical uranium mill tailings is regulated by the NRC or "Agreement States" under Title II of UMTRCA, are not exempt from CERCLA. In addition, while releases of radioactive materials from "nuclear incidents" from private commercial nuclear sites that are subject to financial protection requirements issued by the NRC under Atomic Energy Act Sec. 170 are exempt from CERCLA, releases of identical radioactive materials from "nuclear incidents" from DOE facilities that are covered by indemnification authorized under the same section of the Atomic Energy Act are not exempt from CERCLA. Also, while releases from inactive uranium mill tailings sites being cleaned up by DOE under UMTRCA are exempt from CERCLA, releases of identical radioactive "byproduct materials" from other DOE facilities being cleaned up under other DOE remedial action programs, including private sites formerly owned or controlled by DOE's statutory predecessors, (13) are not exempt from CERCLA. It is therefore possible that

radioactive waste sites containing identical radioactive waste sites containing identical radioactive wastes may be cleaned up under different standards depending upon whether CERCLA applies.

With respect to releases of radioactive materials that are not exempted from CERCLA, the U.S. Environmental Protection Agency (EPA) has the authority under CERCLA and Executive Order 12580 (14) to require owners, operators, generators, and transporters of hazardous substances to clean up releases of radioactive materials from private and federal sites. All such parties are considered to be jointly and severally liable for the entire cleanup. In addition, EPA can issue administrative orders against these responsible parties and levy fines and penalties against them for noncompliance. Alternatively, EPA can expend monies from the "Superfund" for the cleanup of private sites and then reimburse the Superfund with monies obtained as a result of civil lawsuits brought against the responsible parties. However, Sec. 107(j) (15) of CERCLA provides that any recovery of EPA's response costs resulting from a "federally permitted release" is to be under existing law only, rather than under CERCLA.

Section 206 of SARA created a new Sec. 310 of CERCLA on citizen suits. With respect to the cleanup of private and federal radioactively contaminated sites, CERCLA Sec. 310 provides that citizen groups can for the first time bring suits against EPA and other federal agencies for failure to comply with nondiscretionary duties, or for violations of standards, regulations, conditions, requirements, or orders issued pursuant to CERCLA. However, citizen suits probably cannot be brought against EPA for the cleanup of naturally occurring radon or radium contaminated soils, since EPA's obligations under Sec. 118 and Title IV of SARA are expressly limited to conducting research, development, and demonstration programs. (16)

CERCLA applies to releases of radioactive materials on federally owned sites procedurally and substantively as it does to privately owned sites except: (1) monies from the Superfund are generally not available for the cleanup of federal facilities, and (2) EPA cannot sue other federal agencies. Section 120 of SARA, however, created a new Sec. 120 of CERCLA on federal facilities. In addition to new schedules for the identification, assessment, ranking, and cleanup of federal sites, this new section contains two limited grandfather provisions which apply to radioactive materials on sites owned or controlled by federal agencies.

Conference Report language accompanying SARA Sec. 120 provides that releases of "source," "special nuclear," and "byproduct material" from federal facilities that are properly reported in accordance with the requirements of CERCLA and SARA need not be docketed by EPA in the newly created special docket for federal facilities if EPA concurs that the cleanup of these sites under other laws is

consistent with the National Contingency Plan. Presumably, if these sites are not listed in the docket they will not be included in EPA's National Priorities List (NPL) or otherwise subjected to the procedural and substantive requirements of Sec. 120.

Section 120(b) of SARA contains another limited grandfather provision that applies to those sites in St. Charles or St. Louis counties in Missouri, or in the City of St. Louis, Missouri, that are listed on the NPL and where a plan for cleanup by DOE is in preparation. For these sites, DOE must consult with EPA in the cleanup. However, the provisions of Sec. 120 do not otherwise apply. This provision was intended to cover DOE's inactive Weldon Spring facility in St. Charles County, Missouri, which was proposed by EPA for listing on the NPL as of the date of SARA's enactment.

#### EFFECT OF OTHER PROVISIONS OF SARA ON RADIOACTIVE MATERIALS

SARA also contains new provisions with respect to indoor and naturally occurring radon. Title IV of SARA established a freestanding act entitled The Radon Gas and Indoor Air Quality Research Act of 1986. (16) Under SARA Sec. 403, EPA is required to establish a program which is designed to obtain information on indoor air quality, to coordinate federal, state, and private research and development, and to assess appropriate federal government actions to mitigate the risks associated with indoor air quality. EPA is required to establish a committee of federal officials and an advisory group of nonfederal persons to carry out the research program. A plan must be submitted to the Science Advisory Board, which shall submit comments to Congress in reasonable period of time. Two years after enactment of SARA, EPA is required to submit a report of recommendations to Congress on its research activities. SARA Sec. 405 authorizes appropriations not to exceed \$5 million in fiscal years 1987, 1988, and 1989, to carry out this title and other related activities under SARA.

In addition to Title IV, SARA Sec. 118 contains a number of provisions affecting naturally occurring radioactive material and radium contaminated soils. Section 118(b) (18) provides that EPA, not later than 90 days after enactment, should provide a grant of \$7.5 million from the Superfund to New Jersey for the transportation from residential areas in New Jersey and temporary storage of 14,000 containers of "radon contaminated soil" which is the subject of remedial action under CERCLA. These containers are to be transported to and temporarily stored at any site in New Jersey that is designated by the Governor.

Section 118(k)(l) (19) requires EPA to submit a report to Congress within one year after enactment that identifies locations in the United States where radon is found in commercial, residential, and institutional structures and

assesses the level of radon gas present; determines the level of radon gas and radon "daughters" that poses a threat to human health and assesses the extent of this threat; determines methods of reducing or eliminating the threat; and includes guidance and public information materials. Section 118(k)(2) (20) requires EPA to conduct a demonstration program in the Reading Prong area of Pennsylvania, New Jersey, and New York and at other locations to test methods of reducing or eliminating radon gas and to submit annual reports beginning February 1987.

SARA Sec. 118(m) (21) provides that the President, in selecting response actions at radium-contaminated sites on the NPL, is not required to use "fully demonstrated methods" but may use "innovative or alternative methods" to protect human health in a more cost-effective manner. Under this section, the President need not dispose of waste at an off-site location if "innovative or alternative" methods of disposing of the waste on site are available.

Under Sec. 118(o), (22) EPA is required to establish a new research, development, and demonstration center for hazardous substance response in the Pacific Northwest. EPA and DOE are authorized to enter into interagency agreements for evaluation, testing, and demonstration relating to hazardous and radioactive mixed waste characterization at the Hanford, Washington site. SARA authorizes DOE to provide EPA up to \$5 million for the purpose of entering into cooperative agreements, contracts, or providing grants to the newly created center.

#### **GROWING OVERLAP WITH PROVISIONS OF OTHER ENVIRONMENTAL LAWS**

There is a considerable degree of overlap and, consequently, the potential for inconsistent application of many federal and state environmental laws which authorize or require the cleanup of radioactive materials. This is the case despite the limited attempts by the Congress in CERCLA's exemptions and SARA's grandfather clauses to minimize such duplication.

Among the other laws which would apply to radioactive waste cleanup are UMTRCA and the Atomic Energy Act, under which DOE has been undertaking a number of remedial action programs on inactive uranium milling sites and sites currently or formerly owned or controlled by DOE and its statutory predecessors. (23) In addition, the NRC and "Agreement States" regulate the cleanup of active uranium milling sites under Title II of UMTRCA.

Also, the Low Level Radioactive Waste Policy Amendments Act of 1986, (24) and the Nuclear Waste Policy Act of 1982 (25) provide for the disposal of commercial low-level, high-level, and transuranic wastes in accordance with standards promulgated by EPA and/or regulations and licenses issued by the NRC and by "Agreement States."

The Resource Conservation and Recovery Act (RCRA) (26) also applies to radioactive waste cleanup. While this Act specifically excludes "source," "special nuclear," and "byproduct material," RCRA would apply to the cleanup of other radioactive waste and to radioactive "mixed waste." (27) RCRA Sec. 3004(u) (28) requires compliance schedules for the cleanup of inactive hazardous waste sites (including radioactive mixed waste sites) on active facilities as a condition for the granting of a permit to operate the facility.

RCRA, as well as SARA, contains waivers of sovereign immunity that will permit states to regulate radioactive mixed wastes on federal facilities under RCRA, and to promulgate laws covering remedial action on radioactive waste sites that are not listed on the NPL, pursuant to CERCLA Sec. 120(a)(4). Further, many states, whether pursuant to RCRA-authorized programs, or under their own initiative, are promulgating regulations and passing laws which will authorize them to regulate the treatment, storage, and disposal of hazardous wastes (including radioactive mixed wastes) on both private and federal facilities in their states.

The potential exists for inconsistent application of the technical, procedural, legal, and other substantive requirements of these various laws, which may lead to extensive litigation concerning such issues as "how clean is clean" and, with respect to federal facilities, where should decreasing federal appropriations first be applied. It will become increasingly difficult for federal agencies and private responsible parties to plan and prioritize the cleanup of their contaminated facilities based upon the degree of risk to public health, safety, and the environment.

It is this author's view that Congress should closely monitor the implementation of CERCLA, SARA, RCRA, and the various state cleanup laws over the next few years with respect to the cleanup of radioactive wastes, radioactive mixed wastes, and other hazardous wastes to assess whether the growing multiplicity of overlapping federal and state hazardous waste and radioactive waste laws are facilitating or hindering the expedited cleanup of these sites.

Several options Congress may wish to consider include: (1) broader grandfather clauses for federal and private radioactively contaminated sites being cleaned up or regulated under other laws; (2) amendments to CERCLA to limit its applicability to releases of radioactive substances, particularly where these releases are federally permitted under the Atomic Energy Act; (3) amendments to CERCLA and/or RCRA that will eliminate the overlap between these two laws; (4) amendments to CERCLA and/or RCRA that will enable federal and private facilities to plan for the cleanup of their waste sites in an orderly prioritized manner to protect public health and safety; and (5) amendments to CERCLA and/or RCRA that will recognize the

inherent differences between federal agencies and other private responsible parties with respect to the cleanup of inactive waste sites. Under CERCLA, federal agencies and their officials may be found liable for violations incurred due to factors out of their control. These factors include the Congressional budget process, applicability of the Anti-Deficiency Act, and federal procurement laws.

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1. 42 U.S.C. Sub-section 9601-9675, ELR Stat. 44001.
2. Pub. L. No. 99-499, 100 Stat. 1613 (1986).
3. 42 U.S.C. Sec. 9601, ELR Stat. 44005.
4. 42 U.S.C. Sub-sec. 7401-7642, ELR Stat. 42201.
5. 42 U.S.C. Sec. 7412, ELR Stat. 42215.
6. 42 U.S.C. Sec. 2210, ELR Stat. 41233.
7. 42 U.S.C. Sub-sec. 7901-7942, ELR Stat. 41925.
8. CERCLA Sec. 101(22), 42 U.S.C. Sec. 9601, ELR Stat. 44006.
9. CERCLA Sec. 103(a), 42 U.S.C. Sec.9603(a), ELR Stat. 44009.
10. 42 U.S.C. Sec.9611(g), ELR Stat. 44036.
11. 42 U.S.C. Sec. 9603(b), ELR Stat. 44009.
12. CERCLA Sec. 101(10), 42 U.S.C. Sec.9601(10), ELR Stat. 44005.
13. These predecessors include the Manhattan Engineer district, the Atomic Energy Commission, and the Energy Research and Development Administration.
14. 52 F.R. 2923 (1987)
15. 42 U.S.C. Sec. 9607(j), ELR Stat. 44027.
16. See *infra*.
17. SARA, Pub. L. No.99-499, Sub-sec. 401-405, 100 Stat. 1613(1986).
18. ELR Stat. 44046.
19. Clean Air Act Sec. 101 (note), 42 U.S.C. Sec. 7401 (note), ELR Stat. 44047.
20. *Id.*
21. ELR Stat. 44048.
22. CERCLA Sec. 311 (note), 42 U.S.C. Sec. 9660 note, ELR Stat.44048, as a note after CERCLA Sec. 118.
23. These programs include the Uranium Mill Tailings Remedial Action Program, the Formerly Utilized Sites Remedial Action Program, the Grand Junction Remedial Action Program, and the surplus Facilities Management Program.
24. 42 U.S.C. Sub-sec. 2021 (b)-(j).
25. 42 U.S.C. Sub-sec. 10101-10226, ELR Stat. 41971.
26. 42 U.S.C. Sub-sec. 6901-6987, ELR Stat. 42001.
27. Mixed wastes contain both hazardous nonradioactive substances and radioactive substances which may include "source," "special nuclear," and "byproduct material."
28. 42 U.S.C. Sec. 6924 (u), ELR Stat. 42017.