

MONTHLY PROGRESS REPORT TO COLONEL WARREN ON HEALTH HAZARDS  
AT BERKELEY, CALIFORNIA

721309

Month ending March 1, 1945

E. R. Miller

~~SECRET~~  
~~LIMITED~~

DECLASSIFICATION RECORD  
Date of Review: ORO  
Name (ADD) - Organization  
11/17/92

1. Medical Check-up

This is being done in a satisfactory manner. The laboratory reports have had adequate scrutiny. Everything seems to be in order. I am still concerned about [redacted]. I would like to show you his chart when we can talk it over.

DECLASSIFICATION AUTHORITY

MALCOLM TREISEN, ANALYST

Name (ADD) - Organization  
12-18-91

2. Radiation Hazards

a. 184<sup>n</sup> - All windows having any radiation coming through them are protected by lead glass. Constant film monitoring has shown no positive results with the exception of one cubicle where the level reached tolerance. This is being covered with lead glass. All the voltage regulator tubes and rectifier cages are protected.

b. Fox's Lab. - No change. Radiation is one tenth of tolerance at working area.

c. 60<sup>n</sup> - This is bad. With high energy deuterons, the radiation through the water tanks is above tolerance so that while the machine is running, no one should be near it. It is now known that the control desk is less than tolerance level. Film monitoring is being carried out under the direction of Dr. Hamilton. More water tanks are being installed over the machine on the platform. Dr. Hamilton has always taken an active interest in protection, so that I feel very sure this part of the project is in excellent hands. It remains a danger and gives a forewarning about the problems that may be encountered if the big one is ever used in this fashion.

3. Product

a. Connick's place has been put on a routine weekly complete survey. One Sandy is kept up there. They also have the hand counter always available. In general it remains almost unbelievably clean in spite of the housekeeping in the halls. The workers themselves are very good about their own checks and Dr. Connick keeps after them all the time. There are two areas where  $\beta$  and  $\alpha$  activity from fission products is rather high. This is being monitored at the present time. Corrections of placement of hot materials may solve the problem. Badges worn by workers have not shown undue exposure. I continue to be suspicious of possible hazards in Brewer's laboratory, but so far I have not been able to uncover any serious trouble.

b. Overstreet and Jacobson's lab is now under quite good control. The only time they are unduly exposed is in their separation of  $P^{32}$ . The hot lab is always hot with it. The labs where Scott does his tracer work is its own best protection. The tiny amounts they work with make it essential that the place be clean in order that their results make any sense.

c. [redacted] hands now look C.K. Product studies on his urine, carried out by Scott, showed no activity. The areas have practically disappeared.  $\alpha$  counts on his hands have always been negative. While the areas under consideration may have been contaminated by product, there is now neither subjective or objective evidence that he was injured by it. We have no real proof that it was product.

For the sake of the record, this man showed me his hands one day about two and a half weeks after five small red spots had developed on the palm and

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and palmar surfaces of several of his fingers. He had been working with product. The spots were noted after scrubbing his hands. They lasted about five weeks in all and disappeared with no trace.

4. Air Surveys for Product

This is being carried out by the percipitron by Ballenger. A couple of the filter papers are being analyzed for product. The rest are studied by their activity. The filter paper method used at Chicago is going to be introduced here as soon as the equipment becomes available. So far the studies look O.K.

5. Air Studies for T

All have been negative or well within normal limits with two exceptions of spot surveys under especially dusty conditions in reassembly. The particular type of cleaning methods have been discontinued, and masks and adequate vacuum lines and cleaners are now available.

6. Job Surveys

A certain few people on the project had blood counts which seemed to be slightly abnormal in one way or another. These were studied in detail by Dr. Lucia. These were ultimately all found to be within normal limits.

7. New Hematological Laboratory

It has been recognized that having to ask the personnel to go down to Cowell lab for their counts and urines has been unsatisfactory. A laboratory technician has been found who is a graduate of University of Oregon and who has been trained in their clinical lab. course. Within one week she will be set up in a lab in the O. R. L. She will go and get the counts and should therefore increase the coverage of the situation. The counts are to be done with research accuracy.

8. Machining T

They have started machining T in the shops on the hill. All of it is done under water or oil. Air surveys and analyses of the oil show that the operations appear safe.

ER:mann

cc: H. A. Fidler

Joseph G. Hamilton, M. D.

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