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RC Free

Date May 3, 1976  
To Tommy Ambrose  
From Jim Fuquay *jf*

Subject HANFORD LABORATORIES (GENERAL ELECTRIC COMPANY) AND  
BATTELLE-NORTHWEST ASSISTANCE TO PRISONER STUDIES,  
AT WALLA WALLA, WASHINGTON, AND SALEM, OREGON

Attached for interim guidance is a Synopsis of the subject activities.

My investigations into the above have revealed no evidence that Battelle-Northwest staff at any time were involved directly in exposure of any prisoners at the Washington State Penitentiary at Walla Walla, Washington, or the Oregon State Penitentiary at Salem, Oregon.

Activities in the X-ray program involved only independent confirmation of dosimetry. The neutron irradiations were never performed.

A complete chronology with appropriate attachments and summaries will be prepared for the file.

JJF/af

Attachment

REPOSITORY PNL  
COLLECTION Prisoner Study  
BOX No. 3156  
FOLDER Pr Studies on prisoners

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SYNOPSIS

The consequences of irradiation of the male reproductive system received increased emphasis following the RECUPLEX accident at Hanford in April 1962, in which three men were exposed to above guidance limits. Clinical follow-ups on the exposed men gave indications of functional or morphological alterations. In 1963, C. Alvin Paulsen, MD, of the University of Washington, received a grant from the Atomic Energy Commission, AT(45-1)-1781, for studies of spermatogenesis in man, that proposed neutron irradiation of male prisoners at Walla Walla. At about the same time, the Atomic Energy Commission entered into a contract, AT(45-1)-178, with Pacific Northwest Research Foundation for a related study by Dr. Carl Heller, which contemplated X-ray irradiation of prisoners in the penitentiary at Walla Walla, Washington, and at Salem, Oregon.

Under the provisions of Agreement No. AT-6 under Contract No. AT(45-1)-1350, in a letter dated July 9, 1963, the Hanford Laboratories Operation (General Electric Company) was requested and authorized to assist Dr. Paulsen in the development of proper shielding and pertinent dosimetry for the neutron irradiation at Walla Walla. Although the work was completed, these irradiations never occurred and the program was terminated in 1969.

By letter from Mr. K. L. England (AEC-ROO), September 16, 1964, the Hanford Laboratories Operation (GE) was requested to make independent calibrations of the X-ray machines used in the Pacific Northwest Research Foundation studies at Walla Walla, Washington and Salem, Oregon. Calibration results were reported to AEC-ROO by letter of January 7, 1965, to Dr. C. A. Paulsen by letter of January 19, 1965, and to Dr. C. G. Heller by letter of January 19, 1965, each with the identical statement as follows:

"Our independent calibrations agreed with those of the experimenters within the accuracy expected from the instruments used.

On September 9, 1964, W. C. Roesch and K. L. Swinth observed the procedures used at Walla Walla and made duplicate measurements with their own equipment. Both they and the experimenters used Victoreen condenser R-meters; both sets had been calibrated by the National Bureau of Standards. Their results were consistently a few per cent lower than ours so Swinth brought both sets of R-meters back to Hanford for more leisurely intercomparison. We found that the man making the readings at Walla Walla had not

been recharging the reading device before reading the R-meter. Correcting for this, we found a standard deviation between our results of about 2%.

On December 10, 1964, K. L. Swinth made similar observations and duplicate measurements at Salem. This could not have been done sooner because there had been trouble with the X-ray machine there. Again, R-meters were the instruments used. We did not feel it was necessary to intercompare the R-meters at Hanford. The standard deviation between our results was about 3%."

According to Mr. K. L. Swinth (BNW) there were no "human subjects" present during these calibrations. The above report completed all work associated with the X-ray experiments.

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