ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 192

[FRL-3510-1]

RIN 2060-AC03

Groundwater Standards for Remedial Actions at Inactive Uranium Processing Sites

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency is issuing final regulations to correct and prevent contamination of groundwater beneath and in the vicinity of inactive uranium processing sites by uranium tailings. EPA issued regulations (40 CFR part 192, subparts A, B, and C) for cleanup and disposal of tailings from these sites on January 5, 1983. These new regulations replace existing provisions at 40 CFR 192.20(a)(2) and (3) that were remanded by the U.S. Court of Appeals for the Tenth Circuit on September 3, 1985. They are promulgated pursuant to Section 275 of the Atomic Energy Act, as amended by Section 206 of the Uranium Mill Tailings Radiation Control Act of 1978 (Public Law 95-604).

The regulations apply to tailings at the 24 locations that qualify for remedial action under Title I of Public Law 95–604. They provide that tailings must be stabilized and controlled in a manner that permanently eliminates or minimizes contamination of groundwater beneath stabilized tailings, so as to protect human health and the environment. They also provide for cleanup of contamination that occurred before the tailings are stabilized.

EFFECTIVE DATE: February 10, 1995.

ADDRESSES: Background Documents. A report ("Groundwater Protection Standards for Inactive Uranium Tailings Sites, Background Information for Final Rule," EPA 520/1-88-023) has been prepared in support of these regulations. Another report ("Groundwater Protection Standards for Inactive Uranium Tailings Sites, Response to Comments," EPA 520/1-88-055) contains the detailed responses of the Environmental Protection Agency to comments on the standard by the reviewing public. Single copies of these documents may be obtained from the Program Management Office (6601J), Office of Radiation and Indoor Air, U.S. Environmental Protection Agency, Washington, DC 20460; (202) 233-9354.

Docket. Docket Number R-87-01 contains the rulemaking record. The docket is available for public inspection between 8 a.m.-4 p.m., weekdays, at EPA's Central Docket Section (LE-131), Room M-1500, 401 M Street SW., Washington, DC 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Allan C.B. Richardson, Criteria and Standards Division (6602J), Office of Radiation and Indoor Air, U.S. Environmental Protection Agency, Washington, DC 20460; telephone (202) 233–9213.

SUPPLEMENTARY INFORMATION:

I. Introduction

On November 8, 1978, Congress enacted the Uranium Mill Tailings Radiation Control Act of 1978 (henceforth called "UMTRCA"). In UMTRCA, Congress found that uranium mill tailings "* * * may pose a potential and significant radiation health hazard to the public, and * that every reasonable effort should be made to provide for stabilization, disposal, and control in a safe and environmentally sound manner of such tailings in order to prevent or minimize radon diffusion into the environment and to prevent or minimize other environmental hazards from such tailings." The Act directs the Administrator of the Environmental Protection Agency (EPA) to set "* * standards of general application for the protection of the public health, safety, and the environment * * *" to govern this process of stabilization, disposal, and control.

UMTRCA directs the Department of Energy (DOE) to conduct such remedial actions at the inactive uranium processing sites as will insure compliance with the standards established by EPA. This remedial action is to be selected and performed with the concurrence of the Nuclear Regulatory Commission (NRC). Upon completion of the remedial action program, the depository sites will remain in the custody of the Federal government under an NRC license.

The standards apply to residual radioactive material at the 24 processing sites designated, as provided in the Act, by DOE. Residual radioactive material is defined as any wastes which DOE determine to be radioactive, either in the form of tailings resulting from the processing of ores for the extraction of uranium and other valuable constituents of the ores, or in other forms which relate to such processing, such as sludges and captured contaminated water from these sites. (Additional wastes that do not meet this definition may be subject to regulation as hazardous waste under the Solid Waste Disposal Act (SWDA) as amended by the Resource Conservation and Recovery Act of 1976 (RCRA).)

Standards are required for two types of remedial actions: disposal and cleanup of residual radioactive material. Disposal is here used to mean the operation that places tailings in a permanent condition which will minimize risk of harmful effects to the health of people and harm to the environment. Cleanup is the operation that eliminates, or reduces to acceptable levels, the potential health and environmental consequences of tailings or their constituents that have been dispersed from tailings piles or disposal areas by natural forces or by human activity, through removal of residual radioactive materials from land, buildings, and groundwater.

On January 5, 1983, EPA promulgated final standards for the disposal and cleanup of the inactive mill tailings sites under UMTRCA (48 FR 590). These standards were challenged in the Tenth Circuit Court of Appeals by several parties (Case Nos. 83-1014, 83-1041, 83-1206, and 83-1300). On September 3, 1985, the court dismissed all challenges except one: it set aside the groundwater provisions of the regulations at 40 CFR 192.20(a)(2) and (3) and remanded them to EPA "* to treat these toxic chemicals that pose a groundwater risk as it did in the active mill site regulations." On September 24, 1987, EPA proposed new standards to replace those remanded. A public hearing was held in Durango, Colorado, on October 29, 1987. In response to requests from several commenters at the public hearing and a later request by the American Mining Congress, the public record for comments on the proposed standard was not closed until January 29, 1988. With this notice, EPA is establishing final standards to replace those set aside.

II. Summary of Background Information

Beginning in the 1940's, the U.S. Government purchased large quantities of uranium for defense purposes. As a result, large piles of tailings were created by the uranium milling industry. Tailings piles pose a hazard to public health and the environment because they contain radioactive and toxic constituents which emanate radon to the atmosphere and may leach into groundwater. Tailings, which are a sand-like material, have also been removed from tailings piles in the past for use in construction and for soil