

File in 50-39

Div. of Insp.

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TO : The File

DATE: December 22, 1959

FROM : Peter A. Morris *PAW*

SUBJECT: RELATING A TELEPHONE CALL WITH MORTON BEAM, HEALTH PHYSICIST, AND GEORGE A. ANDERSON, SUPERINTENDENT OF THE NUCLEAR SCIENCE DIVISION, CURTISS WRIGHT CORPORATION, QUEHANNA, PENNSYLVANIA - DECEMBER 22, 1959

Curtiss Wright has a license from the State of Pennsylvania called an Industrial Waste Permit No. 1907 issued March 26, 1958, which allows them to discharge liquid waste to Meeker Run (Meeker Run is a small creek which flows into Mosquito Creek which in turn flows into the west branch of the Susquehanna River).

At the reactor site there is a 4 megawatt swimming pool reactor. Cooling is provided by a cooling tower and heat exchanger. There is also a waste treatment facility at the reactor site. Any radioactivity from either source is held up in retention tanks before discharge to Meeker Run as a liquid waste. If, however, the maximum permissible concentration is less than 10⁻⁴ microcuries per milliliter this liquid activity is collected in jugs and absorbed on vermiculite material and disposed of as solid waste. Any liquid waste discharged to Meeker Run is discharged in such a way that the activity in Meeker Run is less than that permitted for unrestricted areas by 10 CFR Part 20. Typical levels discharged have been gross beta-gamma activities in the range of 10⁻⁵ to 10⁻⁷ millicuries. The activity probably arises from decontamination and laundry activities and is thought to be mostly Cobalt 60 and Iridium 192. No detectable alpha activity has been observed. A geiger counter is used for the beta-gamma measurements and the instrument is calibrated with a thallium source.

All of these health physics procedures are described in a publication entitled "Radium and Beryllium Protection Manual" CWRMC-8, two copies of which were submitted to the Isotope Division.

cc: E. B. Johnson

Curtiss Wright Corp.
X Waste Disposal
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