



Department of Energy  
Washington, D.C. 20545

SEP 16 1985

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Division of Waste Management  
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U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

WM Record File

WM Project 39

Docket No.

PDR ☒

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Dear Mr. Higginbotham:

Subject: Draft Annual Status Report to Congress: Public Law 95-604,  
Section 114(2), Uranium Mill Tailings Radiation Control Act of 1978.

I am enclosing the subject draft report for your review and comment.

In order that we might meet our statutory submittal to Congress, we would appreciate your comments by October 4, 1985.

Should you have any questions please call me on 353-5221 or L. C. Brazley on 353-5438.

Sincerely,

Donald H. Groelsema, Director  
Division of Uranium Mill Tailings  
Projects  
Office of Remedial Action  
and Waste Technology  
Office of Nuclear Energy

Enclosure

SEP 19 1985

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# **ANNUAL STATUS REPORT on the Uranium Mill Tailings Remedial Action Program**

December 1985



Prepared in response to the  
requirements of Section 114(a)  
to Public Law 95-604

**U.S. Department of Energy**  
Assistant Secretary for Nuclear Energy  
Office of Terminal Waste Disposal  
and Remedial Action  
Washington, D.C. 20545

DRAFT

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## I. INTRODUCTION

This Seventh Annual Status Report, required by Public Law (PL) 95-604, the "Uranium Mill Tailings Radiation Control Act of 1978," (herein referred to as "the Act") summarizes activities of the Uranium Mill Tailings Remedial Action (UMTRA) Project undertaken during Fiscal Year (FY) 1985 by the U.S. Department of Energy (DOE) and other agencies. Project goals for FY 1986 are also presented.

Title I of the Act authorizes the DOE, in cooperation with affected states and Indian tribes within whose boundaries designated processing sites are located and with persons who own these sites, to provide a program of assessment and remedial action at such sites. The purpose of the remedial actions is to stabilize and control the tailings and other residual radioactive materials located on the inactive uranium processing sites in a safe and environmentally sound manner and to minimize or eliminate potential radiation health hazards. For some processing sites, the remedial action might include the reprocessing of tailings to extract residual uranium and other minerals. Properties in the vicinity of designated processing sites which are contaminated with material from the sites, and which are herein referred to as "vicinity properties," are also eligible for remedial action. Twenty-four inactive uranium processing sites and associated vicinity properties located in 10 states and the vicinity properties associated with the Edgemont, South Dakota, inactive uranium mill, currently owned by the Tennessee Valley Authority (TVA), are presently included in the UMTRA Project (Appendix A).

Summarized below are the UMTRA Project FY 1985 major accomplishments and FY 1986 goals.

FY 1985 Project Accomplishments:

- o Completed 85 percent of the processing site remedial actions at Canonsburg, Pennsylvania, and initiated remedial actions at Salt Lake City, Utah, and Shiprock, New Mexico.
- o Initiated remedial action on 180 vicinity properties at six designated locations and completed survey and inclusion activities on a total of 1350 vicinity properties.
- o Published the Environmental Assessment (EA) for Lakeview, Oregon, and prepared the preliminary final Environmental Impact Statement (EIS) for Durango, Colorado.
- o Completed the Remedial Action Plan (RAP) for Lakeview, Oregon, and prepared the draft RAP for Durango, Colorado.
- o Executed cooperative agreements with Idaho, New Mexico, and the Navajo Nation/Hopi Tribes and modified the Colorado cooperative agreement to assign limited management responsibility to the State of Colorado.
- o Executed a Memorandum of Understanding with the NRC.

FY 1986 Project Goals:

- o Initiate processing site remedial actions at Durango, Colorado, Tuba City, Arizona, and Lakeview, Oregon; continue remedial actions at Salt Lake City, Utah, and Shiprock, New Mexico; and complete remedial action at Canonsburg, Pennsylvania.
- o Complete inclusion surveys for approximately \_\_\_\_\_ vicinity properties.
- o Initiate engineering on \_\_\_\_\_ vicinity properties and remedial actions on \_\_\_\_\_ high priority vicinity properties in Salt Lake City, Utah; Grand Junction, Colorado; Edgemont, South Dakota; Riverton, Wyoming; Durango, Colorado; and Shiprock, New Mexico.
- o Complete EISs or EAs and RAPs for Durango, Grand Junction, and Gunnison, Colorado; Riverton, Wyoming; Tuba City and Monument Valley, Arizona; Mexican Hat, Utah; and Ambrosia Lake, New Mexico.
- o Execute cooperative agreement with Texas.

## II. PROGRAM STATUS

Progress made during FY 1985, present status, and plans for FY 1986 are described below.

### 1. RADIOLOGICAL SURVEYS AND INCLUSION OF VICINITY PROPERTIES

The vicinity properties program has been greatly accelerated in 1985 to prepare for the peak engineering and construction years of 1986 through 1988. Over 1300 properties have been surveyed this past year; over 550 properties designed; and over 250 remedial actions completed. The Inclusion Survey and Remedial Action Contractors have begun major ramp-ups of technical staffs to accomplish the upcoming workload. In addition to significant survey, engineering, and remedial action progress, the project participants have made major strides in the areas of planning and project implementation. Specifically:

- o A vicinity properties special study was conducted and a report issued to the Project Office in November, 1984. This report summarized major project modifications required to meet the mandated project schedule. Most of these recommendations were implemented.
- o A vicinity properties technical information system of networked automated data plotting and transfer was implemented.

- o Management plans were developed by all contractors and submitted to DOE. The plans illustrate how the contractors intend to meet their objectives for the life of the Project.
- o Overall, FY 1985 was a very productive year for the vicinity properties in expectation of the upcoming peak remedial action activities. A summary of vicinity property activities during FY 1985 is presented in Table A.2, Appendix A.

## 2. ESTABLISHMENT OF COOPERATIVE AGREEMENTS

During FY 1985, DOE negotiated and executed cooperative agreements with the States of Idaho and New Mexico and with the Navajo<sup>Nation</sup> and Hopi Tribes~~X~~ for the site at Tuba City, Arizona, which is located within the Bennett-Freeze (Navajo-Hopi Dispute) Area. Cooperative agreements are now in place for all sites with the exception of Falls City, Texas. Progress was made with the State of Texas during FY 1985, and it is anticipated that a cooperative agreement will be in place early in FY 1986.

## 3. IMPLEMENTATION OF EPA STANDARDS FOR REMEDIAL ACTION

The DOE has coordinated with the NRC in developing a Site Certification Plan. This plan specifies the content of the Site Completion Report that is prepared by the Remedial Action Contractor (RAC) as well as other responsibilities associated with certification. For example, the Technical Assistance Contractor<sup>(TAC)</sup> is tasked with preparing



a compendium of audit reports as well as reviewing the completion report for adequacy. This will result in a recommendation to the DOE that the site be certified and is ready for NRC licensing. A concurrence in the certification package along with the DOE-prepared surveillance and maintenance plan are the essential steps in the NRC licensing process.

4. ACQUISITION OF LAND<sup>6</sup> AND MATERIALS

Negotiations continued between DOE and the State of Colorado with Hecla Mining Corporation regarding acquisition of the tailings pile at Durango. A final determination is dependent upon an appraisal by the U.S. Army Corps of Engineers.

5. NATIONAL ENVIRONMENTAL POLICY ACT

The draft EIS and the EA and related Finding of No Significant Impact (FONSI) for remedial actions at Durango and Lakeview, respectively, were prepared and published in FY 1985. In addition, environmental reports for remedial actions at vicinity properties at Durango and at fourteen (14) low- and medium-priority sites were completed.

In FY 1986, the draft EIS for Grand Junction, final EIS and Record of Decision for Durango, and EAs for Riverton, Gunnison, Ambrosia Lake, Tuba City, and Mexican Hat/Monument Valley will be completed. The draft EIS for Rifle is scheduled for publication in May, 1986.

6. LICENSING AND SURVEILLANCE

In FY 1985, a Project Licensing Plan and a Project Surveillance and Maintenance Plan were completed. Both plans have been reviewed and accepted by the NRC. During FY 1986, site-specific surveillance and maintenance plans will be prepared for Canonsburg and Shiprock for NRC review and approval. Post-remedial action surveillance at Canonsburg will begin early in FY 1986.

7. PROGRAM PLANNING

7.1 Project Planning. The revised Project Schedule and Cost Estimate (PS/CE) Report was published in November, 1984, with a projected total estimated cost (TEC) of \$683.6 million. During FY 1985, an extensive study was conducted to better define the project scope and associated costs. This study resulted in a revision to the Project Plan in July which recognized the need to extend the end date of the Project from March 30, 1990 (as currently authorized), to September 30, 1992, with an attendant TEC of \$944.3 million.

7.2 Project Procurement. The contract for Jacobs Engineering Group Inc., the TAC, was extended to March, 1987. The TAC is responsible for providing technical and management support connected with planning and design development, NEPA document preparation, environmental health and safety, quality assurance, and ~~maintenance~~ <sup>and maintenance</sup> ~~and~~ surveillance of disposal sites. The TAC also acts as the integrating contractor for project-wide management control.

Morrison-Knudsen Company, Inc., was awarded a contract in March, 1983. As one of the principal remedial action contractors (RACs) they are responsible for engineering and design of approved remedial actions, for construction management, and for accomplishing the remedial actions through the use of competitively awarded firm fixed-price subcontracts to the maximum extent possible.

Bendix Field Engineering Corporation, as the other principal RAC, is contracted through the DOE Idaho Operations Office, and is responsible for engineering design and remedial actions for vicinity properties at Grand Junction and Edgemont, data acquisition support for site characterization, and operation of the Technical Measurement Center.

Other prime contractors are Oak Ridge National Laboratories<sup>y</sup> and Monsanto Research Corporation, who provide vicinity property inclusion surveys and processing site radon monitoring, respectively.

#### 8. REMEDIAL ACTION

Remedial action continued at Canonsburg and was completed in November, 1985. Remedial action began at Shiprock in October, 1984, and at Salt Lake City in July, 1985. Both are scheduled for completion in the fall of 1986. Remedial actions are scheduled to begin at Lakeview in April, 1986, and at Tuba City and Durango in July, 1986.

During FY 1985, Morrison-Knudsen generated 167 Radiological and Engineering Assessments (REAs) and initiated remedial action on 145 vicinity properties. In addition, Bendix generated 388 REAs and initiated remedial action on 150 vicinity properties. The REAs provide the basis for vicinity property remedial action design. A site summary of REAs and remedial actions is provided in Appendix A. In FY 1986, 1224 REAs and 1067 vicinity property remedial actions are planned.

9. PUBLIC PARTICIPATION

Information meetings were in Canonsburg, Durango, Rifle, Gunnison, Grand Junction, Riverton, Lakeview, Edgemont, Mexican Hat, Monument Valley, and Tuba City. The Project Office participated in numerous Task Force meetings in Lakeview, Durango, Riverton, and Gunnison throughout the year. These Task Forces are independent groups established by a State or Indian Tribe, under the term of the cooperative agreement to serve as a communications link between the UMTRA Project Office and the affected public. They consist of interested citizens, business people, local and State officials, and other community leaders.

The Project Office continued making presentations to the State agencies in Colorado, Utah, Oregon, Texas, New Mexico, and South Dakota.

An information pamphlet was published on radon health effects and a video tape was made for media presentation to the public.

A campaign of public announcements was held in Grand Junction, Durango, and Canonsburg to request citizens to report any known~~X~~tailings on their properties that needed to be cleaned up. This resulted in a requirement to survey numerous new vicinity properties.

Scoping meetings on the Rifle and Durango EISs and the Lakeview EA were held in FY 1985. Public information meetings were held in Rifle, Shiprock, and Lakeview regarding progress of the project.

#### 10. OTHER FEDERAL AGENCY ACTIVITIES

Coordination with participating Federal agencies continued and meetings were conducted to exchange information and resolve problems. Following are condensed texts of contributions to this report from the Federal agencies cooperating with the DOE on the UMTRA Project.

##### 10.1 Department of the Interior (DOI).

The DOI reviewed and commented on DOE proposals for the Lakeview and Durango sites and continued to work closely with DOE in the review and planning of remedial actions at the Shiprock and Riverton sites. The Department has initiated a water monitoring program at the Riverton site; no test results are available as yet. DOI will continue to provide technical advice and assistance on remedial actions as appropriate.

10.2 Department of Justice (DOJ).

The Land and Natural Resources Division of DOJ has been designated by the Attorney General to perform staff work necessary to conduct the studies under Section 115(b) of PL 95-604 to determine the identity and legal responsibility of any person who owned, operated, or controlled any site designated under the Act. The Attorney General's Section 115(b) study with respect to the Canonsburg, Pennsylvania site, which concluded that there was an insufficient basis for seeking to recover the Government's remedial action expenditures from the former owners and operators of the site, was transmitted to the President of the Senate and Speaker of the House of Representatives on March 6, 1985.

DOJ is continuing its defense of the United States in the case of Won-Door v. United States, No. 109-79L, before the U.S. Claims Court. The case involves an inverse condemnation claim by a vicinity property owner at the Salt Lake City site. Pursuant to an agreement among Won-Door, DOE, NRC, and the State of Utah the Court has ordered that the case be stayed for two years (commencing 3/21/84), pending a decision by DOE and the State of Utah as to whether the plaintiff's property will be acquired in conjunction with the remedial action program at the Salt Lake City Site.

As previously reported, DOJ also defended several lawsuits filed against the United States, DOE, the Department of Defense, NRC, the Department of Health and Human Services, and EPA in the U.S. District Court for the Western District of Pennsylvania. In the first of these cases, Dunn, et al. v. United States, et al. Civil Action No. 82-0437, the plaintiffs were seeking injunctive relief to abate an alleged public nuisance posed by radioactive materials at the Canonsburg, Pennsylvania site. The plaintiffs also contended that DOE had failed to comply with certain public participation requirements imposed by the Uranium Mill Tailings Radiation Control Act and the requirements of NEPA concerning the preparation of an EIS. In the second case, Amorose, et al. v. United States, et al., Civil Action No. 82-0438, plaintiffs sought damages against the federal defendants and several private corporations for alleged reductions in property values attributed to radioactive contamination resulting from activities at the Canonsburg processing site. A third case, Bennett, et al. v. United States, et al., Civil Action No. 84-1161, was filed May 11, 1984 and, like the Amorose case, sought damages against federal and State defendants for alleged diminution in property values.

The Dunn case was resolved by a Consent Judgement entered May 5, 1984, subsequent to denial of plaintiffs' motion for class certification, and dismissal of the claim that the Secretary of Energy had failed to comply with the requirements of NEPA, both on October 18, 1983. Plaintiffs' application for attorney's fees under the EAJA, was denied by the District Court on January 17, 1985, which held that the prerequisites to a fee award had not been met. Plaintiffs have appealed this decision. Oral argument was heard before the United States Court of Appeals for the Third Circuit on August 14, 1985, and the case is now pending the decision of the Court.

As in the Dunn case, plaintiffs' motion for class certification in the Amorose suit was also denied on October 18, 1983. The Amorose case was dismissed with prejudice as to all plaintiffs other than William and Janis Dunn (based on an extra-record settlement with the private corporate defendants) on March 13, 1985, and as to the Dunns (based on failure to prosecute) on May 9, 1985. The Bennett case was dismissed as to the federal defendants, based on the grounds raised in our motion to dismiss, on November 27, 1984.

Finally, four Petitions for Review are currently pending in the United States Court of Appeals for the Tenth Circuit, challenging the EPA Administrator's final remedial action standards for inactive uranium milling sites, in American Mining Congress v. Ruckelshaus, Docket No. 83-1014 and Consolidated Cases. Oral argument was heard on September 10, 1984, and the case is now pending the decision by the Court.

#### 10.3 Nuclear Regulatory Commission (NRC).

As part of its role as a cooperating agency in the preparation of NEPA documents, the NRC has reviewed and concurred in the publication of the Lakeview EA, and concurred in the Shiprock RAP. Other documents that NRC reviewed and provided comments on to DOE were the Lakeview Processing Site Characterization Report, the Lakeview Disposal Site Characterization Report, and the Lakeview draft RAP.

#### 10.4 Environmental Protection Agency (EPA).

The EPA standards for cleanup and disposal of tailings from inactive uranium mill sites took effect on March 7, 1983, thus fulfilling EPA's primary responsibility for the remedial action program under Title I of the Act. Since then, EPA has reviewed and commented on site EISs and EAs, and consulted with Federal, state, and tribal officials, as necessary, to assist with the planning and carrying out of remedial actions. The EPA's headquarters and regional offices plan to continue liaison with the remedial action program, both to provide any needed assistance and to improve their knowledge of the practicality and effectiveness of the standards.



## 11. STATE AND INDIAN TRIBE ACTIVITIES

Excellent cooperation has been extended by all of the participating states and Indian tribes. Their comments are included in Appendix B. Quarterly meetings with state and tribal representatives on Project activities were initiated during FY 1984 and will continue in FY 1985.

## 12. STATUS OF DESIGNATED SITES

12.1 Canonsburg, Pennsylvania. Approximately 25 percent of the project was completed in 1984, including site preparation, fencing, storm water and flood control facilities, and waste-water treatment. Construction resumed with the advent of good weather in the spring of 1985. Remedial action, both on the site and off the site, progressed according to schedule and, with the exception of the former landfill in Burrell Township, is scheduled for completion in November, 1985. FY 1985 efforts included excavation of contaminated material and its encapsulation in the cell.

All former tenants of the Industrial Park were relocated and reimbursed for moving expenses and business dislocation damages with the exception of a transportation company, which failed to submit the proper forms for reimbursement. Relocation expenses for this company are estimated to be \$6,000.



The Pennsylvania Department of Environmental Resources continued to work with the DOE and their contractors in surveying and, when applicable, executing remedial action agreements with the owners of vicinity properties. During FY 1985, a total of 130 agreements were executed. The total number of properties requiring remedial action was 144, 19 of which were completed prior to 1985. The remaining 125 were completed by October, 1985.

The subcontract for the Burrell Landfill remedial action was awarded and mobilized during FY 1985 and is expected to be completed during FY 1986.

- 12.2 Salt Lake City, Utah. In October of 1984, the Record of Decision on the final EIS was received, and clearance for final design of construction, plans, and specifications was given. The State of Utah conducted all phases of planning, specification design, and solicitation of bidders. On December 14, 1984, bids were opened for remedial action at the Vitro site. The Argee Corporation, located in Denver, was selected by the State of Utah as the contractor and in February of 1985, construction began at Vitro and Clive. Early construction activities included the railroad spurs at the Vitro and Clive sites. Union Pacific Railroad was selected as the subcontractor to Argee. The project opening ceremonies were held in early July, 1985, with the first tailings being relocated into the Clive disposal pit. Construction progress is approximately six months ahead of schedule and is projected to be completed by July of 1987.

Final design and remedial action on 25 vicinity properties were completed during FY 1985. Progress was made on reaching a resolution concerning two major complex properties in Salt Lake City.

- 12.3 Shiprock, New Mexico. A finding of No Significant Impact (FONSI) was published in October, 1984. Ground-breaking ceremonies for the site were held in October of 1984.

The Processing Site Engineering was completed in May, 1985. Major construction began in June of 1985, and 30 percent of the site work was completed during FY 1985.

Final design on 14 of the 15 vicinity properties was completed in FY 1985 with two separate subcontracts awarded for the remedial action. Work on 14 properties was initiated during the year with completion anticipated in the fall of 1985.

- 12.4 Durango, Colorado. The draft EIS was published in October, 1984, followed by public hearings in December, 1984. Based upon public comment and input from the State of Colorado and the NRC, the preferred alternative in the EIS was revised from relocation to Long Hollow for reprocessing and disposal to relocation for disposal in Bodo Canyon. The final EIS is scheduled to be published in October, 1985, with a record of decision (ROD) anticipated in December, 1985. Disposal site engineering by the

RAC was initiated during FY 1985. Site remedial action is scheduled to begin in late summer of 1986.

A total of 88 properties have been included for remedial action. Final design on 24 properties was completed during the fiscal year and three separate bid packages were awarded which encompassed all 24 properties where design was completed.

12.5 Gunnison, Colorado. An alternate site selection process was done in response to community and state comments on the draft EA and RAP. Cost estimates for reclamation at these sites were prepared. Agreement was reached with the state on an alternative site for relocation of the tailings (preliminary preferred alternative was the new West Gold Basin site). This disposal area will be characterized in FY 1986 and the FONSI is scheduled for February, 1987.

12.6 Grand Junction, Old Rifle, and New Rifle, Colorado. During FY 1985, remedial action was completed on 109 properties at Grand Junction, bringing the total to 172. Joint disposal of the Old Rifle and New Rifle tailings with Grand Junction was no longer considered a viable option. A new preferred alternate disposal site for the Rifle tailings was located within a six-mile radius of the New Rifle tailings pile. During FY 1985, 19 properties in Rifle were recommended for either inclusion or exclusion. Twelve of these properties were included and await engineering assessment during the first quarter of FY 1986.

12.7 Riverton, Wyoming. The draft EA and RAP were distributed in late 1984. Several questions on the ground-water contamination required additional field studies which delayed completion of the NEPA and design processes. Public meetings were held in May, 1985, where the local Task Force and State of Wyoming requested that the DOE evaluate the alternatives of tailings relocation to an American Nuclear Corporation tailings pond in the Gas Hills area. Although the alternative would be technically feasible, it appeared to be more costly than stabilization in place due to the 45-mile hauling distance. The project was delayed in July, 1985, awaiting a decision for remedial action. Processing site engineering was initiated during 1985. Final design on 11 of 15 vicinity properties was completed as well as the remedial action on these properties during FY 1985.

12.8 Tuba City and Monument Valley, Arizona; and Mexican Hat, Utah.

These sites were grouped together to facilitate coordination with the Navajo Nation. Monitoring wells were installed and sampled, indicating migration of contaminated ground water away from each of these mill sites. Additional wells were installed to provide data necessary to characterize and define the extent of these plumes. Radiological characterization of the Monument Valley site was completed. A cooperative agreement was executed with the Navajo Nation and the Hopi Tribe for remedial action at the Tuba City site, which is located on land claimed by both Tribes. Work procedures were established with both Tribes, including funding of

their key project staff. Public information and participation continued with briefings to concerned citizens groups, hospital and health boards, and general Chapter meetings. Initial processing site engineering was begun during FY 1985 on all three sites.

12.9 Lakeview, Oregon. Remedial action planning documents, including the EA, were completed in FY 1985. An alternate disposal site was chosen and preliminary design was started. Completion of design and commencement of remedial action is anticipated in April of 1986.

12.10 Ambrosia Lake, New Mexico. Site characterization activities were initiated at the Ambrosia Lake site in May, 1985, and were completed in September, 1985. Ongoing quarterly water level and quality measurements will continue through FY 1986. Windblown contamination of more than 500 acres represents the sole type of vicinity properties associated with the site. An environmental assessment is in preparation, with completion scheduled in mid-1986. Remedial action is tentatively scheduled to begin in late FY 1986.

12.11 Falls City, Texas. Significant progress was made during 1985. The present occupant of the major portion of the site, Solution Engineering, was placed under order by the Texas Department of Health to submit a closure plan for interim site stabilization and to provide protection for ground and surface waters. Meetings were held between the State of Texas and the DOE to discuss the

conditions of a cooperative agreement. A study of remedial action options for the site was initiated.

12.12 Lowman, Idaho. An appropriation request was sent to the state legislature for funds to purchase the Lowman Mill site and provide part of Idaho's apportionment to the UMTRA Project. This bill died in committee. A budget request has been prepared for FY 1987 for submission to the legislature for funds to purchase the mill site, add one FTE position, and provide for part of the state's 10-percent funding.

12.13 Spook, Wyoming. No activities were undertaken at the Spook site during FY 1985. The Wyoming Department of Environmental Quality initiated a request to reclaim this site using abandoned mine land (AML) funds. However, they were advised by the Office of Surface Mining that the Spook site did not qualify for AML funds and would have to be reclaimed with UMTRA Project funds.

12.14 Edgemont, South Dakota. Included vicinity properties reached 151 in FY 1985, 24 of which have undergone remedial action.

### III. PROGRAM FUNDING

<u>ACTIVITY</u>	FY 1984 <u>OBLIGATIONS*</u>	FY 1985 <u>OBLIGATIONS*</u>	EST FY 1986 <u>OBLIGATIONS*</u>
<u>ASNE</u>			
Planning & Design Development	\$ 4,542,000	\$14,935,000	\$ 13,372,540
Engineering	4,935,000	6,569,000	15,735,160
Environmental Health & Safety	1,301,000	1,571,000	1,443,550
Site Acquisition	2,227,000	740,730	6,262,130
Remedial Action	7,607,000	31,934,930	73,929,560
Maintenance & Surveillance	---	18,000	86,100
Technical & Management Support	<u>8,165,000</u>	<u>8,342,400</u>	<u>7,630,210</u>
Total Funding	\$28,777,000	\$64,250,200	\$118,459,260
Federal Funding	\$28,309,000	\$61,135,523	\$110,000,000

\*Includes Federal and State funds.

APPENDIX A  
DESIGNATED PROCESSING SITES AND VICINITY PROPERTIES

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Figure A-1

## LOCATION - UMTRA PROJECT SITES

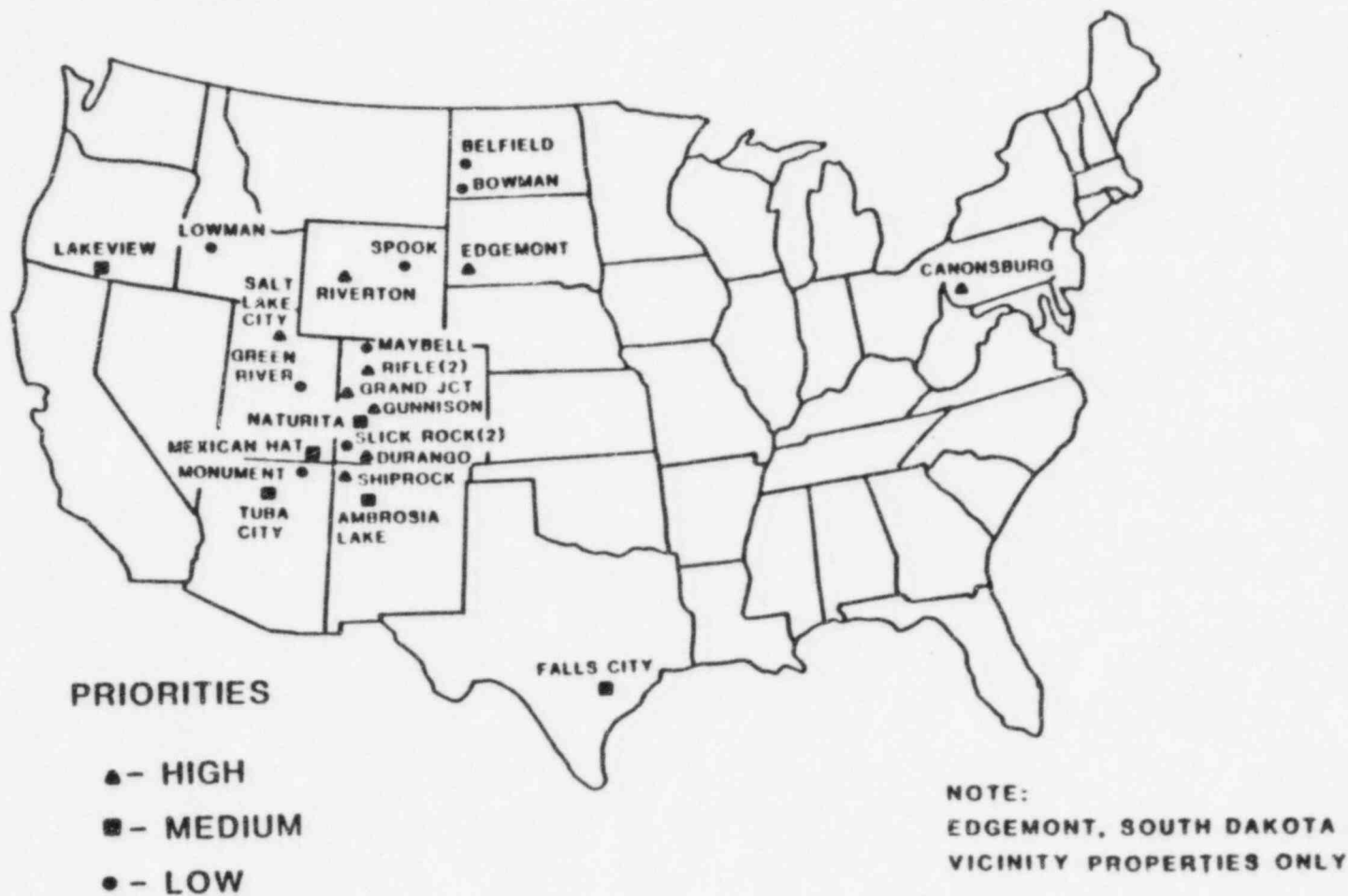


Table A.1 Processing sites summary

State	Processing site	Tailings (10 <sup>6</sup> tons)	NEPA document/proposed action**
Arizona	Monument Valley*	1.100	EA
	Tuba City*	0.800	EA
Colorado	Durango	1.555	EIS/Relocate
	Grand Junction	1.900	EIS/Relocate
	Gunnison	0.540	EA
	Maybell	2.600	EA
	Naturita	0.344	EA
	New Rifle	2.700	EIS/Relocate
	Old Rifle	0.350	EIS/Relocate
	Slick Rock (NC)	0.037	EA
	Slick Rock (UC)	0.350	EA
Idaho	Lowman	0.090	EA
New Mexico	Ambrosia Lake	2.600	EA
	Shiprock*	1.500	EA/SIP
North Dakota	Belfield	0.050	EA
	Bowman	0.071	EA/Relocate
Oregon	Lakeview	0.130	EA/Relocate
Pennsylvania	Canonsburg	0.414	EIS/SIP
Texas	Falls City	2.500	EA
Utah	Green River	0.123	EA
	Mexican Hat*	2.200	EA
	Salt Lake	1.880	EIS/Relocate
Wyoming	Spook	0.187	EA
	Riverton	0.900	EA

\*Processing site on Navajo tribal lands.

\*\*Assumes all sites not otherwise designated are stabilization in place (SIP) pending completion of environmental and engineering studies.

TABLE A-2 Vicinity properties summary of activities for FY 1985.

DESIGNATED	INCLUSION/EXCLUSION RECOMMENDATIONS		INCLUSIONS		READY SUBMITTED		PROPERTIES BID		READY COMPLETED		
	FY 1985	TOTAL	FY 1985	TOTAL	FY 1985	TOTAL	FY 1985	TOTAL	FY 1985	TOTAL	
CAN	111	102	148	69	190	57	147	70	131	81	115
SLC	127	43	87	27	88	324	61	23	41	28	36
SHP	17	5	20	3	17	15	15	12	12	0	0
DUR	137	105	159	73	88	46	46	26	24	0	0
GUN	14										
GRJ	6905	1046	1122	523	1246	353	437	135	138	109	172
DT		35						2		5	5
RFL	384	19	57	12	12	0	0	0	0	0	0
RVT	50	2	53	5	14	15	15	12	12	10	10
TUB	8	1	8	0	0	0	0	0	0	0	0
HAT	21	1	19	0	9	0	0	0	0	0	0
LKV	4										
AMB	*										
NAT	60										
FLC	20										
GRV	29										
SLR	4										
BEL	11										
BOW	3										
MAY	*										
LOW	17										
SPK	1										
MON	17	1	17	0	0	0	0	0	0	0	0
EDG	216	97	158	49	151	35	80	15	44	24	24
	8156	1457	1848	759	1815	555	801	295	402	257	362

\*Windblown only

APPENDIX B  
COMMENTS FROM STATES

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## COLORADO DEPARTMENT OF HEALTH

Richard D. Lamm  
Governor

Thomas M. Vernon, M.D.  
Executive Director

August 9, 1985

John Themelis, Project Manager  
UMTRA Project Office  
Department of Energy  
5301 Central Ave., N.E., Suite 1700  
Albuquerque, New Mexico 87115

RE: 1985 UMTRA Project Annual Status Report to Congress

Dear John:

The following is a summary of the significant activities conducted during the past year.

- \*Governor Lamm and Ray Romatowski signed, on December 31, 1984, a "Statement of Principles and Directives for the Implementation of the UMTRA Project in Colorado".
- \*The State has provided \$3.3 million for F.Y. 1986 for remedial action of the tailings pile in Durango and other areas, and vicinity properties in Grand Junction and Durango.
- \*The State is expanding its staff in an effort to provide timely reviews and better overall coordination.
- \*The State's preferred alternative for Durango has been selected with significant input from the task force and local government.
- \*The State and DOE's contractor's have identified three new sites within three miles of the Gunnison pile after strong local objections to stabilization on site and the East Gold Basin site. The State's preliminary preferred alternative is the new East Gold Basin site.
- \*Work is progressing on vicinity properties in Grand Junction where the Grand Junction Remedial Action Program (GJRAP) and UMTRAP are jointly involved, reducing the cost in accomplishing both programs.
- \*Additional work on UMTRAP vicinity properties in Grand Junction is increasing rapidly.
- \*Work on UMTRAP vicinity properties in Durango will begin shortly.

Thank you for this opportunity to provide a summary of State activities.

Sincerely,

Paul Ferraro, Program Manager  
UMTRA  
Office of Health Protection

4210 EAST 11TH AVENUE



# STATE OF IDAHO

DEPARTMENT OF HEALTH  
AND WELFARE

DIVISION OF ENVIRONMENT  
Statehouse  
Boise, Idaho 83720

August 5, 1985

John G. Themelis  
Department of Energy  
Albuquerque Operations Office  
P.O. Box 5400  
Albuquerque, New Mexico 87115

Dear Mr. Themelis:

In 1985 the Radiation Control Section of the State of Idaho accomplished the following:

1. An appropriation request was sent to the state legislature for funds to purchase the Lowman Mill site and provide part of Idaho's apportionment to the UMTRA program. This bill died in committee.
2. A budget request has been prepared for FY 87 for submission to the legislature for funds to purchase the mill site, add one FTE position and provide for part of the states 10% funding.

Thank you for your time.

Sincerely,

A handwritten signature in cursive script that reads "Robert D. Funderburg".

Robert D. Funderburg, Manager  
Radiation Control Section

RDF/ds



## The Oregon Department of Energy

LABOR & INDUSTRIES BUILDING, ROOM 102, SALEM, OREGON 97310

PHONE 378-4040 TOLL FREE 1-800-221-8035

1975  
TEN YEARS  
SERVICE  
TO THE  
PEOPLE OF  
OREGON  
1985

August 21, 1985

John G. Themelis, Project Manager  
Uranium Mill Tailings Project Office  
U.S. Department of Energy  
PO Box 5400  
Albuquerque, NM 87115

Dear Mr. Themelis:

As requested in your letter of July 22, 1985, the following highlights are provided on Oregon's participation in the Uranium Mill Tailings Remedial Action Program for the period of October 1, 1984 through September 30, 1985. The success of the joint Oregon/US DOE program to date can be attributed to a large extent on the basic philosophy under which this state is participating, i.e., that Oregon has chosen to be an active participating partner in this action and that the State's preference is to be *involved* in all decision-making processes.

The most significant program accomplishments that have occurred, primarily as a result of our joint efforts, include:

- A decision to relocate the tailings to an alternate disposal site. This decision was based on the determination that the existing site was not technically suited for achieving long-term stabilization and isolation of the tailings.
- Developed and implemented a public participation program that has provided a mechanism for concerned community and state residents to have an effective role in all phases of the Lakeview project decision-making process.
- Identification of a thorium-230 contamination problem at the mill processing site which required use of non-conventional UMTRA measurement techniques and will require special attention during the remedial action to ensure that the problem is satisfactorily cleaned up.

John G. Themelis  
August 21, 1985  
Page 2

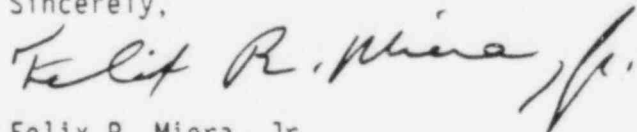
The Draft Remedial Action Plan conceptual design and the Environmental Assessment for the Lakeview site was issued by the US DOE in March 1985. Comments on these documents were submitted by ODOE, USNRC and several public interest groups. The most significant concerns identified dealt with the use of a liner in the final disposal site, surface water erosion concerns, and the need for more thorough evaluation of seismic potential in the region. The US DOE is expected to issue their response to the comments that were formally submitted by the end of FY'85. The ODOE and USNRC will want an opportunity to evaluate these responses to ensure that all concerns have been satisfactorily addressed and major issues resolved.

All major aspects of the program appear to be proceeding in a timely fashion. Funding for the project was approved by the State Legislature during its session that ran from January to June 1985. The Collins site was selected as the preferred alternative for final tailings disposal and the state is now proceeding with negotiations for acquiring this site.

We believe that the Lakeview project has made major strides towards accomplishing the final remedial action. However, minimizing the often excessive time frequently required in the decision making process, might assist in completing the project in a more timely fashion. We are willing to meet with you at your convenience to discuss our thoughts on this issue further.

Thank you for the opportunity to provide input to your annual report. The staff of the Oregon Department of Energy looks forward to a continued successful working relationship.

Sincerely,

A handwritten signature in dark ink, appearing to read "Felix R. Miera, Jr.", with a stylized flourish at the end.

Felix R. Miera, Jr.  
Lakeview Project Manager

FM:tg  
142-Letter (F1)





Bureau of Radiation Protection

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES

Post Office Box 2063  
Harrisburg, Pennsylvania 17120

August 14, 1985

717-787-3720

John G. Themelis, Project Manager  
Uranium Mill Tailings Project Office  
Department of Energy  
Albuquerque Operations Office  
P. O. Box 5400  
Albuquerque, NM 87115

Dear Mr. Themelis:

As requested in your July 22, 1985 letter, we are providing information for inclusion in the UMTRA Project Annual Status Report for the period October 1, 1984 through September 30, 1985.

Remedial action, both on-site and off-site, is progressing according to schedule and, with the exception of the former landfill in Burrell Township, should be completed by November 1985. The Remedial Action Plan was revised during the past year to exclude the former lagoon area (Parcel C) from the final disposal site. This allows Strabane Avenue to form the eastern boundary of the site in lieu of the Chartiers Creek. Thus, Strabane Avenue will not bisect the final disposal site as originally planned.

The Department filed an appeal of a lower court ruling that a de facto taking had occurred in April 1977 as opposed to the filing of a Declaration of Taking by the Department in February 1982. Our appeal was heard in the Commonwealth Court on March 14, 1985, but as yet, the higher court has not handed down an opinion on our appeal.

All former tenants of the Industrial Park have been relocated and reimbursed for moving expenses and business dislocation damages with the exception of a transportation company. This company has failed to submit the proper forms for reimbursement. Their relocation expenses are estimated to be \$6,000.

The Department continues to work with DOE and their contractors in surveying and, when applicable, executing remedial action agreements with the owners of vicinity properties. Thus far, 124 agreements have been executed and six more are in process. The total number of properties to be cleaned up is estimated to be 150. 144

Very truly yours,

Donald J. McDonald, Chief  
Division of Radiation Control  
Bureau of Radiation Protection



## Texas Department of Health

Robert Bernstein, M.D., F.A.C.P.  
Commissioner

1100 West 49th Street  
Austin, Texas 78756-3199  
(512) 458-7111

Robert A. MacLean, M.D.  
Deputy Commissioner  
Professional Services  
  
Hermas L. Miller  
Deputy Commissioner  
Management and Administration

August 16, 1985

Mr. John G. Themelis, Project Manager  
Uranium Mill Tailings Project Office  
U. S. Department of Energy  
Albuquerque Operations Office  
P. O. Box 5400  
Albuquerque, New Mexico 87115

Dear Mr. Themelis:

Significant progress has been made during Fiscal Year 1985 with regard to the remedial action effort for the Falls City, Texas site.

Following the annulment of the radioactive materials license issued to Solution Engineering, Inc. by the Texas Department of Health on August 24, 1984, the U.S. Department of Energy notified Texas on October 30, 1984, that the entire Falls City site was eligible for remedial action under Title I of Public Law 95-604.

The present occupant of the major portion of the site, Solution Engineering, Inc., has been placed under order by the Texas Department of Health to submit a closure plan that will address the measures it will take to provide interim stabilization for the site. Such measures are to be effective for the period of time until Title I remedial actions begin. Although Solution Engineering, Inc. has been slow in providing an acceptable closure plan and commencing work, efforts continue to see that such a plan is developed and implemented.

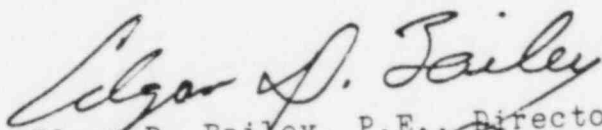
In concert with these efforts, the Texas Department of Water Resources has begun procedures to involuntarily amend the in situ mining permit issued to Solution Engineering, Inc. to require that certain actions be taken in a timely manner to provide protection for ground and surface waters.

On March 12, 1985, Texas requested that a study of alternatives, including alternative sites, be initiated. Work on this study appears to be progressing satisfactorily, and a selection of the remedial action option should be able to be made in the near future.

Mr. John G. Themelis  
Page 2

On March 19, 1985, representatives from the Albuquerque Operations Office met with Texas officials, including the Secretary of State and a representative of the Office of the Governor, to discuss the terms and conditions of a cooperative agreement between the State of Texas and the U.S. Department of Energy. Further consideration of such an agreement awaits the receipt of a revised agreement document from the U.S. Department of Energy.

Sincerely,



Edgar D. Bailey, P.E., Director  
Division of Licensing, Registration  
and Standards  
Bureau of Radiation Control



STATE OF UTAH  
DEPARTMENT OF HEALTH

NORMAN H. BANGERTE, GOVERNOR

August 9, 1985

SUZANNE DANDOLY, M.D., M.P.H., EXECUTIVE DIRECTOR

John Themelis, Project Manager  
U.S. Department of Energy  
Albuquerque Operations Office  
P.O. Box 5400  
Albuquerque, New Mexico 87115

Re: Input to the 1985 UMTRA Project  
Annual Status Report to Congress  
Salt Lake City, Utah

Dear Mr. Themelis:

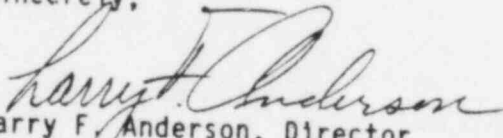
The following is our response to your request dated July 22, 1985, for your input to the 1985 Report to Congress. We hope the information provided is satisfactory.

In October of 1984 the Record of Decision on the FEIS was received and clearance for final design of construction, plans and specifications was given. On December 14, 1984, bids were opened for remedial action at the Vitro site. In February of 1985, construction began at Vitro and Clive. The State of Utah conducted all phases of plan and specification design, bidding, and award of the contract. Construction progress is approximately 6 months ahead of project life schedule and is projected to be completed by July of 1987.

Cost projections and planning are within 3 percent of the outlay forecasts.

If you have any questions concerning the information please contact Mark Day of my staff.

Sincerely,

  
Larry F. Anderson, Director  
Bureau of Radiation Control

KENNETH L. ALKEMA, DIRECTOR • DIVISION OF ENVIRONMENTAL HEALTH

3266 STATE OFFICE BUILDING • P.O. BOX 45500 • SALT LAKE CITY, UTAH 84145-0500 • (801) 533-6121  
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*Department of Environmental Quality*

## LAND QUALITY DIVISION

HERSCHLER BLDG. - THIRD FLOOR  
122 WEST 25TH

TELEPHONE 307-777-7756

CHEYENNE, WYOMING 82002

August 13, 1985

John G. Themelis  
Project Manager  
Uranium Mill Tailings Project Office  
U.S. Department of Energy  
Albuquerque, New Mexico 87115

Dear John:

At the Governor's request, the Wyoming Department of Environmental Quality (WDEQ) has been actively involved in the UMTRA program during fiscal year 1984. A summary of those activities by UMTRA project is given here for inclusion in your annual report to Congress.

RIVERTON SITE

Under the State Cooperative Agreement, WDEQ has actively participated in evaluation of the Riverton site. WDEQ has attended several meetings with both the Task Force (a public participation group) and DOE on the Riverton site. During this fiscal year, WDEQ has completed reviews and provided comments to DOE on two drafts of the Environmental Assessment and one draft of the Remedial Action Plan for the site.

These reviews resulted in the identification of important hydrologic and cost concerns. As a result of these reviews WDEQ suggested that DOE investigate the potential of moving the Riverton tailings to an existing licensed site.

Two appraisal contracts have been let for evaluation of the Riverton site lands. The results of those appraisals are currently being evaluated by WDEQ.

SPOOK SITE

No activities were undertaken at the Spook site during this fiscal year. WDEQ had initiated a request to reclaim this site using abandoned mine land (AML) funds. However WDEQ was advised by the Office of Surface Mining that the Spook site would not qualify for AML funds and would have to be reclaimed with UMTRA funds.

John G. Themelis  
August 13, 1985  
Page 2

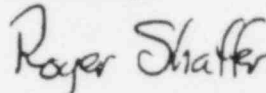
VICINITY PROPERTIES

WDEQ has participated in the identification of eleven (11) Vicinity Properties and in the review of Radiological Engineering Assessments for those sites. During this fiscal year construction inspections have been conducted by WDEQ on five sites.

WDEQ has also requested that DOE bring their radiological survey van to Hudson and Lander, Wyoming to check for any radiologic hazards that may exist in those two communities.

Thank you for the opportunity to provide input into your annual report.

Sincerely,

A handwritten signature in cursive script that reads "Roger Shaffer".

Roger Shaffer  
Administrator

RS:KMO:clw