

March 31, 2000

The Honorable Clinton Stennett
Idaho State Senate
State Capital
P.O. Box 83720
Boise, Idaho 83720-0061

Dear Mr. Stennett:

As I stated in my March 13, 2000, letter, I am providing a detailed response to your February 28, 2000, letter concerning disposal of radioactive materials from the Formerly Utilized Sites Remedial Action Program (FUSRAP) at the EnviroSAFE Services of Idaho, Inc. (EnviroSAFE) facility, which currently operates under a Resource Conservation and Recovery Act (RCRA) hazardous waste disposal permit. You have also asked for additional information about these disposals, operations, and the adequacy of public and worker health and safety, and protection of the environment. The Commission's responses to your four questions follow:

1. *What are any radiation exposure issues presented by the radioactivity levels under EnviroSAFE's permit for FUSRAP waste disposal at its facility, and how do these limits compare with the NRC's requirements?*

The U.S. Nuclear Regulatory Commission (NRC) does not regulate the EnviroSAFE facility; therefore, we are not familiar with its design features and operating procedures for protecting workers at the facility and members of the public offsite. However, we can make some observations based on Section C-2 of the EnviroSAFE permit, which was attached to your letter and which addresses disposal of FUSRAP wastes. The permit allows the disposal of radioactive materials at concentrations that are generally consistent with "unimportant quantities" of uranium and thorium that are exempted from regulation by the NRC. With respect to a radiation dose limit, the permit specifies a maximum of 4 mSv/yr (400 mrem/yr) to a worker handling FUSRAP material. NRC standards in 10 CFR Part 20 (Part 20) limit occupational doses to individual adults covered by the radiation protection program to 50 mSv/yr (5000 mrem/yr) total effective dose equivalent in a year (See 10 CFR 20.1201). We do not know what public dose, if any, results from the operation of the EnviroSAFE facility. Our regulations require that licensees conduct operations such that the total effective dose equivalent to individual members of the public from the licensed operation does not exceed 1 mSv/yr (100 mrem/yr). See 10 CFR 20.1301.

2. *What are the appropriate health and safety protections necessary for workers, the public, and the environment relative to disposal of radioactive materials that can be disposed of at EnviroSAFE's facility under its permit?*

The NRC has limited regulatory jurisdiction over certain types of radioactive materials. For example, we understand that the Envirosafe facility disposes of various types of hazardous material that can contain naturally occurring radioactive material (NORM). NRC does not have authority to regulate NORM, and as such, the regulation of this material is subject to requirements established by the State of Idaho or the U.S. Environmental Protection Agency. Therefore, even if the Envirosafe facility chose not to take FUSRAP material, it could still handle radioactive material in the form of NORM. According to Envirosafe, the NORM wastes at the facility can have concentrations of radioactive material comparable to or greater than some Envirosafe FUSRAP materials. As a result, either EPA or the State may be in a better position to provide you with information regarding the controls and protection of worker health and safety afforded by this site. For NRC regulated material, the health and safety protections during facility operation for workers and the public are found in NRC's regulations in Part 20 (enclosed).

Many of the standards governing RCRA landfills are similar in some respects to those required at NRC-licensed sites handling 11e.(2) byproduct material (tailings or wastes from extraction of uranium or thorium from ore). However, RCRA landfills are subject to State and/or EPA requirements. (The EPA regulations are found at 40 CFR Parts 260 through 272.) RCRA disposal facilities, like state-of-the-art mill tailings impoundments subject to NRC licensing, rely, in part, on a system of liners and leachate detection and collection systems to prevent releases of hazardous materials to the environment. RCRA disposal and the NRC's mill tailings regulations also address monitoring and inspection, site selection, and other detailed requirements. Most, if not all of these controls, help protect public health and safety, and the environment from both radioactive and non-radiological materials.

3. *Who has the authority and responsibility for regulating the disposal of FUSRAP and other 11e.(2) byproduct material generated before 1978 in the State of Idaho?*

Section 11e.(2) byproduct material is regulated by the NRC pursuant to the Uranium Mill Tailings Radiation Control Act (UMTRCA). UMTRCA has been understood to provide that the NRC does not have explicit legislative authority to regulate material generated at sites that were not licensed at the time UMTRCA was passed. Regulation of this material is subject to the jurisdiction of other Federal and State agencies.

You state in your letter that Idaho has no radiation control program or qualified personnel who could enforce radiological controls. In Enclosure 1, we have provided the names of State radiation control program officials familiar with disposal of radioactive materials in RCRA disposal facilities, and who could provide assistance to persons in your State responsible for issuing the permit. We have contacted each of these State officials and they are willing to help. If you need additional assistance, please contact Paul Lohaus, Director of the NRC's Office of State and Tribal Programs, at (301) 415-3340.

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4. *What is the NRC's authority and responsibility as to the regulations of the disposal of this material?*

See our response to Question 3.

I hope this information is helpful to you.

Sincerely,

/RA/

Richard A. Meserve

Enclosures:

1. Agreement State Radiation
Control Program Contacts
2. 10 CFR Part 20

Agreement State Radiation Control Program Contacts

1. Ruth E. McBurney, CHP, Director
Division of Licensing, Registration, and Standards
Bureau of Radiation Control
Texas Department of Health
1100 West 49th Street
Austin, TX 78756-3189
(512) 834-6679

2. William Sinclair, Director
Division of Radiation Control
Department of Environmental Quality
168 North 1950 West
P.O. Box 144850
Salt Lake City, UT 84114-4850
(801) 536-4255
or
Dane Finefrock, Environmental Health Manager
Environmental Monitoring and Low Level Waste Management Section
(address same as above)
(801) 536-4257

3. Edgar D. Bailey, CHP, Chief
Radiologic Health Branch
Division of Food, Drug & Radiation Safety
California Department of Health Services
P.O. Box 942732
Sacramento, CA 94234-7320
(916) 322-3482