



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

FEB 07 2003
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MEMORANDUM

SUBJECT: Request for a Ceiling Increase at the Webster-Gulf Nuclear Site, Webster, Harris County, Texas

FROM: *for* Myron O. Knudson, P.E., Director
Superfund Division (6SF)

TO: Marianne L Horinko, Assistant Administrator
Office of Solid Waste and Emergency Response (5101T)

THRU: Michael B. Cook, Director
Office and Emergency and Remedial Response (5201G)

ATTN: ~~Mark M. Jones,~~
~~Jo Ann Griffith,~~ Director
~~Region 2/6 Accelerated Response Center (5202G)~~
ERR Center/OERR

I. PURPOSE

This memorandum requests approval for a ceiling increase for a removal action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA), 42 U.S.C. §§ 9601 et seq., at the Webster-Gulf Nuclear Site (Site) located in Webster, Harris County, Texas. The response action involves the removal and proper disposal of the radioactive sources and contaminated wastes at the Site, and disassembly and disposal of the contaminated buildings and foundations.

This action meets the criteria for initiating a removal action under the National Contingency Plan (NCP), 40 CFR §300.415.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS # TX0000605420
Category of removal: Classic Emergency
Site ID # 06MD

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A. Site Description

1. Removal site evaluation

The Webster Site is located in Harris County, Texas. At the Webster Site are numerous radioactive sources and radioactive-contaminated wastes, materials, and structures. Machining of radioactive sources, spills, and other releases during operations at the Site contaminated the structures and equipment. The radiation level in the structures has resulted in their being defined as a High Radiation Area, and therefore time and shielding precautions must be observed. Several radioactive isotopes have been identified throughout the facility.

The meters and monitors have detected elevated radiation beyond the perimeter of the Webster Site. This is from the "shine" from the gamma radioactive sources within the building. The level of radiation at the perimeter is high enough to be of concern to the Texas Department of Health, Bureau of Radiation Control (TDH-BRC).

The operations of Gulf Nuclear are described in the Action Memorandum for the Site dated August 28, 2002. The Site investigation and ongoing removal action have shown that radioactive contamination is on the building walls and floors at the Webster Site. The construction of the building and type of contamination do not allow for effective and efficient decontamination of the structure, and experience at the Gulf Nuclear site in Odessa, Texas, has shown that building decontamination is not realistic.

It has been impossible to determine the amount of contamination under the slab and foundation of the building. The building is actually five conjoined buildings, built at different times during the history of Gulf Nuclear's operations. Documents recovered from the building indicate that the operators poured a concrete slab to cover a spill of radioactive material. Anecdotes from former workers, competitors, and industry workers suggest that Gulf Nuclear buried radioactive sources or items under the foundations as they built the next section of building.

There are currently twenty-five in-ground vaults that were used to store radioactive sources. Investigations during the removal action have found that the walls of some of the vaults are broken, and there is communication with the ground water. Samples of water flowing into the vaults show no elevated radioactive contamination, but this does not eliminate the potential for subsurface contamination. In addition to the twenty-five vaults, there is evidence of up to ten more vaults; areas of concrete were poured in the same sizes as the areas surrounding the existing vaults. Until the foundation can be removed, it cannot be determined if these additional vaults exist, were removed, or were abandoned with radioactive material inside.

2. Physical location

The Site is located at 202 W. Medical Center Boulevard in Webster. The immediate area is a medical center with clinics, offices, and a hospital. To the east is a breast cancer diagnostic

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clinic separated by only a sidewalk. To the west is a medical office building and then the Clear Lake Regional Hospital. The front door opens onto Medical Center Boulevard to the south. Parking lots for the clinic and doctors' offices surround three sides. A dog kennel is located to the north, separated by a parking lot of two rows of parking and the driveway. Retail stores, other commercial buildings, and ball fields are nearby in the busy urban area of the immediate vicinity. New housing construction has started in the empty field across Medical Center Boulevard.

3. Site characteristics

The Webster Site has a series of structures that are connected or abutted on a plat of approximately 300 feet by 85 feet. Materials of construction include brick, prefab metal, and wood siding. The conjoined building sits on concrete slabs poured at different times during the operations.

An investigation conducted by U.S. Ecology in September 2001 found significant radioactive contamination on walls and floors in several rooms. The contamination was not limited to the radiation containment areas, as the investigation found alpha contamination 120 times greater than background at the opening of the front door. Dust and dirt in the office area had readings of 650 times that of background.

While Gulf Nuclear was operating, a significant release occurred involving a metal lathe. Americium-241 was spewed throughout the room. Fabric, which was designed and used to prevent the contamination of structures, was placed on floor, walls and ceiling of the room. When the fabric was pulled back, the detectors measured the degradation at approximately 200,000,000 cpm on the floor. Every room located at the Webster facility exceeded the acceptable surface limits for radioactivity, as defined by the Texas Administrative Code 289.202.

Since the approval of the previous ceiling by the Assistant Administrator of OSWER, additional sources have been discovered and the known conditions of the building have been refined. When a large piece of equipment was removed with a crane, the crews discovered five Cesium-137 sealed sources totaling more than 385 Curies. The exposure to these sources poses an immediate danger, at over 1000 R/hr the dose received could cause severe health effects. The recovery and handling of these sources in the uncontrolled and dangerous conditions required diligent and utmost care. The additional labor hours, packaging, transportation, and disposal of these sources are significant and contribute to the additional ceiling request.

The presence of these sources could not have been predicted. They were hidden under the Cesium oven that took a 40-ton crane to remove it through the roof of the building. It was impossible to access the sources without the destruction of the building and use of the crane. Gulf Nuclear was never licensed to even store sources of that activity. The oven and its shielding prevented identification of the sources. The instruments identified very high activity in and around the oven but based on the intended use, it was speculated that spills were the cause of the high instrument readings. A spill of less than 1 Curie on the outside of the oven would have

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resulted in the instrument readings the crews found. It was anticipated that the spill would be included in the established waste streams and included in the previous ceiling.

As more and more of the radioactive material is removed from the building, the crews are able to better characterize the building material. The original site assessment and characterization conducted by a contractor for the Bankruptcy court estimated that much of the building was not contaminated to an extent that would require disposal at a radioactive disposal facility. However, much of the activity attributed to the sources, contaminated instruments and equipment is now found on and in the structure of the building. The contamination level of the building debris will require disposal at the Class A waste disposal facility. The cost difference for that disposal is significant.

The condition of the building is worse than originally anticipated. Loose radioactive material, primarily Americium-241, is being found in very dangerous concentrations in rooms and even more so in the attics and behind walls of the building. As the highest activity items, sources, and wastes are removed from the building, the instruments are able to identify the contamination as part of the building. That contamination could not be "seen" by the instruments because of the high radiation levels of the material in the buildings overwhelmed the radiation coming from the building itself.

It is a common practice in the radioactive laboratory industry to counter releases by painting surfaces to fix the contamination to the surfaces. The paint not only fixes the alpha particles but also attenuates the activity so that it is shielded from the instruments. The investigation of surfaces in the working areas of the building were very elevated but gave no indication that the attics and areas behind equipment and walls would be contaminated to the extent found.

The Americium-241 was milled to less than 400 mesh, meaning that the extremely fine dust falls through a sieve with 400 openings per inch. That small size can easily be entrained in breezes caused by the movement of workers in the rooms, it can easily be inhaled or ingested, and can adhere to clothing, hair and skin. Inhaling or ingesting the Americium-241, alpha radiation, poses a great danger to health in the long term and with the concentrations found at the Site, an immediate danger is present.

The actions necessary to respond to the level of contamination are beyond the anticipated effort. Additional personal protective equipment is needed, Level A protection is required to prevent contaminating the crews. Additional shielding and containment structures are built to allow the crews to work and limit their exposure. Those actions take additional time and money to accomplish.

The crews anticipated that the personal protective equipment could be disposed of as unregulated radioactive waste. However, the heavy contamination in the building has resulted in the equipment contaminated to the extent that it must be disposed of as higher classification. The In-Situ Object Counting System (ISOCS) has verified the classification of the waste stream.

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Some of the personal protective equipment has exceeded the Class C criteria thus increasing the volume of Greater Than Class C waste.

The Americium, Americium-Beryllium, and Plutonium-Beryllium sealed neutron sources are being recovered by the Department of Energy (DOE) source recovery program. The stability and integrity of several of the sources was in question and DOE required substantial characterization and documentation of the sources. Mechanical failure of DOE's shipping containers, and problems with DOE's transportation services have resulted in handling the sources more than anticipated.

4. Releases or threatened release into the environment of a hazardous substance, pollutant or contaminant

An inventory of the radionuclides at the Webster Site includes predominately Cesium-137, Americium-241, Cobalt-60, and Radium-226. A detailed inventory of the material found in the building is included in Attachment 3, the assessment report funded by the bankruptcy court. The radionuclides Cesium, Americium, Cobalt, Radium, and the others are designated hazardous substances as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and 40 CFR § 302.4.

The TDH-BRC maintains the perimeter thermo-luminescent dosimeters (TLDs) to monitor the radiation being emitted from the Site. In the report provided by TDH-BRC to EPA on November 8, 2001, the highest annual dose rate recorded at a station at the Webster site was 1966.5 milli-Rem (mRem), and an adjacent TLD recorded 1585.7 mRem. On the opposite side of the building, a TLD recorded an annual dose rate of 1148.7 mRem. The background TLD recorded 71.7 mRem. The permissible annual dose rate for the public is 0.1 Rem, and for occupational exposure is 5 Rem (10 CFR §§ 20.1302 and 20.1201).

Employees of the neighboring clinic wear personal dosimeters as part of their occupational requirements. Exposures to radiation have been recorded on TLDs worn by employees working in the clinic closest to the Site. Patterns of exposure indicate a significant contribution from the Site, although the exposures recorded are within the permissible limits.

5. NPL status

The Site is not on the NPL. The Site has not been ranked for possible inclusion on the National Priorities List.

6. Maps, Pictures and other graphic representations

Attachment 1 Enforcement Addendum

Attachment 2 Site Map

Attachment 3 Site Specific Decommissioning Cost Estimate, Prepared for the U.S. Bankruptcy Court, 10/18/2001

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- Attachment 4 U.S. EPA Fact Sheet on Ionizing Radiation, No. 1 (EPA 402-F-98-009)
- Attachment 5 U.S. EPA A Fact Sheet on the Health Effects from Ionizing Radiation, No. 2 (EPA 402-F-98-010)
- Attachment 6 Removal Action Contract with Texas Commission on Environmental Quality

B. Other Actions to Date

1. Previous actions

Following the October 17, 2001 conversion of the owner's Chapter 11 bankruptcy proceedings to a Chapter 7 bankruptcy, the State of Texas requested assistance from EPA. Under the OSC's authority, a new fence was constructed to completely enclose the Webster facility. Other repairs and actions were taken to bolster the security of the Webster Site, and EPA also took control of the alarm systems at the Site.

2. Current actions

Following verbal approval by the Region 6 Superfund Division Director on October 26, 2001, crews mobilized to the Site and began the cleanup actions. The sources have been accumulated from the various rooms in the building, and are being sent for disposal at the proper facilities. The gamma sources are being sent to the commercially available disposal sites, and the sealed Americium-241 sources are being recovered by the Department of Energy's Sealed Source Recovery Program. Debris has been cleared from the building, and actions have been taken to stabilize the facility and reduce radiation exposure. The building is being dismantled in a way to minimize any offsite migration of the contaminants. The investigation to determine potentially responsible parties continues.

On August 28, 2002, the Director of the Region 6 Superfund Division approved an Action Memorandum for the Site. This Action Memorandum documented the use of the On-Scene Coordinator's delegated authority to initiate a Classic Emergency Response at the Site; documented the Division Director's verbal approval for a removal action up to \$4,500,000, which covered both the Webster-Gulf Nuclear Site and the related Tavenor-Gulf Nuclear Site; and also approved an increase in the cost of the removal action at the Webster Site up to \$5,850,000.

On November 12, 2002, the OSWER Assistant Administrator approved an Action Memorandum for a ceiling of \$10,300,000 and an exemption from statutory limits.

C. State and Local Authorities' Roles

1. State and local actions to date

Since the closing of the facility in 1992, the TDH-BRC has worked with Gulf Nuclear and its bankruptcy trustee to identify, remove and dispose or reuse some of the sources left in the

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Webster facility.

2. Potential for continued State/local response

The Texas Commission on Environmental Quality (TCEQ) has agreed in writing (Attachment 6) to assume ownership of the Greater Than Class C (GTCC) radioactive waste and to contract for the long-term storage of the GTCC waste. TCEQ will be responsible for the ultimate disposal when a facility becomes available.

The TDH-BRC has indicated its continued interest and its commitment to participate in the proposed removal action. The TDH-BRC is expected to assist in the identification of radioactive contamination and the isotopes, and confirmation of decontamination. The TDH-BRC assistance will facilitate the disposal and transportation procedures.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health or Welfare

The current conditions at the Site meet the following factors which indicate that the Site is a threat to the public health, welfare and the environment, and a removal action is appropriate under Section 300.415(b)(2) of the National Contingency Plan. Any or all of these factors may be present at a site yet any one of these factors may determine the appropriateness of a removal action.

1. Exposure to Human Populations, Animals or the Food Chain, NCP Section 300.415 (b)(2)(i)

People can be exposed to the radiation from the perimeters of the Site. The perimeter monitoring instruments have detected radiation levels that require limited exposure to people in that area. Within the facility, a member of the general public would exceed the hourly allowable dose of radiation within a few minutes. The allowable dose for individual members of the public is found in 10 CFR § 20.1301, and allows no more than 100 mRem per year and no more than 2 mRem in any one hour. The perimeter dosimetry registered an annual dose of 1966.5 mRem.

In addition to the gamma radiation found at the Site, alpha and beta sources and contamination were also found in the building. The particulates were found as surface contaminants on walls, floors, equipment, and tools. People coming into contact with those contaminated surfaces could have picked up the radioactive particles or ingested or inhaled the contaminated dust particles.

The clinics and medical offices share patients, and as a result there is a high volume of pedestrian traffic in front of the Webster facility. The neighboring breast diagnostic clinic makes

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uses of every parking space in its lot. Eighteen of the spaces are along the exterior wall of the facility, where the dosimeter registered 1148.7mRem.

2. Hazardous Substances or Pollutants or Contaminants in Drums, Barrels, Tanks, or Other Bulk Storage Containers, That May Pose a Threat of Release; NCP Section 300.415 (b)(2)(iii)

At least 25 vaults have been found at the Site. These vaults are constructed of metal or plastic pipe and placed in the ground, thus using the ground as shielding. The vaults typically are used to store sources. Contaminated oil and sand have been found in some of the vaults. Investigation of the other vaults will be conducted as protective shielding and equipment are erected to safely explore the contents.

Next to some vaults are cut-outs in the concrete that are of the same size and shape as the cut-outs around the vaults. It is unknown if these were intended to be future vaults or are vaults that have been closed. If they are vaults, they may contain additional sources, liquids, or waste. The vaults may have been contaminated and damaged and still contain radioactive waste.

3. Weather Conditions That May Cause Hazardous Substances or Pollutants or Contaminants to Migrate or be Released. NCP Section 300.415 (b)(2)(v)

The area is subject to hurricanes and other severe weather. Since the building itself is contaminated, any structural damage would cause the radioactive contaminants to be released. The building does provide protection for the containers and other contaminated items. However, the building is highly contaminated, and if the building is significantly damaged, the contaminants could easily migrate off-site. Gulf Nuclear installed shielding which was comprised of pouring lead shot or oil between wall panels or window panes. Damage to these building components could release the shot or oil.

4. Threat of Fire or Explosion, NCP Section 300.415 (b)(2)(vi)

The volume of volatile chemicals is minimal and does not present a high risk of fire or explosion resulting from those chemicals. However, the fire department is on record as saying that should a fire occur, it will take no action to fight the fire or enter the building. A fire could carry radiation in the plume which could be dispersed throughout the city.

5. Availability of Other Mechanisms, NCP Section 300.415 (b)(2)(vii)

The TDH-BRC is expected to participate in the removal action, and its involvement will be instrumental in facilitating the proper disposal of the radioactive materials at the Site. The TDH-BRC has indicated that it has exhausted its capability to dispose of the remaining material. The TDH-BRC does not have the mechanisms to conduct the required removal action.

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No activity is expected from the potentially responsible parties (PRPs). The bankruptcy trustee does not have the capability to perform the removal action. Sources and wastes that could easily be linked by the TDH-BRC to a PRP have been previously disposed of off-site.

6. Other Situations or Factors That May Pose Threats to Public Health or Welfare of the United States or the Environment, NCP Section 300.415 (b)(2)(viii)

The State of Texas considers this Site as a potential target for terrorist activity. The Site itself could be the target or could be the source of materials to attack other targets.

If the Site was intentionally set on fire, the contamination could spread over a very wide area. Homes, businesses, hospitals, malls, schools, and parks would be severely impacted. Soil contamination above the action levels could exist in an area greater than the size of the City of Webster. Walls, floors, and air handling equipment are so contaminated that they could significantly contribute to the widespread contamination of the surrounding community.

Anecdotal information from former employees, competitors, and current industry workers suggests that there are several radioactive items buried below the slab. The building was built in different stages during Site operations. It is feasible that material could have been buried prior to the pouring of the different slabs. Hidden rooms and false walls inside the building indicate that the practices at Gulf Nuclear could have resulted in undisclosed, buried material.

B. Threats to the Environment

Runoff from the Site has the potential of contaminating the bayous and other drainage pathways. The water would enter Clear Lake and subsequently Galveston Bay.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances, pollutants or contaminants from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to the public health, welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed Action Description

The radioactive sources and wastes have been and will continue to be packaged and transported off-site for disposal at a proper facility that is in compliance with the EPA Off-site

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Rule. The buildings and foundations will be disassembled and disposed of off-site at an appropriate facility. The contaminated material will be screened and segregated to minimize the volume of radioactive material. If any of the sources are viable for reuse, the TDH-BRC may assist with the proper transfer of licensing for future use. The foundation will be backfilled to appropriate grade. Cleanup levels for each different radioactive source are based upon Texas Administrative Code 289.202.

2. Contribution to remedial performance

No remedial action is expected to take place at this Site. However, should conditions change or more information is found that indicates a remedial action is appropriate, the proposed action is consistent with any potential remedial action.

3. Description of alternative technologies

There are no alternative technologies that could feasibly be applied.

4. Applicable or relevant and appropriate requirements

This removal action will be conducted to eliminate the actual or potential release of a hazardous substance, pollutant, or contaminant to the environment, pursuant to CERCLA, 42 U.S.C. § 9601 *et seq.*, and in a manner consistent with the National Contingency Plan, 40 CFR Part 300, as required at 33 U.S.C. § 1321(c)(2) and 42 U.S.C. § 9605. Pursuant to 40 CFR Part 300.415(j), fund-financed removal actions under CERCLA § 104 and removal actions pursuant to CERCLA § 106 shall, to the extent practicable considering the exigencies of the situation, attain the applicable or relevant and appropriate requirements under Federal environmental law.

Due to the fact that consolidation and off-site disposal are the principal elements of this removal action, RCRA waste analysis requirements found at 40 CFR §§ 261.20 and 261.30, RCRA manifesting requirements found at 40 CFR § 262.20, and RCRA packaging and labeling requirements found at 40 CFR § 262.30 are deemed to be appropriate requirements for this removal action. Regulations covering the transportation of radioactive materials include 49 CFR § 173, Subpart I; 10 CFR § 71 and 10 CFR § 61. Ambient air quality standards at 40 CFR 50 will be used, as applicable, to protect the quality of air during the implementation of the action.

5. Project schedule

The total duration of activities is expected to be sixteen to eighteen months, depending upon weather conditions and scheduling, and the availability of disposal contractors and other contractors.

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B. Estimated Costs

The Region 6 Superfund Division Director gave verbal approval on October 26, 2001, to conduct the removal action and established a ceiling of \$4,500,000 for the cleanup contractors and disposal. That ceiling was to cover both the Webster-Gulf Nuclear and the Tavenor-Gulf Nuclear actions. The conditions as understood by EPA on October 26, 2001, were consistent with a combined cost estimate of \$4,500,000; however, the number of unanticipated sources, hidden rooms, and the levels and quantities of contamination have raised significantly the original estimate of costs. The Tavenor-Gulf Nuclear site has been addressed in a separate action memorandum, also dated August 28, 2002. The original approval to initiate the Classic Emergency Response at the Webster Site was provided by the OSC using his delegated authority, with the Classic Emergency Response ceiling initially established at \$50,000.

The amount of radioactive waste found on Site was many times over what was anticipated from previous investigations. The high levels of radiation require extraordinary precautions and practices. The time that workers can spend in proximity of radioactive items has to be limited. It is necessary to choreograph the activities and moves prior to an entry in order to limit the time spent in highly contaminated areas. Remote handling devices have to be used. The glove-boxes, hot-cells, and other structures were originally assumed to be empty, but they have required painstakingly slow and cautious work to retrieve a large number of sources left haphazardly in them, mixed with loose, raw radioactive material.

Many of the items are too large to be disposed of in a routine manner. Some items are larger than the state permit allows without obtaining a waiver. It would be unsafe to attempt to cut the items down because the radioactivity inside the shielded walls would result in a very high exposure to the workers. Other items are heavier than transportation regulations allow without special waivers. Lead was used to shield many of the cells, and if removed, the exposure from the radioactive contamination would prevent any transportation or disposal.

Several additional sources have been discovered since the previous Action Memorandum was approved. The contamination in the building is greater than anticipated. The resources and procedures necessary for the safe performance of the cleanup have significantly increased than originally anticipated. Hidden sources, suspect work practices of the former operators, and inconceivable conditions require additional efforts to conduct the response in a safe and compliant operation .

Special representatives from the disposal companies have been contracted to work on the Site. They have been presented with unique and first-time challenges involving the disposal of the waste. Concentrations and activities of the radioactive material found at the Site are normally found only at nuclear power plants or nuclear test sites. Conditions at the Site have demanded innovative and sometimes costly alternatives to address the dangers posed by the conditions of the Site.

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<u>Extramural Costs</u>	Previous Ceiling	Requested Ceiling
Cleanup Contractor..... (Includes the \$50,000 ceiling for the Emergency Action)	\$10,000,000.....	\$12,500,000
START.....	\$300,000.....	\$450,000
TOTAL, EXTRAMURAL COSTS	\$10,300,000.....	\$12,950,000

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If this action is not taken at the Site, the potential for human exposure to contaminants at the Site will remain unabated. The drums, boxes, and bags will continue to deteriorate and the radioactive material will be released. The building is subject to vandalism, and people coming into contact with the contamination will be exposed to dangerous levels of radiation. Vandalism or damage from storms could result in the release and migration of the radiation.

VII. OUTSTANDING POLICY ISSUES

It is anticipated that several glove-boxes or hot-cells will exceed the classification of Class C radioactive waste. There are no current disposal facilities for commercial greater than class C or GTCC waste. The Department of Energy (DOE) has facilities that are capable of taking the GTCC waste, but has not approved use of those facilities for Site waste. While disposal is not an issue for this site, disposal at future clean-up sites will pose similar issues.

VIII. ENFORCEMENT

For administrative purposes, information concerning confidential enforcement strategy for this Site is contained in the Enforcement Confidential Addendum. The total for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$16,565,942¹

(Direct Cost) + (Indirect Costs) = **Estimated EPA Cost for a Removal Action**

(\$12,950,000 + \$230,000) + (25.69% x \$13,180,000) = **\$16,565,942**

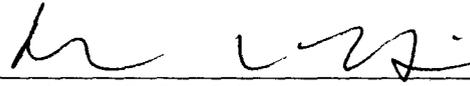
¹Direct Costs include direct extramural costs and direct intramural cost. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgement interest, do not take into account other enforcement costs, including Department of Justice cost, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not included to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual cost from this estimate will affect the United States' right to cost recovery .

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IX. RECOMMENDATION

This decision document represents the ceiling increase for the selected removal action for the Webster-Gulf Nuclear Site, in Webster, Harris County, Texas, developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision is based on the administrative record for the Site.

Conditions at the Site meet the criteria as defined by 40 CFR Section 300.415(b) of the NCP for a removal, and I recommend your approval of the proposed ceiling increase. The total project ceiling will be \$12,950,000.

APPROVED  DATE 2/21/03
Marianne L. Horinko, Assistant Administrator for
Solid Waste and Emergency Response

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