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## **ATTACHMENT B**

# Umetco Minerals Corporation

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October 3, 1994

Mr. Samuel J. Chilk  
Secretary  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, MD 20852  
Attn: Docketing Branch

Re: Land Ownership Requirements for Low-Level Waste  
Sites

Dear Mr. Chilk:

Umetco Minerals Corporation (Umetco) submits these comments in response to the Nuclear Regulatory Commission's (NRC) advanced notice of proposed rulemaking (ANPR) on land ownership requirements for low-level radioactive waste (LLW) sites. 59 Fed. Reg. 39485 (August 3, 1994). Umetco is a uranium recovery licensee located in Grand Junction, Colorado.

Umetco has some questions about whether private ownership of LLW sites will provide the equivalent level of protection to the public health and safety as provided by Federal or State land ownership requirements. In any event, NRC has not sufficiently explained in the ANPR why it is considering a change to long-standing Commission policy or discussed the

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relevant policy issues or the impact of the proposal on existing and proposed regulatory programs. Thus, it is difficult to comment on the proposal in a meaningful fashion.

These comments first address several general considerations with respect to NRC's proposed amendment to 10 C.F.R. § 61.59(a) to permit private ownership of LLW disposal sites. These comments then briefly look at the specific questions raised by NRC in the ANPR.

## **I. General Considerations**

### **A. The NRC Framework for Radioactive Materials**

The primary purpose of the Atomic Energy Act (AEA) - the source of NRC's statutory authority - is to comprehensively address control over radioactive materials. Radiation, unlike chemical substances, poses potential hazards that cannot be seen, felt, smelled, heard or tasted. Mere proximity to radiation, in contrast to typical chemical wastes, could expose an individual to potential harm. NRC's rules (including government land ownership requirements) have been designed to permanently (within reason) isolate the waste from virtually all human contact while it poses a potential radioactive threat. Radioactive waste, unlike chemically hazardous waste, cannot be neutralized or destroyed, such as by incineration. Potential radioactive hazards are eliminated only by time and transmutation. As NRC has noted, "because

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the hazard posed by low-level waste is of an atomic nature, its hazard is inherent, i.e., independent of its chemically bound state. Destruction of the [LLW] hazard, aside from transmutation processes, is impossible."<sup>4</sup> .

A fundamental assumption of existing NRC regulatory programs in 10 C.F.R. Parts 61 and 40 has been that even the government cannot be relied upon past 100 years for active maintenance of disposal sites. As a result, in developing Parts 61 and 40 regulatory programs the emphasis has been on highly conservative, engineered "passive" control systems intended to last for long periods of time (300 to 500 years and 200 to 1,000 years respectively). The purpose of the 100 year period for institutional controls, such as monitoring and maintenance by a government agency, is to preclude human contact with low-level radioactive waste and require a continuing social order to take responsibility for the site. 10 C.F.R. § 61.7(b)(4). Control by a government body "minimizes the potential for possible abandonment of the site." NUREG 0782, Vol. 2 at 4-47, 48. Therefore, to the extent that social systems could be relied upon for periods beyond 100 years, government ownership was necessarily preferred. Government ownership and passive controls help to ensure that motives such as profit and loss do not lead to

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<sup>4</sup> NRC, NUREG CR-4450, BNL NUREG 51944, "Management of Radioactive Mixed Wastes In Commercial Low-Level Wastes", 83 (1985)

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abandonment, sale or inappropriate use of property used for disposal of radioactive waste. Id. at 4-49. NRC has noted that the most significant elements of "passive" long-term institutional control measures are control of the land by a government entity, land use restrictions and multiplicity of records. Thus, the government ownership requirements provide important long-term health and safety protection at LLW disposal sites in contrast to private entities with more limited lives and commercial goals making them potentially unfit to accept such responsibility.

The ANPR proposes to allow private ownership as a substitute for government land ownership requirements. The ANPR does not explain how private ownership could provide an equivalent level of protection to public health and safety as that provided by government ownership. It may be that an alternative package of controls could reasonably be expected to be effective. NRC's proposed amendment to 10 C.F.R. §61.59, however, does not offer an adequate explanation of why a change would be appropriate.

NRC must exercise leadership as the primary implementor of the AEA. It cannot simply ask a series of questions as part of a post-hoc rationalization of prior actions without any discussion of statutory authority or the bases for and impact of the proposal on existing and future regulatory programs. NRC does not address the impact of the proposed

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amendment on existing regulations, including not only Part 61, but also Part 40 as it applies to mill tailings facilities. Even with government landownership, Parts 61 and 40 are based on the fundamental assumption that institutional controls cannot be relied on beyond a 100 year timeframe and, therefore, primary reliance must be placed on passive/engineering controls. If NRC decides to allow private land ownership, then presumably, the Commission would have to take a very different view of the appropriate institutional controls for LLW sites, how long they are likely to be viable, and may need to consider even more stringent closure requirements and increased surety amounts. NRC also does not discuss the significant impact this change in policy could have on NRC's proposed decommissioning criteria. 59 Fed. Reg. 43,200 (August 22, 1994). Indeed, the ANPR does not even reference the decommissioning rulemaking proceeding.

It is not clear from the ANPR whether NRC no longer considers the potential hazards from radioactive materials to be different than those of chemicals and, therefore, to no longer require radiation hazard driven controls. Does NRC's proposed amendment to the land ownership requirements suggest that NRC now thinks that the potential radiation hazards caused by LLW are less significant than NRC has portrayed them in the past or than the public views them? If so, then the extremely conservative passive controls required for LLW and mill tailing sites could presumably be relaxed. If this is

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now NRC's position, NRC should explicitly say so and explain the change in position. If, however, NRC continues to believe that radioactive materials pose a different hazard than chemical hazards, it must explain what authority over these materials is appropriate and not abdicate leadership in radiation health protection to individual licensees and States (Agreement States or non-Agreement States). It is NRC's responsibility to assert AEA's preeminent authority over control of radioactive materials and not to merely rely on a State's exercise of police power to protect public health and safety in granting an exemption to an important control (i.e., government land ownership) without explanation. To fail to make the requirements less stringent for LLW and mill tailings facilities, as NRC apparently intends to do for Envirocare, would be arbitrary and capricious.

The ANPR contains questions without any substantive discussion of the pros and cons of the proposal, including any reason why the land ownership issue needs to be reviewed or modified. As a result, it is difficult to offer meaningful comment on the proposal. As a first step in the rulemaking process, this ANPR is inadequate.

B. Alternative Controls

NRC has not fully analyzed the issue of potentially effective alternative controls. For example, it is

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questionable whether zoning is a viable alternative as zoning regulations tend to be based more on local political and economic considerations and can be amended at will by local governments.

Similarly, there is some question whether deed restrictions, while better than zoning restrictions and a potentially useful control, can by themselves substitute for government land ownership requirements as they are directed only at the transfer of property and not at active control over the site. A deed restriction may not prevent transfer of a LLW site. Nor do deed restrictions address site abandonment and possible site reuse by an uninformed intruder occupying the land without title to the property.

NRC also has not analyzed in depth what happens when a licensee declares bankruptcy and abandons the property. NRC appears to have assumed that with bankruptcy there will be some entity to rely upon to control the site. However, a trustee may have a different agenda than NRC such as trying to generate money out of the site (by rezoning and selling the property) to pay off debts. NRC does not address who will be around to bring an enforcement action against the site. The recent declaration of bankruptcy by American Nuclear Corporation, though, demonstrates that NRC is not as prepared to handle the bankruptcy of a licensee as it could or should be.

Whatever the mix of controls relied upon, a related issue that should be addressed involves a licensee's ability to decommission and remediate a site, terminate its license, and walk away from the site. Predictability in closure and license termination should be a goal of NRC's regulatory program. If there is no government entity, however, to take the license, the licensee will have the long-term burden. NRC, therefore, must consider in detail what type of private entity could likely fulfill such a burden adequately.

There is also some concern over whether sureties can be an effective, long-term means of control in the private ownership context. Even with a significant surety there is no assurance, and certainly no requirement, that a private corporation (or its surety) will exist after 50 to 100 years. Sureties also do not provide long-term hazard minimization. While sureties are valuable, they are held by private entities who often are under commercial and financial pressures and may need to be combined with some other mix of controls including ownership by an entity that may be less subject to commercial and financial pressures.

Furthermore, it is questionable whether the mere assertion by a State that it will exercise its police state authority to protect public health and safety over a site is sufficient. First, state administrations can change, making them less than constant in their positions as has been the

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case in Michigan and Nebraska with the LLW siting problems. Politics at the state level may even override "legal" obligations as it did at one site where the State put a LLW site on the Superfund list to avoid its long-term responsibility for the site. This would seem to be especially true when a State currently denies it has the authority to take title to the disposal site. If it is not required by law to take the land, and perhaps even if it is, despite what a State may say, NRC may not be able to rely on the State to enforce passive controls. Of course, where a state obligates itself under state law to take responsibility for long term protection of public health and safety, as with the case of federal responsibilities, the comfort level simply has to be greater than with private ownership. For example, the State of Colorado has made its decision and the basis for it as follows:

It is recognized by the general assembly that any site used for the construction, disposal, or storage of radioactive materials and the contents thereof will represent a continuing and perpetual responsibility involving the public health, safety, and general welfare and that ownership of said site and its contents must ultimately be reposed in a solvent government, without regard for the existence of any particular agency, instrumentality, department, division, or officer thereof. To this end ... [all such lands, buildings and grounds] shall be owned in fee simple absolute by the

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state and dedicated in perpetuity to such purposes, and all radioactive material received at such facility, upon permanent storage therein, shall become the property of the state and shall be in all respects administered, controlled, and disposed of, including transfer by sale, through the department, unless the general assembly shall designate another agency, instrumentality, department, or division of the state so to act. Colorado Revised Statutes, 25-11-103 (1993).

Reliance on a State's assertion that it will control a site through the exercise of its police power also raises questions about the ongoing legitimacy of NRC's Agreement State program. If NRC were to rely merely on such an assertion by a State, what is the necessity for the Agreement State program? If NRC is not going to assert the preemptive authority of the AEA, then any state can claim it has the authority to regulate radioactive waste disposal. NRC reliance also might be troublesome in light of the General Accounting Office's report that NRC does not even exercise adequate control over Agreement State regulatory programs.

C. Envirocare

Other questions are raised in the ANPR by NRC's treatment of Envirocare of Utah, Inc. (Envirocare). NRC states in the ANPR that the Commission "found acceptable" the exemption for Envirocare. NRC, however, does not explain why the exemption

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for this particular entity is acceptable. Nor has NRC explained who decided Envirocare was "special", what the criteria for the decision were, or why Envirocare should be given the exemption. Thus, the public can only speculate as to why an exemption is warranted and why Envirocare is receiving preferential treatment from NRC. Without some basic understanding of these issues, it is impossible to make a judgment on whether the circumstances leading to the exemption will reoccur. NRC appears to have made a decision to grant the exemption without an adequate explanation and is now issuing an ANPR post-decision to attempt to justify its decision. Such a course of action is not reasoned rulemaking.

In the final analysis, NRC's failure to analyze meaningfully the impact of the proposed rule on existing and proposed regulatory programs, the long-term effects of private ownership and the ability of private entities to protect the public health and safety at these sites over several hundred years makes the ANPR fatally deficient as a component of reasoned decisionmaking.

#### **Response to Specific Questions**

The following are Umetco's comments to several of the specific questions raised by NRC in the ANPR.

- (1) The Commission considers that an amendment to 10 C.F.R. Part 61 as described in this ANPR could facilitate the objectives of the Low-Level Radioactive Waste Policy**

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**Act of 1985, as amended, by allowing States additional flexibility in developing new low-level radioactive waste disposal facilities. Would this change be useful for other LLW disposal sites or is it likely that the Utah exemption is a one of a kind?...**

It is not clear what the Commission means by this question. As noted above, it is not possible to analyze the proposed change without first understanding what the implications of the phrase "the Utah exemption is one of a kind."

The proposed change to the land ownership requirements may appear to make it easier for more LLW sites to be developed in a state where political problems make it difficult for the state to assume ownership. But what are a private citizen's long term promises worth? For example, what happens if the waste business is not profitable?

As a matter of policy, EPA currently does not place NRC sites on the Superfund list. If under private ownership requirements, a site is abandoned, a site could end up as a Superfund site if the State does not step in to take responsibility. It is possible such a step would open the door for EPA to draw every NRC facility into the Superfund web.

**(4) Would the responsible regulatory agency lose any control over the disposal site if it is not owned by the Federal or State government?**

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Without federal government ownership, NRC would have to take action against a private entity, which may no longer exist, and if it exists, might resist an enforcement action, or which, if it exists, does not respond until the NRC takes action at the site and then challenges such actions as a trespass without authorization and seeks damages. Under the private ownership scenario, how would NRC assure that site obligations are being fulfilled? Who takes care of a site if the private owner goes into bankruptcy? As noted above, NRC may not always be able to rely on States to step into the fray absent an ownership stake in the property. Even then, NRC may not have any effective control over Agreement States. NRC has no control over non-Agreement States.

**(6) How would private ownership affect liability for a disposal site?**

One of the main purposes of the government land ownership requirements is to provide a means for a government entity to become the long-term site licensee after closure of a site. There are no guarantees that a private entity will exist over the 100 year timeframe, much less a longer timeframe, necessary to maintain a site licensee against whom either NRC or a State could take action. After closure, there may not even be a licensee (and, thus, no license) and the only requirements then applicable to the site would be those that the State chooses to impose.

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Without a licensee, there is no agreement by anyone (including the State) to do anything at the site to protect the public. The license binds a licensee to long-term monitoring and site care and provides a legal basis for enforcement actions by both the regulating entity and the public. Without such a binding commitment, the State has complete discretion to decide what, if anything must be done at the site. Such unfettered discretion is at odds with the AEA's policy on control of potential risks to public health from radiation.

While a State may insist it would bring enforcement measures to require an owner to control a site, there may not be anyone for the State to pursue if, at the time of abandonment, the entity that owned the property declares bankruptcy and no longer exists and, accordingly, there is no license. Under these circumstances, State enforcement actions could be meaningless. Where a State, such as Colorado, requires state ownership of LLW sites, there is a higher comfort level that the public health and safety will be protected. As noted above, though, even state legislation does not guarantee that the authority will be exercised.

To ensure long-term responsibility and care of a site, some long-lived entity must accept the responsibility of becoming the site licensee in perpetuity. Without such a licensee, there is no discernible legal means for imposing

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control requirements at the site over the hundred year timeframe (much less a longer timeframe) that may be deemed necessary to protect the public health and safety. NRC needs to address these issues in the decommissioning context. It may be necessary before the federal government can take over a property to have legislation authorizing such action as is the case under the Nuclear Waste Policy Act.

**(7) Would States' concerns about assuming liability for a disposal site be alleviated by this proposal?**

It is not clear how over the long term the States' concerns could be alleviated by the proposed amendment. At first the proposal may address some of their concerns. Utah has said that it cannot take ownership of a LLW site now but admits it would have to step in later if a problem arises. Local citizens will look to the State to address any concerns, even if they initially had wanted the site. The proposal appears to be taking States down the road that led to Superfund sites with all of their expense and corresponding problems. NRC's proposal as presently drafted could leave LLW sites in an undefined relationship with the government.

**(9) Should NRC consider allowing a site owner to be only the licensee, or broaden the proposal to allow other private ownership?**

Again, it is not clear what NRC means by this question. Is NRC referring to multiple site owners? Lessors/leseees?

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Trust entities combining multiple entities such as private, local government, state government, and environmental organizations)? Who would want to assume the responsibility and the liability?

**(10) Should there be a time period after which the licensee can request termination of the license, even though the land might remain in private ownership?**

To the extent the property is released for "unrestricted use" and the decommissioning criteria have been satisfied, then termination of the license would be appropriate. If the site is to be released for "restricted use," then there are a series of questions NRC must consider, including the site-specific nature of compliance with the decommissioning criteria. Where site use is to be restricted for 1,000 years, if federal or State ownership is not required and deed restrictions and zoning are considered adequate controls, then the time period after which a licensee can seek termination of the license is anybody's guess.

**(11) If the NRC were to implement this proposal, are the surety requirements contained in 10 CFR Part 61m Subpart E, sufficient?**

As discussed above, it is questionable whether surety can be viewed as a substitute for government land ownership or some other well thought out combination of control measures, if such exist. Unless NRC intends to change its long-term hazard minimization policy for radioactive material, the

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Commission may need to increase the surety amounts required by NRC regulations to protect against the dissolution of the responsible private entity and to provide sufficient funds for implementing control methods. Surety cannot be viewed as an adequate control in and of itself, but must be part of a combination of other controls.

**(12) Under § 61.80(e), all records are to be transferred to Federal and/or State agencies at the time of license termination. If the license remains in effect during the active institutional control period (licensee is site owner), would there be a need for this records transfer?**

If there is no licensee, then the records must be transferred. If there is a licensee, then the records should remain with those who have management responsibility for the site.

\* \* \* \* \*

Umetco supports the issuance of an ANPR as a means of gathering information if NRC is considering changing its policy under the AEA regarding closure and ownership of radioactive waste sites. NRC's ANPR, however, raises far more questions than it answers without any explanation for the basis for the proposed change. The Commission has taken far too simplistic an approach for a meaningful rulemaking proceeding.

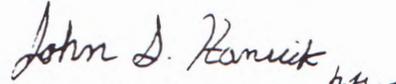
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If you have any questions or if we can be of assistance,  
please contact me at (303)245-3700.

Sincerely,



John S. Hamrick  
Manager of Health, Safety and  
Environmental Affairs