

## DEPARTMENT OF HEALTH SERVICES

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(916) 322-2308

August 11, 1995

To: Base Commanders  
Interested Parties

Subject: Guidance For Radiological Cleanup/Remediation

The California Department of Health Services (Department) has been designated as the agency responsible for administering programs to protect the citizens of California from exposure to radioactive materials (Health and Safety Code §25600 et.seq.). As such, it is the Department's responsibility to ensure that military bases (both open and closing) do not pose a threat to the public from exposure to radioactive material. For closing bases, if the potential for radioactive contamination is not addressed during the base realignment and closure cleanup and transfer process, reuse of the base may be restricted by the Department until that potential is adequately addressed. Therefore, we are asking for your cooperation in investigating the potential for radioactive contamination by the most efficient means--concurrently with investigation for other hazardous materials.

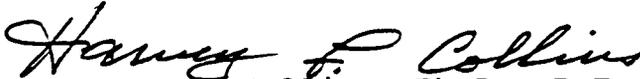
Enclosed with this letter is a list of questions that should be answered about each base to determine the potential for radiological contamination. Use this list as a guide in preparing documents for submittal to the Department. Some bases have already submitted documents which do not include all the necessary information. In those instances, the remaining information should be gathered and provided to the Department as soon as possible. In addition, we encourage you to utilize the radiation expertise that exists within each branch of the military. Several closing bases that are using this expertise are recognizing marked improvements in expediting the process of identifying and remediating radioactive contamination. Contacts for accessing this expertise are provided in Item 13 of the enclosure.

Also enclosed is a flowchart that illustrates the process of investigation, cleanup, and release of parcels with potential radiological contaminations.

Base Commanders  
Page 2  
August 11, 1995

The Department provides radiological support to the California Environmental Protection Agency to address problems at military facilities identified in the Defense State Memorandum of Agreement through an interagency agreement with the Department of Toxic Substances Control (DTSC). The Department's activities at bases must be coordinated through DTSC.

Should you have questions regarding this letter, please contact Rufus Howell of the Environmental Management Branch at (916) 322-2040 or your DTSC contact.

  
Harvey F. Collins, Ph.D., P.E., Chief  
Division of Drinking Water and  
Environmental Management

Enclosures

**California Department of Health Services  
Information Needed for the Radiological Evaluation  
of Military Bases**

Information the California Department of Health Services needs for radiological evaluation of military bases:

1. What were the types and quantities of radionuclides used, stored, or disposed of at your facility? The response should include copies of the current license with any amendments, or a summary of those documents. The response should also address uses of nonlicensed radioactive material (*e.g.*, radium-226) and its disposition.
2. How long has your facility been licensed to use radioactive material? How often did your facility utilize radionuclides during a typical work week, and over what period of time were they used?
3. How were radioactive materials used at your facility? What were the protocols and procedures required for their use and what were the details of the protocols and procedures? What was the extent of the past and present radiological surveillance program? Examples of documentation supporting the radiological surveillance program should be provided.
4. How did utilization of radioactive material change over time? When did you begin controlling uses of nonlicensed radioactive material?
5. Discuss and provide data for the ambient radiologic background of your facility within all relevant environmental media. What are the details of your past and present environmental monitoring program?
6. Did your facility release any radioactive material to the environment? What data support your response? If releases did occur, what were the details of such releases, and what was your course of action to correct the problem?
7. Have you buried nonlicensed radioactive material at your facility? What is the supporting documentation for this response?
8. What were the requirements for training users of radioactive material at your facility? What was the chain of command for your radiation safety program? Were personnel monitoring devices used at your facility as part of the radiation safety program?
9. Have any of the individuals in your radiation safety program been interviewed regarding the past and present use of radioactive material? What positions did the interviewees hold in the radiation safety program and for how long?
10. What is your current inventory of sources of radioactive material and their utilization? What remediation is ongoing, or proposed, at your facility?
11. What were and are your plans for the disposition of licensed and unlicensed radioactive sources? What is the potential for mixed waste (radioactive and hazardous wastes) at your facility?

12. In addition to a narrative description of your facility's use of radioactive material, provide a table that identifies each radionuclide, the approximate quantity (in standard units of millicuries or microcuries) per item, as well as the total activity for the inventory of items, the purpose, the years during which the radionuclide was utilized, the location of use, storage, or disposal; whether the source was sealed or unsealed, whether its presence was authorized by a specific license or not licensed; and the disposition of the radionuclide (*e.g.*, decayed on site, disposed of on site, stored on site, transferred off site, destination if transferred).
  
13. Have you contacted your military service branch's experts in radiologic matters for help in answering questions you have or resolving issues that concern you? Please identify the organization and specific staff contacted. These contacts would include the Air Force's Armstrong Laboratory at Brooks Air Force Base in San Antonio, Texas, telephone (210) 596-3305; the Army's Environmental Hygiene Agency at the Aberdeen Proving Ground, Maryland, (410) 671-3526; the Army Corps of Engineers in Omaha, Nebraska, (402) 221-7401; and the Navy's Radiological Affairs Support Office in Yorktown, Virginia, (804) 887-4695.

California Department of Health Services  
Base Cleanup Process for Environmental Radioactivity

