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MEMORANDUM

TO: Gini Nelson, Assistant General Counsel  
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Randy Van Vleck, Assistant Attorney General  
Office of Attorney General

FROM: Elizabeth Gordon, <sup>cy</sup> Permitting Supervisor  
Hazardous & Radioactive Waste Bureau

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RE: LANL appeal

DATE: June 6, 1991

The rebuttal I think appropriate is that no operating requirement or monitoring parameter for a hazardous waste incinerator can give us any information on radioactivity. Consequently we are forced to monitor for radioactivity. The argument is outlined below.

The technical framework is as stated in my affidavit at #12. As indicated in that statement, the agency is assured that an incinerator is operating as required to protect human health and the environment if it is meeting the required performance standards and the performance standard used for incinerators is the destruction and removal efficiency (DRE). In order to ensure that the DRE is maintained during a hazardous waste burn, operational limits for incineration parameters are specified in the permit and it is these operational parameters that must be continually monitored. Those in the operating permit for Los Alamos National Laboratory are: pH of the flue gas scrubber solution; temperatures of both combustion chambers; feed rate of the waste; carbon monoxide content of the flue gas; oxygen content in the second combustion chamber; combustion air flow rate; flow rate of recycling water in the scrubber and the total hydrocarbon exiting the exhaust stack (Exhibit One, page 38). None of these parameters provides, either directly or indirectly, any information on radioactivity. Consequently, the New Mexico Environment Department has no means of gathering information on radioactivity except for direct monitoring. Consequently, the State has no means of ensuring that a burn is a strictly hazardous waste burn except to monitor directly for radioactivity.

I have no other comments on the cross-motion from DOE except the above. There are some small technical comments/corrections in



the cross-motion from the University of California. Obviously, they messed up the division of HED into two departments in the footnote on page 2. New Mexico received authorization for mixed waste on July 25, 1990, not July 11, 1990.

I guess we live with the inconsistencies they have pointed out. If this goes to trial will I have to testify. If so, it appears that they are already discrediting anything I say because of these inconsistencies. If necessary, I need to discuss this with you.

- a. U044 Chloroform
  - b. U228 Trichloroethylene
  - c. U226 1,1,1-trichloroethane
  - d. U211 Tetrachloromethane
2. Bulk-Feed Operations. Whenever the hazardous waste feed contains ten percent by weight or more of any listed hazardous waste, each such constituent is designated a POHC.

#### V.E. MONITORING

For each hazardous waste burn, the continuous monitoring and/or recording devices below shall be observed hourly by an operator during waste feed operation and the observation recorded in the operating record. For purposes of this requirement, permanent charts which are made a part of the record may be initialed to document such observation. A log identifying the full name associated with the initials shall be included with the record.

1. Flue gas scrubber solution pH, "Process Sump pH Out";
2. Primary Combustion Chamber Temperature, "Lower Chamber Temperature";
3. Secondary Combustion Chamber Temperature, "Upper Chamber Temperature";
4. Waste Feed Rate;
5. Flue gas carbon monoxide content;
6. Secondary combustion chamber oxygen content, "Upper Chamber Oxygen";
7. Combustion air flow rate, "Final Flow Totalizer";
8. Scrubber water recycle flow rate, "Absorber Liquid Flow" and "Quench Liquid Flow".
9. Total hydrocarbon reading from the exhaust stack.
10. Radioactivity from the exhaust stack.

#### V.F. OPERATION

During hazardous waste feed operations the following operational limits shall be observed:

1. Total Chloride Content. The aggregate chlorine content of the waste plus fuel shall not exceed 99.4 pounds per hour input to the CAI. Each batch of waste shall meet this standard.
2. Waste Feed Rates.