

RADIATION LABORATORY
University of California
Berkeley, California

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Issued to: Dr. Warren

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SURVEY OF HEALTH HAZARDS

Radiation Laboratory, University of California

Berkeley, California

PERIOD ENDING OCTOBER 31, 1944

E. R. Miller

Copies to:
Dr. Warren
Mr. Fidler (2)

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1. Medical and Laboratory Examinations

Medical and laboratory examinations have been adequately carried out under the direction of Dr. Dailey. I have checked many of the reports with him. (See letter Dated October 30, 1944) In addition to those that Dr. Dailey has mentioned I have asked that particular attention be paid to at least one man who is showing a downward trend in the total leucocytes. Dr. Dailey has been instructed to watch for this trend in others in the future. All other medical reports have been within normal limits. In a few isolated cases it has been difficult to get the cooperation of workers for their examinations. Continued pressure has been brought to bear to have them do this.

2. Gas Hazard

A hazard arose when welding was being done in certain closed tanks in Building #6. During the welding process, an irritating gas arose when the flame was directed on to the black sludge inside the tanks. No radiation hazard could be detected. Special papers for phosgene detection showed a positive test. However, these papers also react to other acid gases. Further tests to prove the presence of phosgene were not carried out. The welders were placed on the medical program and special air flow masks were provided for those who worked in the tanks. No untoward effects were noted. They had been noted on a previous welding job in these tanks.

3. Radiation Hazards

Mr. Ballenger has continued monitoring the 184th building. Certain hazards were present about the high voltage cages. Using this method, all areas are now safe.

The arc viewing windows are safe with the exception of the T viewing windows on the D1 tank. Mr. Priestley has been notified of this hazard and recommendations for the installation of lead glass over these windows have been made.

Film studies for scattered radiation around the "bugs" in building #4 (Chemistry) under David Fox show that no serious hazard exists.

Film studies in the last week of operation of an insulator test area showed a high radiation hazard. It no longer exists. (This place looked very innocent. We were surprised by the findings).

4. Dust Hazards

Mr. Ballenger, using the polarograph technique for collecting dust samples over long periods of time has never detected a single instance where T dust concentrations were even near the accepted tolerance limit in building #6 or anywhere else on the project.

An arrangement has been made so that Mr. Ballenger will be called to check air samples during each of the actual operations in building #4. This is to be carried out this week.

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5. C-616

A special house for handling the material has been built. Adequate measures have been taken for its proper handling throughout the entire process. No danger is anticipated.

First aid has been equipped with material for handling skin contamination and has been told about the necessity and technique for handling skin wounds.

The dangers have been discussed with the crew working with the material.

6. C-216

None used.

7. Summary

The health situation seems to be fairly well under control except in a few isolated cases where special hematological studies are indicated. (See #1)

8. Needs

- A) Continued monitoring.
- B) At least one portable sound instrument for beta and gamma-ray detection.

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