



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

AUG 2 1980

Mr. Ross A. Scarano, Chief
Uranium Recovery License Branch
U. S. Nuclear Regulatory Commission
Mail Station 483-SS
Washington, DC 20555

Dear Mr. Scarano:

The Uranium Mill Tailings Remedial Actions (UMTRA) Project Office has been assigned responsibility for preparing the 1980 Annual Status Report to the Congress on the Uranium Mill Tailings Remedial Actions Program. In accordance with the provisions of P. L. 95-604, the "Uranium Mill Tailings Radiation Control Act of 1978," Section 114(a), the report is to include a summary of the UMTRA Program activities for which the Nuclear Regulatory Commission (NRC) is responsible. Therefore, I am writing to formally request your input for the report to be submitted on January 1, 1980.

The first annual report, submitted January 1, 1980, covered the period ending December 31, 1979. However, it has been decided that with expanding program activities, it will be more practical to cover the period of the previous fiscal year in the report to be submitted each January. Accordingly, the report to be submitted on January 1, 1981, will cover the period January 1, 1980 through September 30, 1980, and all subsequent reports will cover the period October 1 through September 30.

The purpose of the report is to inform Congress of progress made during the reporting period. Your input will be incorporated into the Program Status Section of the report. An introductory section will have already described NRC responsibilities under the program and will have set forth other background information (see attached copy of Introduction to the 1979 report). Please submit your input in a form suitable for verbatim inclusion in the report. This will eliminate the need for time-consuming revisions. The draft report will be forwarded to DOE Headquarters for review and final approval.

In order to remain on schedule, we need to receive your input no later than September 30, 1980. Sandia National Laboratories is functioning as the interim technical support contractor under the Uranium Mill Tailings Remedial Actions

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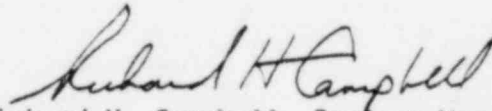
Mr. Ross A. Scarano

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Project Office, and in this capacity is coordinating preparation of the report. If you have any questions, please contact Dr. Sieglinde Neuhauser (FTS 844-8246) at Sandia or Mark Matthews (FTS 844-3941) in my office.

Your prompt response will be appreciated.

Sincerely,

A handwritten signature in cursive script, reading "Richard H. Campbell". The signature is written in dark ink and is positioned above the typed name.

Richard H. Campbell, Project Manager
Uranium Mill Tailings Project Office

Attachment:
As stated

cc: Mr. Hubert Miller, NRC

EXECUTIVE SUMMARY

This report on the remedial action program at inactive uranium mill tailings sites fulfills the requirements of Section 114(a) of Public Law 95-604, "Uranium Mill Tailings Radiation Control Act of 1978," enacted on November 8, 1978. It provides a summary history of the program, an analysis of its current status, and a forecast of future effort required. The termination date for the receipt of information for the report was November 8, 1979.

Assessments of inactive uranium mill tailings sites in the United States led to the designation of 25 processing sites for remedial action under the provisions of Section 102(a) Public Law 95-604. Under the provisions of Section 102(b), the Department of Energy assessed the potential health effects to the public from the residual radioactive materials on or near the 25 sites; and, with the advice of the Environmental Protection Agency, the Secretary established priorities for performing remedial action. Table I lists the 25 sites and the priorities, by affected State.

In designating the 25 sites and establishing the priorities for performing remedial action, the Department of Energy consulted with the Environmental Protection Agency, Nuclear Regulatory Commission, Department of the Interior, governors of the affected States, Navajo Nation, and appropriate property owners. Public participation in this process was encouraged through the publication of two Federal Register notices, two press releases, and public meetings held by three affected States and local governments.

During Fiscal Year 1980, Department of Energy will be conducting surveys to verify the radiological characterization at the designated processing sites; developing cooperative agreements with the affected States; and initiating the appropriate National Environmental Policy Act documentation prior to conducting specific remedial actions.

I. INTRODUCTION

A. PURPOSE AND SCOPE OF REPORT

This report has been prepared in accordance with the requirements of Public Law 95-604, "Uranium Mill Tailings Radiation Control Act of 1978," enacted November 8, 1978. Section 114(a) of the Act requires that, beginning on January 1, 1980, and each year thereafter until January 1, 1986, the Department of Energy (DOE) submit a report to Congress with respect to the status of actions required to be taken by DOE, Nuclear Regulatory Commission (NRC), Department of the Interior (DOI), Environmental Protection Agency (EPA), and States and Indian tribes under the Act and any amendments to other laws made by this Act.

Title I of the Act authorizes the DOE, in cooperation with the interested States, Indian tribes, and persons who own or control inactive uranium mill tailings sites, to provide a program of assessment and remedial action at such sites, in order to stabilize and control these tailings in a safe and environmentally sound manner and to minimize or eliminate the radiation health hazards to the public. The program must include, where appropriate, the reprocessing of tailings to extract residual uranium and other mineral values.

This first annual status report includes a brief summary of conditions and activities preceding enactment of legislation for the remedial action program of inactive uranium mill tailings sites, a description of program progress to date, and a forecast of activities to be accomplished during the next year.

B. PROGRAM HISTORY

Much of the uranium ore mined within the United States from the early 1940s through 1970 was processed for the Manhattan Engineering District (MED) and the Atomic Energy Commission (AEC) by private companies.

When processing operations ceased for the Government and a mill became inactive, tons of uranium mill tailings remained. Mill operators were not aware of the potential radiation health hazards to the public from exposure to the mill tailings, and the general scientific consensus at the time was that the effects of the radioactivity on the public were minimal. However, radiological criteria guidelines became more stringent as research on the effects of the low-level radiation progressed. As a result, a program was initiated in 1972 to perform an initial evaluation of inactive uranium mill tailings sites to determine their radiological status and potential health effects on the public. Since 1972, considerable effort has been directed towards recovering and regenerating radiological site status information and records, identifying sites and conducting engineering assessments, and developing legislation to initiate remedial action at inactive uranium mill tailings sites.

In 1972 Congress passed Public Law 92-314 (later amended by Public Law 95-236) to provide authority and funds for a cooperative State/Federal program to perform remedial actions on structures in Grand Junction, Colorado, where mill tailings were used for construction. A DOE report to Congress in February 1979, "Progress Report on the Grand Junction Uranium Mill Tailings Remedial Action Program," (DOE/EV-0033) provided an analysis of the current status of the program.

Also in March 1972, the Subcommittee on Raw Materials of the Joint Committee on Atomic Energy (JCAE) of the Congress, held hearings on bills that would have provided for a cooperative program between the Federal Government and the State of Utah to implement remedial action in the area of the inactive uranium mill tailings site in Salt Lake City. The AEC proposed at the hearings that a comprehensive study be performed of all formerly active uranium mill tailings sites, rather than treat the potential problem on a piece-meal basis. The outcome was an assessment of the existing physical conditions of inactive uranium mill sites located in eight western states by the AEC in 1974, in cooperation with the EPA and the affected States. Detailed engineering evaluations of many of these sites commenced in 1975 and were completed in 1977 by the Energy Research and Development Administration, the successor to the AEC.

C. PROGRAM AUTHORIZATION

In April 1978, DOE submitted proposed legislation to Congress which would establish a program to stabilize and control the mill tailings in a safe and environmentally sound manner. Hearings on the proposed legislation began in June 1978 in conjunction with similar bills introduced in the Senate and House of Representatives.

As a result of these hearings, Public Law 95-604 (Appendix A) was enacted on November 8, 1978. The Act authorizes DOE with the affected States, Indian tribes, and persons who owned or controlled inactive uranium mill tailings, to establish assessment and remedial action programs at inactive uranium mill tailings sites. Title I of the Act further stipulates that DOE will meet all radiation standards promulgated by EPA. Additionally, DOE will finance 90 percent of the remedial action costs, and the affected States will be required to pay remaining costs from non-Federal funds. An exception to this requirement are those sites on Indian tribal lands, where 100 percent of the costs for remedial action will be borne by the Federal Government.

D. PROGRAM REQUIREMENTS

Major program requirements to be accomplished over the next seven years to implement Public Law 95-604 are as follows:

- o Designation of processing sites
- o Establish site priorities for remedial action
- o Establish cooperative agreements with affected states and applicable Indian tribes
- o Acquisition and disposition of lands and materials
- o Reprocessing of residual radioactive materials
- o Compliance with the National Environmental Policy Act (NEPA)
- o Remedial action
- o Public participation
- o Annual status reports to Congress

E. PROGRAM MANAGEMENT AND OPERATIONS

I. Major DOE Programmatic Responsibilities

The Inactive Uranium Mill Tailings Sites Remedial Action Program is being implemented in DOE by the Office of the Assistant Secretary for Environment (ASEV) and the Office of the Assistant Secretary for Nuclear Energy (ASNE). In keeping with DOE's intent to consolidate the management of all nuclear waste management programs, responsibility for the remedial actions at the inactive uranium mill tailings sites was transferred during FY 1979 from ASEV to ASNE. With this transfer, the separation of responsibilities can be characterized as follows:

- o ASEV Designation of processing sites; conduct of radiological and other environmental surveys before, during and after remedial action; determination of the need for and extent of cleanup required; operational safety and environmental overview, including independent audits; participation in the determination of priorities in remedial action projects; initiation of cooperative agreements with the States; review of NEPA documents prepared by ASNE; and certification of compliance with remedial action standards after completion of projects.
- o ASNE Technology development and testing; determination of feasibility of remilling of residual radioactive materials; preparation of NEPA documents; participation in determination of priorities; acquisition of properties; implementation of remedial actions; and, other activities necessary to fulfill the intent of Public Law 95-604.

The ASNE activities are managed by the Office of the Nuclear Waste Management under the direction of ASNE, with appropriate participation by the Environmental Control Technology Division of the Office of Compliance and Overview, ASEV. A Uranium Mill Tailings Remedial Action Program Project Office has been established at the Albuquerque Operations Office to execute the ASNE functions of the program. The Albuquerque Operations Office will have the responsibility for the implementation of remedial action

at inactive uranium mill tailings sites. The Environmental Control Technology Division's survey, overview, and surveillance operations will remain at Germantown, Maryland to allow for an independent environmental participation by the ASEV.

2. Other DOE Coordinating Activities

Support for the remedial action program involves other major offices within DOE. Legal advice and services to the ASEV and ASNE are provided by DOE's Office of General Counsel (GC). Program objectives being accomplished with assistance from GC include: review of DOE's authority to perform remedial actions at candidate processing sites under the Act; determination of the responsibility of private site owners and others for expenses incurred under DOE's remedial action program; drafting of cooperative agreements with the affected States and applicable Indian tribes; review of the designation of processing sites; the drafting of memoranda of understanding with appropriate parties as required; and drafting of rules and regulations respecting the inclusion of notices in local land records concerning the existence of the contamination and the certification of clean-up. The Office of Administration (AD) is responsible for facilities management in DOE. In addition to providing advice to ASEV on designating processing sites, it is anticipated AD will be providing advice and services during the acquisition of properties phase of the program.

3. Other Federal Agency Responsibilities

Public Law 95-604 has authorized EPA to prescribe the general standards for remedial actions at inactive uranium mill tailings sites. No remedial action is to be undertaken prior to the promulgation of these standards. Additionally, EPA is the advisor to DOE on the assessment of hazards and establishing priorities at the designated sites.

The Atomic Energy Act of 1954 was amended by Public Law 95-604 giving the NRC statutory authority to directly license and promulgate regulations over the naturally occurring daughter products of uranium and thorium found in mill tailings. DOE is required to consult with NRC on the

designation of processing sites. In addition, NRC concurrence is required on (1) any cooperative agreements between DOE and the affected states, or where applicable, the Indian tribe on whose land the tailings site is located; (2) the acquisition of all processing and disposal sites and (3) selection and performance of remedial actions.

For processing sites located on tribal lands, DOE, in coordination with DOI, is authorized to enter into a cooperative agreement with the affected Indian tribe to perform the necessary remedial action. When it is necessary or appropriate to consolidate the radioactive wastes removed from sites under any State or tribal agreements or when it is necessary for the permanent disposition and stabilization of radioactive wastes, DOI may, under the provisions of the Act, make available for such purposes public lands that it administers.

In the case of each processing site designated by DOE as requiring remedial action under the provisions of the Act, the Department of Justice (DOJ) is to conduct a study to determine the identity and legal responsibility of any person (other than the United States, a State or Indian tribe) who owned, operated, or controlled the site before November 8, 1973, under any law or rule of law or reclamation or other remedial action with respect to the specific site under study. DOJ is to publish the results of the study and provide copies to Congress. Based on the study, the Attorney General shall, if he deems it appropriate and in the public interest, take the necessary action under any provision of law in effect at the time the uranium was produced at the site to require payment of all or any part of the costs incurred by the U.S. for remedial action.

4. States and Indian Tribes Responsibilities

Public Law 95-604 further provides for the full support of the affected State or applicable Indian tribe under whose jurisdiction a processing site is located. Program objectives initiated and to be accomplished by the affected State and applicable Indian tribe include: consultation with DOE on designation of processing sites; entering into cooperative agreements with DOE; and, participation in remedial action. Additionally, the affected State and applicable Indian tribe are to be actively involved in the acquisition and disposition of lands and materials and full participation or consultation in selection and performance of remedial action.