Digest of A Performance Audit of The Utah Department of Environmental Quality

The Utah Department of Environmental Quality's regulation of the commercial waste disposal facilities is achieving its assigned task of protecting public health, safety, and the environment. The level of protection offered is possible because the department operates indepth licensing and permitting programs that oversee the construction and operation of the commercial facilities. These programs are accepted by the relevant federal oversight agencies, and as such, have allowed Utah to maintain program governance through agreements with the department's federal counterparts. While the mission of the agency is intact, there have been concerns with how the operations are carried out.

This audit was requested by members of the Utah State Legislature whose concerns with the licensing and regulation of disposal facilities raised 11 specific questions. Many of these questions and other concerns are a result of the department's statutory mandate to balance public health and safety with economic development. Overall we found the department does protect the public but that disagreements as to how and how much effort should be placed on addressing business customer needs has created some problems.

The following briefly describe the most significant areas reviewed for this report.

Legislator Questions. Representatives Kelly Atkinson, Frank Pignanelli, and David Adams requested answers to 11 specific questions dealing with the regulation of the sole commercial radioactive waste disposal facility in Utah. The major topics are briefly addressed below.

- (1) Protection of public health, safety, and the environment from radioactive waste disposal operations. In general, the Utah Division of Radiation Control (DRC) is administering a regulatory program which adequately protects public health, safety, and the environment. DRC's regulatory program is based on NRC guidelines. NRC guidelines are recognized as the official standard in the field of radioactive waste disposal. In 1990, Utah entered into an agreement with the NRC authorizing the state to administer its own radiation control program. As part of the agreement, the state committed to follow NRC guidelines in regulating low-level radioactive waste. Subsequent audits of the state's radiation control program by NRC have concluded, with a few minor exceptions, that the state's program is in compliance with NRC guidelines.
- (2) Compliance with state and NRC regulations. DRC's compliance inspection program appears to adequately compel Envirocare to meet all regulations

established by the Legislature and the NRC. Envirocare's disposal license is based on NRC guidelines. DRC's compliance inspection program is designed to ensure that all requirements of the license are met. During the course of the audit, shipping manifests and waste characterization documents were reviewed to identify possible license violations. This review found one generator, Rhone-Poulenc, Inc. had sent and Envirocare had received material that due to insufficient internal policies has resulted in questions as to whether or not the material is allowed by Envirocare's license.

- (3) Environmental monitoring. DRC's environmental monitoring program appears adequate to detect whether the environment is being contaminated by disposal operations. DRC requires regularly scheduled tests of environmental conditions: sampling soil, air, groundwater, vegetation, and wildlife. In order to confirm the results of Envirocare's test results, DRC conducts it own regularly scheduled environmental tests.
- (4) **Division involvement with the industry**. The director of DRC has publicly opposed the establishment of two radioactive waste projects proposed by Umetco Minerals Corp. There has been concern voiced as to the motive of this opposition. The director of DRC is charged with protecting Utah citizens and environment from the harmful effects of radiation. It is appropriate for the director to oppose projects if they posed a danger to the state. However, it is not appropriate if projects pose no danger.

In another incident, the director of DRC appears to have aided in the sale of state owned equipment to Envirocare. The equipment in question was not sold on a competitive bid basis because the director of DRC told the Division of State Surplus Property that the nature of the equipment and its location prevented any other possible purchasers. A representative of the competing company insists he contacted the director of DRC on two separate occasions prior to the sale, that company filed a letter protesting the sale of the equipment. Representatives of State Surplus Property and their documentation indicate the director of DRC was the agent of the sale and only called their office for information on how to fill out the proper forms. The director of DRC stated that he has no recollection of talking with any other interested parties prior to the sale.

(5) Financial resources to protect the state from long-term liability. Envirocare currently has \$1,231,000 set aside in a surety trust account to close and monitor the disposal site after closure. Other states with low-level sites, capable of receiving Class A, B, and C waste, require significantly larger amounts to be set aside for closure and post-closure monitoring. South Carolina has \$53,000,000, Nevada \$5,700,000, and Washington \$32,700,000 in their accounts. Some of this difference can be accounted for by the higher levels of radiation accepted by these sites and the build-up of the accounts at these sites over several years. Nevertheless, other states are charging fees for radioactive waste disposal and

have significantly more funding available for post-closure monitoring of their sites. The decision of whether or not a fee should be imposed to built-up Utah's closure/post-closure account in order to protect the state from long-term liability associated with radioactive waste disposal is a policy question to be addressed by the Legislature.

- (6) Analysis of waste shipments received at the site. In 1990, Envirocare failed to correctly identify radioactive isotopes and concentration levels contained in 10 sample tests furnished by DRC. The samples were furnished by DRC inspectors and were not taken from incoming shipments received by Envirocare. According to DRC inspectors, Envirocare still has not received certification. Because Envirocare has not been certified to analyze incoming shipments, DRC issued a license amendment authorizing Envirocare to send samples to an independent laboratory for analysis. According to NRC officials, the use of independent laboratories for analysis is an acceptable practice. In connection with this issue, Envirocare was recently issued an NOV for failure to receive results from the independent laboratory within 45 days as required by the license. Inspectors also found that Envirocare had not sent samples from 44 shipments to the independent laboratory for analysis. DRC management amended Envirocare's license to allow 90 days for results from the independent laboratory.
- (7) Conditional permit used in the licensing of Envirocare. Controversy has surrounded DRC issuance of a conditional permit in the licensing of Envirocare. The conditional permit authorized Envirocare to receive radioactive waste for storage but not for disposal prior to completing all of the state and NRC requirements for disposal. NRC officials are opposed to conditional permits preferring the completion of all licensing requirements before the licensee begins operations. Our review of DRC's administrative rules, which were promulgated after NRC guidelines, found no provisions authorizing the use of conditional permits. However, DRC did not violate NRC regulations by issuing the conditional permit because they were allowed, under the agreement with NRC, to authorize storage of low-level waste. The director of DEQ stated that other divisions within DEQ have used conditional permits and found them to be useful in the licensing process.
- (8) Placement of frozen waste in the disposal cell. Envirocare's license does not prohibit placement of frozen waste in the cell. The license requires lifts (layers of waste) to be compacted to 90 percent of optimum density. Since frozen waste leaves voids as it thaws proper compaction is not possible. According to Envirocare, frozen waste has not been placed in the cell and compaction tests show the compaction requirements of the license have been met. Beginning in February of 1992, DRC contracted with an independent company to perform compaction tests on lifts. Because DRC did not perform compaction tests during the time frozen waste was reportedly placed in the

cell, they are unable to document whether frozen wastes were placed in the cell. According to Envirocare officials, Envirocare's compaction test results show all lifts have met license requirements.

- (9 & 10) Employee protection and employee training. Envirocare's license restricts employee exposure limits to the standards set forth in NRC guidelines. The license also requires employee training programs that meet NRC standards. Furthermore, the pathway analysis used to establish the concentration limits for radioactive waste disposed of at the site was based on NRC established exposure limits to on-site workers as one of the major criteria.
 - (11) Fees. Other states with low-level disposal sites impose fees to protect the state from long-term liability, cover the cost of regulating the industry, and compensate the state for the risk associated with housing a radioactive waste disposal facility. Utah only imposes a fee to cover the cost of regulating the industry. The decision of whether a fee should be imposed on radioactive waste disposed of within the state for the purpose of building up a fund to protect the state from long-term liability or compensate the state for housing a disposal facility is a policy question to be addressed by the Legislature.

DEQ Programs Are Designed To Protect Public Health, Safety And The

Environment. DEQ protects public health, safety, and the environment by issuing licenses and permits founded on relevant state and federal regulations. Further protection is offered by establishing surety accounts for each license or permit holder and by compliance staffs given the authority to enforce the stipulations of the licenses and permits. The surety accounts held in trust for the state are meant as a guarantee for the future costs of final closure of a waste facility site and the long-term monitoring of that site. These accounts are integral to the protection of the public as they are the state's insurance that a site will be maintained without expense to the state. We do have a concern with the sufficiency of these accounts should any problems occur in the future. The departments compliance efforts are also integral as they are the enforcement arm of the program. The efforts of the compliance staffs appear to adequately protect public interests and monitor site operations.

DRC Management Needs Additional Policy Direction To Eliminate Controversy.

Two issues cause much of the controversy surrounding radioactive waste disposal in Utah. The first involves the conflict over how accommodating the department should be in assisting the industry. This conflict revolves around the amendment process and the use of a conditional permit for what some see to be solely for the benefit of the facility. In this case, one kind of waste was allowed into the state before the facility had approval to dispose of that waste type. The second issue involves a conflict over what types of waste should be disposed of in the state and who should make that decision. The fear is that the nuclear waste facility could be allowed to evolve without legislative or board direction. Critics within the industry have charged that evolution of the Envirocare facility will result in a low-level facility that will compete with other low-level sites.

Currently, however, Envirocare's license and an agreement with the Northwest Compact restrict Envirocare from competing with other low-level facilities. In our opinion, the concerns raised are a result of insufficient policy direction. Presently, the DEQ management is required to balance its roles of regulator and policy maker. Better policy definition by the Legislature and the DEQ's boards could eliminate some of the controversy.