Office Memorandum • UNITED STATES GOVERNMENT

TO : H. L. Price, Director
Division of Licensing and Regulation

DATE: FEB 10 1960

FROM : Marvin M. Mann, Assistant Director for Compliance
Division of Inspection

SUBJECT: CURTISS-WRIGHT CORPORATION, QUEHANNA, PENNSYLVANIA - ALLEGED POLLUTION OF CREEK WATERS

SYMBOL: INS:EGO

There is attached a copy of a report prepared by the Division of Inspection and dated January 8, 1960. This report sets forth the findings of an inquiry requested by the Division of Licensing and Regulation and predicated on a letter sent by Mr. T. M. McKinney to the Department of the Interior and in turn forwarded to the Division of Licensing and Regulation.

Mr. McKinney's letter to the Department of the Interior dated December 3, 1959, was prepared on stationery of the Mosquito Creek Sportsmen's Association, Frenchville, Pennsylvania. The letter stated that Mr. McKinney had received information " . . . over several months concerning carelessness in handling fissionable material and the dumping of concentrated water into Mosquito Creek, a tributary of the Susquehanna."

Curtiss-Wright Corporation, Quehanna, Pennsylvania, holds AEC License No. 37-2416-2 for the possession and use of radioactive isotopes and AEC License No. R-36 for operation of a 4 megawatt swimming pool reactor. The firm also holds a license (Industrial Waste Permit No. 1907, dated March 26, 1958) from the State of Pennsylvania authorizing the discharge of liquid waste to Meeker Run, a stream which flows into Mosquito Creek before the creek leaves the licensee's property.

Messrs. Morton Beam and George A. Anderson, Health Physicist and Superintendent, respectively, Nuclear Science Division, Curtiss-Wright Corporation, Quehanna, Pennsylvania, advised Dr. Peter A. Morris, Chief, Reactor Inspection Branch, Division of Inspection as follows:

> Cooling for the swimming pool reactor is provided by a cooling tower and heat exchanger. There is also a waste treatment

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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 by 10 CFR 20 for unrestricted areas. 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.

The radioisotope handling facilities at the licensee's facility were inspected by the NY Inspection Division on March 4, 1958, at which time no wastes had been created. At that time, the only items of noncompliance found were those pertaining to posting and labeling requirements, which were reported as constituting no hazard.

The investigation report shows that on December 31, 1959, Mr. E. B. Johnson, Assistant Director for Investigations, Division of Inspection, in response to a written request, received a telephone call from Mr. McKinney. During this conversation, Mr. McKinney related that his letter to the Department of the Interior was prompted by information received from a confidential informant.

He said this informant told him that the licensee removes beryllium from the plastic bags, some of which had burst and released the material. The informant also told Mr. McKinney that the licensee allegedly washes contaminated clothing in Mosquito Creek in the evenings; that two small children swimming in the creek became ill; and that one child developed hepatitis.

The investigation report also shows that Mr. McKinney's informant, during an interview with a representative of the Division of Inspection, stated he has no first-hand knowledge regarding this matter but that his information was based on rumor and hearsay. The informant stated that the story concerning the two boys was widespread in the community and that the doctor treating the boys stated the rash which developed

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was due to pollution of the creek. He said this alleged incident has caused considerable concern in the community and has led to most of the speculation regarding pollution of the nearby water. The informant also stated he has heard that the water in which the licensee washes contaminated clothing and fabrics is discharged into the creek.

A copy of this memorandum is being furnished to the NY Inspection Division, which office will reinspect the licensee within 90 days.

Enclosure:
Copy INS memo rpt
dtd 1/8/60 (prepared
by F. Hagen)

CC: C. F. Eason, GC, w/encl.
R. W. Kirkman, NY, w/encl.