

November 20, 1998

SECY-98-273

FOR:

The Commissioners

FROM:

William D. Travers

**Executive Director for Operations** 

SUBJECT:

POTENTIAL FUNDING ASSISTANCE FOR AGREEMENT STATES FOR

CLOSURE OF FORMERLY TERMINATED NRC LICENSES

# PURPOSE:

To report on Agreement State actions and the staff actions in response to Staff Requirements Memorandum SRM-SECY-98-011, dated March 3, 1998 and to present options for Commission consideration for potentially funding Agreement States' efforts in addressing formerly licensed NRC sites.

# **BACKGROUND:**

The Commission previously approved the staff's proposal: (1) for the discontinuance of detailed reviews by the NRC staff of license files and inspections for follow up on formerly AEC or NRC licensed sites identified for further investigation in Agreement States; (2) for the referral of identified cases directly to the Agreement States for follow-up investigation; and (3) to hold the Agreement States responsible for addressing remediation of those sites where excessive contamination is confirmed by inspection (see SRM-SECY-97-188, dated November 7, 1997). The Commission directed that State actions in these cases should not affect findings of adequacy under the Integrated Materials Performance Evaluation Program (IMPEP) unless there is a clear, significant threat to public health and safety resulting from the lack of State action. The Commission also directed the staff to work with the Agreement States to identify a mutually acceptable mechanism to provide Federal assistance to the Agreement States, such as a general fund appropriation outside the NRC fee base, in dealing with these cases. The

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301-415-2819

status of the staff efforts was presented to the Commission in SECY-98-011, dated January 22, 1998. By SRM-SECY-98-011, dated March 3, 1998, the Commission directed the staff to continue monitoring the Agreement States' progress in closing out the case files associated with sites located in Agreement States that were formerly licensed by the NRC or its predecessor, and to collect additional information from the individual Agreement States regarding the associated costs and potential funding mechanisms to provide Federal assistance. In implementing this monitoring and information collection program, however, the staff was also directed to undertake the following additional measures:

- inquire whether the initial site surveys and assessments to determine the scope of the
  problem are themselves so significantly expensive and difficult as to preclude the States
  from undertaking even this preliminary step in the cleanup process, in the absence of
  other funds or some other form of resource assistance from the NRC.
- ensure that the file review being conducted by Oak Ridge National Laboratory is completed by March 1998, that the files are subsequently transferred to the States promptly, and that milestones are established on when NRC needs to receive information from the Agreement States. The staff should make an initial recommendation on whether NRC should request a general fund appropriation, to cover the associated Agreement State costs for those States providing a response consistent with the FY 2000 budget cycle.
- consider the merits of an alternative approach to providing financial assistance to individual Agreement States by developing a narrowly focused amendment to the Atomic Energy Act that would allow the Agreement States to return their regulatory authority and responsibility for formerly licensed sites to the NRC if the licenses in question had been terminated before the State became an Agreement State and permit the NRC to receive appropriations off the fee base to cover the costs associated with closure of these sites.

Finally, the Commission directed the staff to inform it of any difficulties experienced by the NRC or Agreement States in attempting to require further remediation of these sites.

#### DISCUSSION:

# Clean-up Process Preliminary Step Preclusion:

The staff contacted the Agreement States through an All Agreement States letter (see Attachment 1) and requested the States to indicate, among other things, whether the cost to review the files was so prohibitive as to preclude the State from performing this initial step. As discussed below under Staff Coordination Efforts With the Agreement States, in many cases, replies to this inquiry were not definitive or there was no reply at all. From the information received, the staff concludes that for reasons of expense, regulatory difficulty, and disagreements about the responsible regulatory authority (NRC or Agreement States), initial site surveys and assessments to determine the scope of potential contamination problems have not been completed in Arizona, California, Colorado, Massachusetts, and New York. These States have a total of 71 loose material sites and 44 sealed source sites.

# The ORNL Contract Work:

Oak Ridge National Laboratory (ORNL) completed its Phase 3 Review of Terminated Nuclear Material Licenses in March 1998. The review included docket file reviews for sites where loose materials were used and sites where sealed sources were used and licenses terminated between 1985 and 1996 with some additional sites revisited outside this time frame. ORNL submitted the following summary reports in preparation of the final report:

- 1. Nuclear Material Use Sites Identified for Additional Review. This document lists all sites, organized by State, which ORNL identified for additional review.
- 2. Material License Files Contained in Phase 3 Review. This document lists sites, organized by State, reviewed during Phase 3.
- 3. Site Summaries and Recommendations, Phase 3 Review of Terminated Nuclear Material Licenses. This report summarizes each site identified for further review during Phase 3 of the project.
- 4. Licenses Identified for Sealed Source Review. This report identifies all licenses with sealed sources, organized by State, which required additional review.
- 5. Licenses with Sites Identified for Site Review. This report identifies all loose material licenses with sites, organized by State, which required additional review.

The final report for the terminated nuclear material license review phase of the ORNL contract was sent to be published as NUREG/CR-6592, and will be available in November 1998.

# **Staff Coordination Efforts With the Agreement States:**

The staff sent letters to each of the Agreement States identifying the sites that needed further evaluation. The letters also asked the States for the location where these files should be sent. Several States responded that they did not want the files based on their disagreement with the Commission's decision in this area, or by lack of response did not request the files. The other States either requested the files or reviewed their records for the sites on the lists.

To update the status of sites in Agreement States and to collect additional information, the staff prepared and sent an All Agreement States letter, dated April 2, 1998, requesting the status of the progress made in reviewing the files and any hindrances keeping the State from proceeding with the review (see Attachment 1). Only a few States (AZ, CO, IL, KY, NV, NY, TN, and WA) responded. Subsequently, the staff called a number of States that have potentially contaminated sites (AL, CA, GA, LA, NE, NV, NY, TN, TX, and UT). Together these States covered all the loose material sites identified by NRC and the majority of the sealed source sites.

Two States (CA and NY) noted their previous position that they do not consider the formerly licensed sites review and remediation a State responsibility and do not intend to conduct work on this project. Others (AZ and CO) said that they would conduct the file reviews and surveys

upon receipt of funding from the NRC. California and New York also commented that, if NRC wanted them to conduct this work under contract with NRC then they would be willing to conduct this work. Other States identified work in progress with a number of files closed. Agreement States to which files were sent and the status of work in the Agreement States is summarized in Attachment 2. Illinois completed all the work for the sites within the State and requested reimbursement for the completed work if funding for State actions were to be approved.

# Staff Estimates for Decommissioning Costs:

Costs for Agreement State regulatory authorities and potentially contaminated site responsible parties (if identified) include both regulatory costs and site remediation/decommissioning costs. Regulatory costs can include license/inspection file review, initial or periodic site surveys, and licensing and inspection. These costs may be recovered, at least in part, through fees assessed to responsible parties, if identified. The costs of detailed site characterization and remediation/ decommissioning should be the responsibility of the former licensee or current responsible party. However, in some cases, it may be difficult or impossible to identify the former licensee or a responsible party. In other cases, the former licensee or responsible party may not have adequate funds for site remediation/decommissioning. If the former licensee or responsible parties are not identified, or if sufficient funding for the costs of detailed site characterization and remediation/decommissioning are not available, clean-up funding through the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) may be a possibility for some sites. If such sites do not qualify for CERCLA funding and no responsible party is identified, some Agreement States (CA, CO and NY) have indicated that State government may take on the liability for funding the costs of site characterization and remediation/ decommissioning in order to protect the citizens of their State.

Because of the uncertainty described in the above paragraph, the staff estimated an upper bound for the costs for regulatory efforts and remediation/decommissioning of the remaining sites in the Agreement States. The estimate, between \$3,000K and \$4,000K, is based on regulatory costs of \$30K per site for sites with ORNL scores between 100 and 300 and an average cost for remediation of \$500K for two-thirds of the sites with ORNL scores greater than 300, and on staff knowledge that four of the remaining sites are known to be contaminated. Included in this estimate is the cost estimate of \$1,500K for one site which has been submitted to NRC in a Tort Claims filing. The Agreement States may identify some additional contaminated sites based on their sites investigations, but the estimate assumes no significant costs for sites with ORNL scores below 100, only regulatory costs (no remediation required) for sites with ORNL scores between 100 and 300, and two additional sites with scores above 300, and not currently known to be contaminated, need remediation (i.e., six of nine sites are estimated to require remediation). This upper-bound approach assumes that no Agreement State regulatory costs are recovered from licensees or responsible parties, that no necessary cleanups are funded under CERCLA, and that Agreement States bear the full responsibility for costs associated with remediation/decommissioning at sites needing cleanup. This cost estimate is summarized in Attachment 3.

# **Funding Options:**

The Commission has two funding options:

- Request a separate appropriation from the General Fund (i.e., outside the fee base) to be made available only for the purposes of review and closure of these formerly licensed sites. The funds could be used for State regulatory efforts including surveys, characterization and remediation when the original responsible party or successor cannot be found or does not have sufficient funds. The funds could be made available to the States through grants with a ceiling amount based on an estimate for the specific sites in that State.
- Allocate funds from fee-based funding to assist the Agreement States in the performance
  of the remaining activities to close out these formerly licensed sites. This would place
  additional financial burden on NRC licensees and would add to the concerns expressed
  by the Commission, NRC licensees and Congress regarding the fairness and equity of
  charging current NRC licensees for agency expenses which can not be attributed to
  these licensees.

Since the costs associated with closure of the formerly terminated NRC licenses are not attributable to current NRC licensees, the staff recommends that these costs be funded by a separate appropriation from the General Fund excluded from fee recovery. If OMB or the Congress does not approve such an appropriation exempt from fee recovery, then the Commission will need to consider using the agency's fee-based funding, within the limits of the other agency mission priorities.

# Amendment to the Atomic Energy Act:

In accordance with the Commission's direction, the staff has considered the merits of developing a narrowly focused amendment to the Atomic Energy Act that would allow the Agreement States to return their regulatory authority over formerly licensed sites. Under current law, it is unclear whether an Agreement State could voluntarily terminate its Agreement with respect to material at formerly licensed sites. The issue of "partial" Agreements was addressed in SECY-97-087 in the context of a proposal from Oklahoma for an Agreement with the Commission. The Commission approved a general approach to address the creation of such limited Agreements. If the Commission were able to conclude that sites formerly licensed and decommissioned under AEC or NRC authority met these criteria, an Agreement State could request an amendment to its Agreement with NRC to terminate State authority over formerly licensed sites.

Absent such a conclusion, an amendment to the AEA would be necessary to allow a State to terminate its Agreement with respect to these sites. Such an amendment could be drafted that would reassert NRC jurisdiction in the absence of an Agreement State indication that it wants to retain regulatory authority.

Such an the amendment would eliminate any existing disagreements between NRC and Agreement States regarding current legal authority over these sites in Agreement States. Those

States that are willing to take the steps necessary to close out these sites would continue to do so under their current Agreements. NRC would have the responsibility to close all other formerly licensed sites located in Agreement States. While the amendment should resolve existing concerns, it would add an unbudgeted, currently unspecified, amount of work that would become NRC's responsibility. The cost estimate for this activity would be for NRC staff efforts and are identified in the Resources section of this paper. This approach would likely result in continued inaction by a number of Agreement States during the period of time Congress considers the amendment. As noted in the Funding Options section of this paper, NRC could request a separate appropriation from the General Fund or fee based funding for this requirement.

# Difficulty in Further Remediation:

The difficulties identified to date are that no responsible party is in existence or no funds are available, the current site owner has no direct relationship with the former licensee and does not have the resources to remediate the site, and Agreement States that do not agree with the Commission's decision are not addressing the sites identified by ORNL. As an example, a specific case is described below.

A site in California was licensed in the 1950s and early 1960s for waste collection and storage, source manufacturing, and commercial radiochemistry laboratory operation. The current owner knew of the site's history but understood that all radioactive material had been removed and the license had been terminated. NRC and State inspectors performed a cursory radiological survey of the site in 1996. These surveys indicated that several areas inside the site buildings and outside were contaminated above NRC release criteria. Analysis of samples determined that Th-230/232 and Cs-137 are the contaminants. The surveys also indicated that source material may be buried on site. NRC sent a letter to the State of California on April 8, 1996 indicating that regulatory responsibility for this site rests with the State. The State responded that it did not agree with NRC's determination on responsibility. The current site owner, which has no relationship with the former licensee, is proceeding with site characterization. The owner has filed a claim against NRC under the Federal Tort Claims Act due to lack of NRC follow up on the property since the initial survey. However, that claim was rejected by NRC and was not pursued further. The owner has not been able to lease or sell the property since the NRC inspection. Currently, this site has raised the most significant Agreement State related concerns in the formerly licensed sites program. The staff is cooperating with the State to resolve these issues in a manner acceptable to all parties involved and that will not delay site characterization and remediation.

# **Program Options:**

The staff has identified three program options:

Option 1 - Agreement State Jurisdiction, with NRC Assistance Through Funding: Develop a grant program that would make funds available to complete the formerly licensed sites file reviews and provide funds for remediation, if necessary, when no responsible party can be located, or the responsible party does not have the resources to conduct the remediation, and

the site does not qualify for cleanup under CERCLA. The Commission would request a separate appropriation from the General Fund (i.e., outside the fee base) in the amount of \$2,000K per year for FY 2001 and FY 2002 to fund this option and would need to consider fee-based funding if exempt funds are not available.

Pros: •

- NRC licensees, which receive no benefit from this program, do not provide the funding support through fees.
- No financial burden placed on the Agreement States.
- Assures all formerly licensed sites in Agreement States are assessed and remediated, if necessary.

Cons: •

- Congressional approval of funding uncertain.
- Agreement States may have to use contractors since any newly hired staff members could not be retained after NRC funding stops.
- Funding support would not begin until FY 2001.

Option 2 - Agreement States Return Jurisdiction to NRC: Propose an amendment to the Atomic Energy Act that authorizes NRC to regulate formerly licensed sites located in Agreement States, unless an Agreement State requests continued authority. NRC regulatory costs for this option are estimated to be 2 FTE (about \$200K). The Commission would fund this effort by requesting Congressional approval for a separate appropriation from the General Fund (i.e., outside the fee base) in the FY 2001 budget and budgets for future years, as necessary. Under this approach, NRC licensees would not provide funding through fees for this purpose. Under this option, sites requiring remediation, but having no responsible party, or no financially solvent responsible party, would be candidates for cleanup under CERCLA.

Pros: •

- Would resolve the NRC/State dispute over regulatory responsibility for these sites.
- Assures all formerly licensed sites in Agreement States are assessed. Most, if not all, sites needing cleanup would be remediated.
- No unwanted financial burden placed on Agreement States.
- NRC licensees, which receive no benefit from this program, do not provide funding through fees.

Cons: •

- Sites with no responsible party and having a low radiological risk would be highly unlikely to be addressed under CERCLA.
- Congressional approval uncertain.
- Would not reimburse Agreement States for work previously completed.
- Budgeted resources are not available until FY 2001.

Option 3 - Continue Current Status: Continue to encourage the Agreement States to review the remaining files and remediate any identified contaminated sites. Existing NRC budgeted resources are sufficient for this option, but a number of the formerly licensed site file reviews and remedial actions, if necessary, may never be accomplished. Additionally, under this option, some sites requiring remediation, but having no responsible party, or no financially solvent responsible party, would be a candidate for cleanup under CERCLA.

Pros: 

No additional resources required.

Cons: 

May leave some sites unaddressed.

- Sites with no responsible party and having a low radiological risk would be highly unlikely to be addressed under CERCLA.
- Disagreements about the responsible regulatory authority would not be resolved.
- NRC licensees fund NRC effort through fees.
- Places financial burden on Agreement States.

The staff recognizes that these options are not mutually exclusive and that it would be prudent to continue working with the Agreement States to reduce the number of sites that need to be considered under Options 1 and 2. Options 1 and 2 could also be pursued in parallel with both options resolving the jurisdictional issue with the States.

### **RESOURCES:**

The resources discussed above are not included in the FY 2000 budget. Due to the limited information provided by the States in response to the April 2, 1998 letter, the staff was not able to develop these estimates in time to incorporate them in the FY 2000 budget package. The staff is recommending that \$2,000K be included in the FY 2001 and FY 2002 budgets as a separate appropriation from the General Fund. The FTE required in OSP and OCFO to administer a grant program is less than 0.25 FTE in each office and is available within currently budgeted resources.

If the Agreement States were to return all the currently open sites to NRC, the resources needed to complete the file reviews and close out all but a few problem sites would be approximately 2 FTE (approximately \$200K) which are currently not included within the budget. The problem sites could then be transferred to the Site Decommissioning Management Program with the long-term resources incorporated into that program's budget when they are transferred. Since NRC does not have the authority under the AEA to pay for remediation under SDMP, the estimated \$3,000K-\$4,000K for remediation would not be required under Option 2.

# **COORDINATION:**

The Office of General Counsel has no legal objection to this paper. The Office of the Chief Financial Officer has reviewed this Commission paper and has no objections.

#### RECOMMENDATIONS:

The staff recommends the Commission:

 Approve the implementation of Program Option 1. This would continue Agreement State jurisdiction and bring the formerly licensed site program to closure with NRC funding assistance.  Note that the staff will continue to work with the Agreement States to support their closure of as many of the file reviews as possible in parallel with implementing Program Option 1.

> William D. Travers Executive Director for Operations

#### Attachments:

- 1. April 2, 1998 Letter to Agreement States w/o enclosures
- Status of Agreement State Actions
- 3. Cost Estimate Table

Commissioners' completed vote sheets/comments should be provided directly to SECY by  $\underline{\text{c.o.b.}}$  Wednesday, December 9, 1998. Commission staff office comments, if any, should be submitted to the Commissioners  $\underline{\text{NLT December 2, 1998}}$ , with an information copy to SECY. If the paper is of  $\underline{\text{such a nature that it requires}}$  additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

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# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 2, 1998

ALL AGREEMENT STATES
OHIO, OKLAHOMA, PENNSYLVANIA

TRANSMITTAL OF STATE AGREEMENTS PROGRAM INFORMATION (SP-98-025)

Your attention is invited to the enclosed correspondence which contains:

INCIDENT AND EVENT INFORMATION	
PROGRAM MANAGEMENT INFORMATION XX	AGREEMENT STATE VIEWS OF COST/IMPACTS FOR CLOSURE OF FORMERLY TERMINATED NRC LICENSES
TRAINING COURSE INFORMATION	
TECHNICAL INFORMATION	
OTHER INFORMATION	

Supplementary information: Enclosed is a copy of a January 22, 1998 Commission paper, SECY-98-011 "Potential Funding Assistance For Agreement States for Closure of Formerly Terminated NRC Licenses," and associated March 3, 1998 Staff Requirements Memorandum (SRM). Your attention is directed to the recommendations in SECY-98-011 (See page 4) and direction provided in the SRM. To assist in better understanding the costs and impacts of your activities to "close" these sites, we request that you provide the following information. We would appreciate your response to Items 1, 2 and 3 by June 30, 1998. We would appreciate your response to Item 4 by May 15, 1998.

- Status of your activities to review background materials and license files on sites located in your. State to identify sites which may be eliminated from further consideration based on existing available information, and those that will require further assessment and possible remediation;
- 2. Identification of the number of sites that may need remediation (or have been remediated), the regulatory efforts necessary to ensure appropriate remediation, the costs for remediation and difficulties likely to be encountered in requiring further remediation:
- 3. Identification of any assistance, including funding assistance, that you believe is needed from NRC to complete the site file reviews, assessment and remediation activities. If you believe funding assistance is needed, we request your views on the funding mechanism or mechanism which should be considered to fund the activities (e.g., general fund appropriation request by NRC, amendment to Atomic Energy Act, as described in the SRM).

4. Whether you believe the initial site surveys and assessments to determine the scope of potential remediation work at sites in your State are themselves so significantly expensive and difficult as to preclude you from undertaking even this preliminary step in the cleanup process, in the absence of funds or some other form of resource assistance form NRC.

As a result of responses to All Agreement States letter SP-97-080, Formerly Licensed Sites and Jurisdcition for Remaining Residual Materials, we note that several States have already provided specific information relating to portions of the above items and we will use and consider that information in development of our response to the Commission. We are also providing below additional information to assist in your efforts to determine the significance of the "scoring" assigned by the Oak Ridge National Laboratory (ORNL) to each site, and expectations as to what actions would be required to close out particular types of sites with particular scores.

- 1. The significance of the scoring: ORNL uses an expert system to evaluate the likelihood and possible magnitude of contamination at a site associated with a given license. The score assigned by the ORNL expert system does not indicate any absolute risk value. Instead, the score provides a relative estimate of the likelihood and magnitude of contamination among the licenses. The overall license site scores can be compared to provide prioritization guidelines for determining which licenses have the highest review priority. A detailed discussion of the License Evaluation & Document Information System (LEADIS) is presented in the enclosed paper entitled, "LEADIS A Computer Decision System For Identifying Potentially Contaminated Nuclear Material Use Sites."
- 2. NRC actions required to close out particular types of sites with particular scores:
  Temporary Instruction (TI) 2800/026, "Follow up Inspection of Formerly Licensed Sites Identified as Potentially Contaminated," provides guidance to the Regions on how to close out license files identified by ORNL. We recommend that Agreement States follow guidance set out in this TI, or equivalent guidance developed by the Agreement State. NRC staff is currently revising TI 2800/026 to incorporate more specific guidance on dealing with specific types of sites and on interactions with Agreement States regarding transfer of background information and licensing files for sites in an Agreement State. A copy of TI 2800/026 is enclosed for your information.

This information request has been approved by OMB 3150-0029, expiration April 30, 1998. The estimated burden per response to comply with this voluntary collection request is 3 hours. Forward any comments regarding the burden estimate to the Information and Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0052), Office of Management and Budget, Washington, DC 20503. If a document does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information."

If you have any questions regarding this correspondence, please contact me or the individual named below.

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/

Paul H. Lohaus, Deputy Director

Office of State Programs

Enclosures:

As stated

Formerly Licensed Sites Status Table For Sites In Agreement States (See notes on page 3)

STATE (NRC REGION)	LOOSE MATERIAL SITES	STATUS OF NRC ACTION	SEALED SOURCE SITES	STATUS OF NRC ACTION	4/98 ALL AGREEMENT STATES LETTER RESPONSE OR PHONE RESPONSE	Suggested Funding Mechanism
ALABAMA (REG II)	1 (0)	500	4 (0)	List/Files	No Response. Loose material site is a Federal site under NRC license. The State has no additional information for the three sealed sources sites, except that one was licensed by the State and then terminated.	
ARIZONA (REG IV)	е	List	1	List	It would take a minimum of \$20K to conduct these activities. Any remediation needed would be additional costs. No work will be done unless NRC identified a significant H&S issue.	Grant
ARKANSAS (REG IV)	0	List	0	List	No Response.	
CALIFORNIA (REG IV)	44	List	16	List	No Response. CA has not accepted the Commission direction and does not wish to participate in this program. The State would consider conducting the work for NRC under contract or through a grant.	Grant or Contract
COLORADO (REG IV)	4	List	5	List	Colorado estimates that it will cost a total of \$227K to conduct the regulatory functions to properly close out these sites. The four former mining sites may require significant decommissioning expenses not included in the regulatory cost estimate. These costs are significant enough to preclude initiating the work until funding is provided.	
FLORIDA (REG II)	0	List/Files	3 (0)	List	No Response. One sealed source site is a Federal site not under State jurisdiction. The others were covered by State licenses following the NRC terminations.	
GEORGIA (REG II)	1 (0)	List/Files	2 (1)	List/Files	No Response. State is following up on one sealed source. All others are closed. No additional resources needed.	Grants
IOWA (REG III)	0	NA	0	NA	No response.	
ILLINOIS (REG III)	0	NA	0	NA	All sites (55 of them) were closed out by Illinois. IL would like to be reimbursed for work completed if funding is obtained (estimated to be about \$53K).	
KANSAS (REG IV)	0	List	5 (0)	List	No response. All sealed sources have either been disposed of or are under current State license.	
KENTUCKY (REG II)	1 (0)	List/Files	2 (0)	NA	The loose material site has been surveyed and closed out. The two sealed source sites are Federal sites under NRC jurisdiction. No additional work or funding needed.	
LOUISIANA (REG IV)	2 (0)	List	1 (0)	List	No Response. LA evaluated three sites and closed all three.	Grants Contracts
MAINE (REG I)	0	NA	0	AN	No response.	
MARYLAND (REG I)	0	NA	7	List	No response. MD is looking into the sites but none of the sites had significant ORNL scores.	8
MASSACHUSETTS (REG I)	6	List	3	List	No response. MA will work on the sites as their workload will allow. They do not consider this work a priority.	,

STATE (NRC REGION)	LOOSE MATERIAL SITES	STATUS OF NRC ACTION	SEALED SOURCE SITES	STATUS OF NRC ACTION	4/98 ALL AGREEMENT STATES LETTER RESPONSE OR PHONE RESPONSE FI	Suggested Funding Mechanism
MISSISSIPPI (REG II)	0	AN	0	A A	No response.	
NEBRASKA (REG IV)	1. (0)	List	0	NA A	No Response. The site is now licensed by the State.	
NEVADA (REG IV)	2 (0)	List	2 (0)	List	The State assessed the sites based on the NRC list information and closed the files. Nevada does not consider these sites part of their responsibility under their Agreement.	
NEW HAMPSHIRE (REG I)	0	NA	0	NA	No response.	
NEW MEXICO (REG IV)	0	NA	2	List	No response. Has not requested files, but will do so in the near future.	
NY (REG I)	11 (11)	List/Files	19	List	NYDL responded with a letter that disagreed with the Commission's determination that the States are responsible for evaluating and cleaning up any contamination identified. NYDEC indicated that the cost is prohibitive (1 FTE, \$50K). This is for regulatory costs only and does not include long-term costs if remediation takes several years. NYDEC is currently working on one site with owner. Remediation costs (currently unknown) would be in addition to these regulatory costs.	Grants, IPA
NORTH CAROLINA (REG II)	0	NA	3 (1)	List/Files	No response. The State has requested information of the third licensee and is awaiting their response.	
NORTH DAKOTA (REG IV)	0	NA	-	List	No response. The State is looking into this file and believes the device is under current State license.	
OREGON (REG IV)	0	NA	0	NA	No response.	
RHODE ISLAND (REG I)	0	NA	0	NA	No response.	
SOUTH CAROLINA (REG II)	0	AN	1	List/File	No response.	
TENNESSEE (REG II)	5 (1)	List/Files	11 (0)	List/Files	TN requested additional information on several sites. NRC retained one site and one site is potentially contaminated based on an earlier survey. If the site is confirmed to be contaminated, TN will request funding of NRC for remediation of the site. The sealed sources have either been removed from the sites or are under current TN license.	
TEXAS (REG IV)	3 (2)	List/Files	16 (8)	List/Files	TX-BRC has reviewed the files and closed about 50% of the files. TX also identified recommended additional actions of interviewing former employees and conducting surveys for the remaining sites and recommended that NRC conduct this work to close these sites. TX will conduct these actions as their routine work takes them to the sites or nearby sites, but is not planning any additional special efforts. TX estimates that it would cost approximately \$30K to close the remaining sites assuming no significant remediation is required. With funding assistance, TX would expedite the work on these sites.	
UTAH (REG IV)	2	List	4	List	No Response. UT does not agree with the Commission's position on the State responsibility for reviewing these files. Therefore, they have taken no action to date.	

STATE (NRC REGION)	LOOSE STATUS SEALED MATERIAL OF NRC SOURCE SITES ACTION SITES	STATUS SEALED OF NRC SOURCE ACTION SITES	SEALED SOURCE SITES	STATUS OF NRC ACTION	STATUS 4/98 ALL AGREEMENT STATES LETTER RESPONSE OR PHONE RESPONSE OF NRC ACTION	Suggested Funding Mechanism
WASHINGTON (REG IV)	0	AN A	2 (0)	List/Files	List/Files WA has reviewed the files and determined that they should be closed. WA does not agree with the Commission's determination and does not consider this a State responsibility.	
TOTALS	(92) 68		110 (69)			

# Notes for Status Table

- List/File List denotes that only a list of sites identified by ORNL was sent to the State. List/File denotes that both the list and files were sent to the State.
- The column following the Loose Material Sites is the status for those sites. The column following the Sealed Source Sites is the status for those sites. 2
- Status column numbers The initial number is the number of sites on the list sent to the States. The number in the ( ) indicates the number of site files that remain open. 3
- 4/98 All Agreement States Letter Response or Phone Response This column specifies whether the State responded to the All Agreement States letter sent April 2, 1998 and other information gathered through telephone inquiries by NRC staff. 4
- Suggested Funding Mechanisms This column presents the funding mechanisms suggested by the Agreement States. column does not indicate whether funding is needed for a specific State.

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### **COST ESTIMATE TABLE**

STATE	ORNL>300	ORNL>100 but <300
Arizona	1	1 (\$30K)
California	4	7 (\$210)
Colorado	0	3 (\$90K)
Massachusetts	2	1 (\$30K)
New York	2	2 (\$60K)
Texas	0	1 (\$30K)
Utah	0	1 (\$30K)
Total by Col.	9 Costed 6 (\$3,000K)	16 (\$480K)
Grand Total		\$3,480K

# The assumptions for this table are:

- 1. All sites found to have an ORNL score > 100 are included in the table with all being loose material sites except for one sealed source site in California.
- 2. On the average, each site with an ORNL score > 300 will cost \$500K to remediate. NRC is aware that 4 of these sites have been confirmed to be contaminated and assumed that 2 additional sites will need remediation for a total of 6 sites costed at \$500K. The 300 score was used since, according to Temporary Instruction 026, sites with scores greater than 300 were to be addressed first since they posed higher potential for radiation risk.
- 3. It was assumed that, on the average, each site with an ORNL score > 100 and < 300 will cost \$30K to survey and characterize to determine if remediation is necessary. Sites with scores between 100 and 300 have a slight potential and should be surveyed or assessed to determine if there is any real contamination at the site. Sites with scores below 100 have little likelihood of contamination but should be reviewed to ensure that a justification for closing the file can be made.
- 4. Costs identified by various States in Attachment 2 are considered included in the cost estimates above.