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TO: SUPERVISOR YVONNE BRATHWAITE BURKE, Chair
SUPERVISOR GLORIA MOLINA
SUPERVISOR ZEV YAROSLAVSKY
SUPERVISOR DON KNABE
SUPERVISOR MICHAEL D. ANTONOVICH

FROM: LLOYD W. PELLMAN
County Counsel

RE: **County's Authority to Regulate Low-Level Radiation at Class III Landfills**

This is to respond to your Board's instruction that this office advise you concerning the County's ability to enact measures applicable to Class III landfills under the jurisdiction of the County that would:

1) Prevent low-level radioactive waste from being placed into such landfills;

2) Regulate the monitoring of background levels of naturally occurring radiation through the testing of soils surrounding the landfills, as verified by independent geologists;

3) Prohibit the placement within such landfills of all waste with radiation levels exceeding that which naturally occurs in the area surrounding the landfill; and

4) Require the inspection of those landfills that have previously received radioactive materials to ascertain if any radioactivity is escaping from those sites and to determine required remediation measures.

Summary Response

Counties may generally adopt regulations relating to low-level radioactive materials as long as those regulations are consistent with applicable federal and state laws.

Low-level radioactive waste, as defined by state law, is precluded from placement in any landfill currently licensed to operate in California. This exclusion has not, however, been interpreted by state agencies as applying to all materials which have any measurable content of ionizing radiation. The state has also exempted certain products containing low levels of radiation from licensing requirements and other regulation.

We are aware of no law that would prevent the County from regulating the monitoring of background levels of naturally occurring radiation at landfill sites. However, such regulations could not deprive state agencies from establishing criteria they deem necessary for the measurement of radiation levels of materials that are proposed to be disposed at landfills.

A county regulation imposing a stricter requirement on the disposal of low level radioactive materials than imposed by state law could conceivably be found not to conflict with the less strenuous state standard. However, an attempt to prohibit the placement of any material at a landfill that exceeds background radioactivity levels may be found by a court to be inconsistent with the authority of the State Department of Health Services ("State DHS") to determine what minimum levels of radioactive content are sufficiently harmless to warrant unrestricted disposal, and would most likely be found to conflict with state law to the extent it was applied to products that the State DHS has exempted from regulation based on their low radioactive content.

Enclosed is a detailed discussion of these issues.

If you have any questions concerning this matter, please contact me, Assistant County Counsel Richard Weiss at 974-1921, or Senior Deputy County Counsel Fred Pfaeffle at 974-1901.

LWP:FWP:am

c: David E. Janssen
Chief Administrative Officer

Violet Varona-Lukens, Executive Officer
Board of Supervisors

Dr. Thomas L. Garthwaite, Director
and Chief Medical Officer
Department of Health Services

James A. Noyes, Director
Department of Public Works

Regulation of Low-level Radiation at Class III Landfills

A. Prevention of Placement of Low-Level Radioactive Waste in Class III Landfills

Regulation of high-level radioactive material is under the jurisdiction of the federal government. High-level radioactive waste can only be disposed of at a federally licensed facility.

The states do have authority with respect to the regulation of low-level radioactive material. The State DHS is charged with the enforcement of the California Radiation Control Law (Health and Safety Code section 114960 et seq.) That law provides for the licensing and regulation of sources of ionizing radiation for the protection of the public health and safety. The Radiation Control Law provides that "low-level radioactive waste" may only be disposed of at a state licensed facility that is on state or federally owned land. No such disposal site currently exists in California.

Notwithstanding the above, materials with very low levels of radiation have not been interpreted by the State DHS as requiring placement in a licensed low-level radioactive waste disposal facility. Materials which have been determined by the state to pose no significant health risk (generally, those that would not expose persons to an annual dose exceeding an equivalent of 25 millirems) are precluded from release to the general environment as long as reasonable efforts have been made to reduce their radiation content to as low a level as possible. The Federal Nuclear Regulatory Commission has also determined that residual radioactive material below 25 millirems poses no significant risk to public health.

Certain products are exempted from state regulations and licensing requirements based upon their radioactive content. These include such things as clock pieces containing luminous material, ceramic tableware, and photographic film and prints. These items typically are characterized by very low levels of radiation.

The State DHS previously adopted a regulation that allows materials from sites previously licensed for the handling of radioactive materials to be released for unrestricted use and disposal if their radioactive content is below a certain level ("decommissioned materials"). This regulation had the practical effect of allowing decommissioned materials to be disposed of in municipal landfills including Class III landfills. In 2002, the Sacramento superior court invalidated the above-referenced regulation on environmental grounds. As a

result of this judicial invalidation, Governor Gray Davis issued Executive Order D-62-02 in October 2002, which has imposed a moratorium on the placement of decommissioned materials into Class III landfills.

Additionally, Senate Bill 13 (Romero) which would enact the Radiation Safety Act of 2003, is pending before the state senate. Senate Bill 13 would provide for enhanced definitions of radioactive waste and other radioactive materials and would impose restrictions on the disposal of radioactive materials not currently existing under state law.

B. Regulation of the Monitoring of Background Levels of Radiation at Landfill Sites

In order to ensure that low or high-level radioactive waste that requires disposal in a specialized state or federally licensed facility is not placed in a Class III landfill, all solid waste facility permits for the Class III landfills under County jurisdiction require that the operator have radiation monitoring units to measure the radioactivity levels of the waste stream brought to the landfills for disposal.

We are advised that landfill operators generally have set their measurement devices to register when they encounter materials containing radioactive content between 2 and 5 times higher than the background radioactivity levels occurring at the landfill sites. When such materials are found, County Department of Health Services staff inspect the material to determine whether it must be diverted to a licensed facility. Materials that are identified during this process are not automatically excluded from disposal at the landfills.

We are aware of no law that would prevent the County from requiring the monitoring of the background levels of naturally occurring radiation at landfill sites through the testing of soils or requiring that such measurements be verified by independent geologists or other experts. However, such authority could not deprive other involved state agencies, such as the State DHS or the Regional Water Quality Control Board from establishing and enforcing other measurement criteria they deemed necessary for the measurement of radiation levels at landfills.

C. Prohibition of Placement of All Waste With Radiation Levels Exceeding Naturally Occurring Background Levels in Class III Landfills

As indicated, the County can adopt regulations regarding the disposal of radioactive materials that are consistent with the Radiation Control Law and the regulations adopted by the State DHS under that law. Nothing in state law specifically establishes the lowest radiation level that could be used as a basis for excluding materials by a county from a Class III landfill. However, as indicated above, the State DHS and the Federal Nuclear Regulatory Commission have previously determined that residual radioactive materials that create exposure levels below 25 millirems do not pose a significant risk to public health.

A County regulation imposing a stricter requirement than imposed by the pertinent state law and regulations could be found not to conflict with the less strenuous standard. However, a court could conclude that an attempt to prohibit the disposal of any material at a landfill that exceeds the background radioactivity level at the landfill would be inconsistent with the authority granted to the State DHS to assess the health risks posed by small levels of radiation and to determine what materials should be unrestricted in terms of their further use or disposal.

Further, establishing a prohibition against the placement of any material that exceeds the background radioactivity level naturally occurring at a landfill site (which normally would create exposure levels substantially below 25 millirems) may be difficult to justify upon scientifically valid health and safety grounds. Additionally, to the extent that such restriction would have the effect of precluding disposal of those products that have been exempted from state regulation due to their low radioactivity content, such restriction could be held to be inconsistent with state law.

Staff from the County Department of Health Services who are involved in the licensing and regulation of radioactive materials have also indicated that such a limitation may be difficult to implement on a consistent basis due to the fact that background levels will vary depending on the placement of the measurement devices and other environmental factors. Additionally, background levels will obviously vary from landfill to landfill.

D. Requirement for Inspection and Remediation at Landfills that Previously Received Radioactive Materials

Under the California Integrated Waste Management Act (Public Res. Code section 40000, et. seq.), the County's Department of Health Services acts is the Local Enforcement Agency ("LEA") with authority to permit Class III municipal landfills within the boundaries of the County of Los Angeles, except in the City of Los Angeles, City of Vernon, and City of West Covina.

LEAs have the authority to impose load checking programs to detect and prevent disposal of radioactive waste as part of their permitting powers. State law also vests the County Department of Health Services, as the LEA, with authority to inspect the landfills which it permits, including for the purpose of ascertaining whether the landfills are emitting harmful radiation.

Accordingly, the County could lawfully provide for the inspection of any of the landfills under its permit jurisdiction to ascertain if any radioactivity is escaping from those sites and to determine whether the problem can be remediated. Any proposed remediation measures would properly be implemented in consultation with the State DHS and potentially with the Regional Water Quality Control Board, to the extent the contamination posed a threat to groundwater and other water resources. However, the County's proposed remediation measures could not interfere with the authority of the above-referenced state agencies to impose all measures they deemed necessary to provide for decontamination of a site or to pursue criminal penalties under their respective statutory schemes.