

STATE OF CALIFORNIA  
DEPARTMENT OF PUBLIC HEALTH



MALCOLM M. MERRILL, M.D.  
DIRECTOR OF PUBLIC HEALTH

GOODWIN J. KNIGHT  
GOVERNOR

2151 BERTLEY WAY  
BERKELEY 4, CALIFORNIA

April 3, 1958

Atomic Energy Commission  
515 - 17th Street  
Oakland 12, California

Attention: Mr. Dick Smith

Gentlemen:

Three licensed radioactive waste disposal companies are presently in process of finalizing their plans and procedures for sea disposal off the California coast. The proposed methods of disposal fall into three classifications: (1) packaging in cement, (2) packaging in asphalt coated 55 gallon drums, and (3) bulk liquid disposal. Methods two and three, and especially the latter, raise some questions relative to the advisability of using this method.

The questions we have in reviewing these disposal methods are:

1. Does the AEC license permit bulk disposal of liquid radioactive waste, i.e., pumping the radioactive liquid into the ocean?

2. If the answer to question one is yes,

a. What level of radioactivity in the waste water may be discharged?

b. Is there any limitation on the volume and total activity of the material which may be dumped at one time and in one place?

c. Are there any special requirements to assure adequate dilution at the time of discharge?

3. Since under the provisions of the California Health and Safety Code, Sections 4400-4404, the State Department of Public Health has the responsibility for checking the disposal of any "garbage" (which is defined to include such materials as radioactive wastes) loaded at any port for dumping at sea, we would propose to check the packaging, storage, transportation and actual dumping of these wastes.

In addition to the above questions, we still would like to have answers to questions we posed to you verbally some time ago. Does the

A/24

April 3, 1958

Commission, in issuing a license, have available information and experience which definitely gives assurance:

1. That the package will reach the bottom without rupture?
2. That the life expectancy of the container exceeds 50 or 100 years? *Base on 50*
3. That there is no lateral drift of containers while sinking? *< 45°*
4. That there is no appreciable movement of the containers on the ocean bottom? *no appreciable movement*

We shall appreciate an early reply.

Very truly yours,

*E. A. Reinke*  
E. A. Reinke, Chief  
Bureau of Sanitary Engineering

EAR  
ACC:MM