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August 23, 2006

The Honorable Genevieve Shiroma
President, SMUD Board of Directors
6201 S Street
Sacramento, California, 95817

Re: Disposal of Radioactive Waste

Dear Board President Shiroma:

The Sierra Club and the Committee to Bridge the Gap are concerned about the safe disposal of low-level nuclear waste from the decommissioning of Rancho Seco Nuclear Station. We have no interest in who was, or was not, awarded one of these contracts, but we do insist that radioactive waste from nuclear power plants be sent to facilities designed and licensed to receive radioactive waste.

The Board has a long-standing commitment to protecting the environment and public health.¹ That commitment, and SMUD's reputation in our community for having an environmental conscience, are now at risk, because SMUD staff plans to allow low-level radioactive waste to be shipped to landfills and other facilities not currently licensed by the Nuclear Regulatory Commission (NRC) for the safe disposal of these materials.² In doing so, the staff has unknowingly stepped into a controversial debate over whether there are so-called "safe thresholds" for disposing of nuclear waste in landfills and other facilities currently not licensed for such disposal. If the Board ratifies the staff recommendation to award this contract, it will place itself on record in support of the de facto deregulation of low-level nuclear waste.

Utility industry efforts to deregulate the storage and handling of low-level radioactive waste started in the 1980s.³ More recently, the Bush and Clinton Administrations attempted to deregulate these key public health safeguards to allow these radioactive materials to be placed in landfills not licensed by the NRC. Senators Diane Feinstein⁴ and Barbara Boxer⁵, the Natural Resources Defense Council (NRDC)⁶, Sierra Club, Committee to Bridge the Gap, and dozens of other environmental groups successfully opposed these efforts. However, two controversial "exemption processes" have been used to get around the failed deregulation plan.

¹ "Environmental protection is the core value of the District. The Board is committed to pollution prevention, continuous environmental improvement, and compliance with all applicable environmental laws and regulations..." SMUD Board Policy, Policy Number SD-7, Resolution No. 03-08-13, Date of Adoption: August 21, 2003, Revised July 21, 2005, Resolution No. 05-07-10

² Addendum No. 2 to RFP 60115.DM, 1.J: "Bulk Survey for Disposal (BSFR) services are an acceptable disposal pathway in lieu of using a fully licensed LLRW disposal location or to a RCRA site currently modeled and licensed for disposal of radioactive material."

³ Judith H. Johnsrud, Ph.D., Chair, Nuclear Waste Subcommittee of the Sierra Club Waste Committee, November 18, 2003

⁴ See attached letters: Senator Diane Feinstein to EPA Administrator Michael O. Leavitt, November 20, 2003 and Statement of Senator Barbara Boxer, July 25, 2000

⁵ Statement of Senator Barbara Boxer, July 25, 2000

⁶ <http://www.nrdc.org/legislation/fl08congress.asp#nuclear>
<http://www.nrdc.org/media/pressreleases/030215.asp>

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- 1) NRC 10 CFR Section 20.2002 exemption process appears to have been rejected by SMUD staff in its somewhat qualified statement that the WGI Proposal "...**does not require use of the US Ecology Idaho site.**"⁷ [Underlined emphasis added.]
- 2) The second process is sometimes referred to as "the Tennessee loophole." It involves what EPA calls "bulk survey for release" (BSFR).⁸ As we understand the process, waste is sorted on site and then placed in large containers and shipped to Tennessee, where the environmental laws are less stringent. Small pieces of highly radioactive waste can find themselves buried in these giant truckloads of contaminated cement and steel. Once the trucks arrive in Tennessee, they get a cursory examination for radioactivity. Then operators are allowed to mix highly radioactive waste with less contaminated material to qualify the resulting mass for disposal in cheaper landfills that were never intended to store such waste.

A policy of deregulating radioactive waste from decommissioned sites has been tried and rejected at the state level. In the 2002 case of *Committee to Bridge the Gap, et al. v. Bonta, et al.* (Case No. 01CS01445), the Sacramento Superior Court overturned the California Dept. of Health Services' adoption of lax radiological standards for decommissioned sites – standards which had been used by DHS to justify sending decommissioning wastes to municipal landfills. Also in 2002, the California Legislature passed SB 1970 (Romero), sponsored by Sierra Club California and Committee to Bridge the Gap, to ban the deregulation of radioactive waste. Although he vetoed the bill, Governor Gray Davis issued a moratorium on sending radioactive waste to municipal landfills. SMUD staff now proposes to send Tennessee's municipal landfills radioactive waste that could not be disposed of in similar landfills in California.

In opposing the Bush Administration's more recent deregulation effort, the California Integrated Waste Management Board (CIWMB) stated the issue clearly:

"CIWMB staff is very concerned about the potential for increased threat to public health and safety and the environment from radionuclides should such wastes enter the solid waste infrastructure. ... Radionuclides have not been routinely monitored nor comprehensively evaluated at the solid waste landfills in California, nor to our knowledge anywhere else in the United States."⁹

Disposing of low-level nuclear waste in landfills not licensed by the NRC threatens public health and the environment. According to the National Academy of Sciences, there is no "safe threshold" for human exposure to radioactive materials. Recent reports on landfills without NRC licenses in California and around the nation show unexpected elevated levels of radiation in ground water. In opposing the deregulation of low-level nuclear waste, Senator Gloria Romero, Chair of the Select Committee on Urban Landfills, released a report on radiation levels at California landfills and underground water supplies:

"At 22 of the (50 California) sites tested, elevated radioactivity was detected in leachate and/or groundwater"¹⁰

SMUD staff may have been led to believe that a pile of radioactive waste could be segregated into portions of higher and lower radioactivity with the idea that the lower activity portion would be safe to dispose in a landfill not licensed by the NRC. We strongly oppose this over simplistic, non-scientific, approach to the deregulation of low-level nuclear waste:

"Unfortunately, the generators of both radioactive and hazardous wastes have indicated that they are not willing to pay the price for the safest, most secure, and longest-lasting methods of sequestration from the biosystem of wastes they have produced.... The National Academy of Sciences Committee on the Biological Effects of Ionizing Radiation [has] concluded: '...with respect to **cancer induction and hereditary genetic effects, that the frequency of such effects**

⁷ Frankie McDermott, Manager, Supply Chain, SMUD letter to Mark Lewis, DURATEK SERVICES, August 4, 2006

⁸ The RFP was changed to: Addendum No. 2 to RFP 60115.DM, 1.J: "Bulk Survey for Disposal (BSFR) services are an acceptable disposal pathway in lieu of using a fully licensed LLRW disposal location or to a RCRA site currently modeled and licensed for disposal of radioactive material."

⁹ Howard Levenson, Ph.D., Deputy Director, Permitting and Enforcement Division, California Integrated Waste Management Board (CIWMB) letter to Air and Radiation Docket, docket ID No. OAR-2003-0095, Environmental Protection Agency, March 3, 2004

¹⁰ Senator Gloria Romero, Chair, Select Committee on Urban Landfills, Letter to Chair Air and Radiation Docket, docket ID No. OAR-2003-0095, Environmental Protection Agency, May 14, 2004 (with attachments).

increases with low-level radiation as a linear, nonthreshold function of the dose.” [Emphasis added.]¹¹

In short, science can't identify the threshold level at which human exposure to radioactive materials no longer causes cancer and birth defects. For this reason, past SMUD disposal practices and policies have been clear and protective of the public health and the environment. However, staff has been less clear about the policy implications of the changes in its low-level radioactive waste RFP. Before you finalize this nuclear waste disposal contract, we urge you to investigate whether this contract award will change the Board's policy on low-level waste and result in the disposal of low-level nuclear waste in facilities not currently licensed to accept such contaminated materials. SMUD staff has avoided directly addressing the implications of the RFP change and the award of the nuclear waste contract. Take a close look at the way the staff dodges the policy implications of their decision. Staff states:

“...Under WGI's Proposal all waste generated during the project would be disposed at facilities currently licensed to receive the waste sent to them...”¹²

However, instead of ending the sentence there, staff goes on to add the following ambiguous qualifier to their otherwise simple declarative sentence: “**and does not require use of the US Ecology Idaho site for disposal and is not contingent on obtaining any exemption.**” [Underlined emphasis added.] And finally the staff adds yet another qualifier:

“Should other sites obtain licenses acceptable to the District, WGI would be allowed to utilize those sites.”

Note: staff refuses to clearly state that under no circumstances will SMUD nuclear waste end up in landfills not currently licensed for such disposal by the NRC. In the past SMUD's policy on disposing of low-level nuclear waste has been clear. Why isn't it clear now? Which is SMUD's policy commitment: 1) Disposing of nuclear waste “**...at facilities currently licensed to receive the waste sent to them**” or 2) at “**other sites [that] obtain licenses acceptable to the District**”?

This issue goes beyond the specifics of any contract award. If the Board decides to change its historic commitment to public health and the environment and support the staff recommendation, this matter should be fully noticed for a public hearing with its stated intention to support the de facto deregulation of low-level nuclear waste.

Given Sacramento-Yolo County community values, it should be unimaginable to watch TV news reports of Rancho Seco workers in protective “space suit” garb loading more than 2500 truckloads of these radioactive materials destined for facilities never designed to accept such nuclear waste. As you know, previous attempts by nuclear facility operators like Connecticut Yankee Atomic Power Company¹³ to get around these licensing requirements have triggered national controversy and failed. California has experienced the problems caused by disposing of low-level nuclear waste in landfills that were never designed to store radioactive materials. The history of Casmalia in Santa Barbara County and Buttonwillow in Kern County is etched in the memory of state regulators and community activists.

We urge the board to reject the staff recommendation to dispose of Rancho Seco nuclear waste at landfills not fully licensed by the NRC. When the national Sierra Club testified against the Bush Administration's plan to deregulate low-level nuclear waste, it concluded with this admonition:

“...The nation's need ... is to identify and recapture the dangerous radioactive materials that have already been exempted and released or orphaned; to bring more radioactive and hazardous waste materials under regulatory control; and to devise better, more enduring methods of assuring the isolation of all forms of low-level radioactive and mixed wastes for so long as these wastes pose biological threats.”¹⁴

Maintain the Board's policy commitment to protecting public health and the environment; do not ship low-level nuclear to landfills not licensed by the NRC.

¹¹ Op. Cit. Sierra Club's EPA Filing.

¹² Op. Cit. Frankie McDermott, SMUD letter to Mark Lewis, DURATEK SERVICES

¹³ See attached letter: Rep. Edward J. Markey to The Honorable Nils J. Diaz, Chairman, Nuclear Regulatory Commission, March 23, 2005

¹⁴ Op. Cit. Sierra Club's EPA Filing

Sincerely,



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cc: SMUD Board Directors:

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