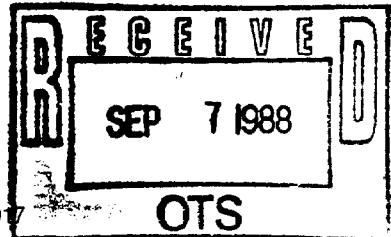


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CRANE CO. 757 THIRD AVENUE NEW YORK, N.Y. 10017

THOMAS UNGERLAND  
ASSOCIATE GENERAL COUNSEL

December 14, 1987

James J. Fiore  
Director  
Office of Nuclear Energy  
Department of Energy  
Washington, D.C.

Re: Crane - Indian Orchard

Dear Mr. Fiore:

We acknowledge receipt of your letter to Paul Hundt, dated September 29, 1987, which requests certain information about Crane's plant site in Indian Orchard, Massachusetts. The plant is not currently operating.

Crane was unable to locate any records concerning the machining of uranium in the 1947-48 period for a customer, Brookhaven Labs, at the Indian Orchard, facility. It is believed that the records, which were kept on the second floor at 305 Hamshire Street, Indian Orchard, Massachusetts were moved ten or fifteen years ago to a second building on the Crane property. Thereafter the second building was sold and we believe the records were destroyed.

In response to the DOE letter, Crane performed an internal radioactivity audit, the results of which are discussed herein. A current employee, Charles Sedlow, the former radiation safety officer at the Indian Orchard Plant was requested to do a survey of Department 40 and its perimeter to determine the existence of radiation readings if any. A copy of his letter, dated November 19, 1987, reporting his findings is attached hereto.

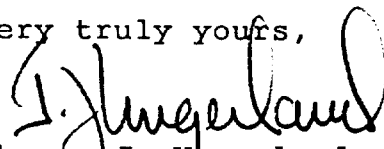
Department of Energy  
December 11, 1987  
Page 2

In addition, Ed Dvorchak, a long service employee of Crane, now retired, was questioned extensively on the period from 1947-1948 in which the uranium project was in effect. A copy of an affidavit from Ed Dvorchak is attached. In the affidavit he indicates that he recalls that all uranium cuttings were disposed of by an agent of Brookhaven periodically throughout the contract period. Further, the entire facility was washed down on several occasions to remove any residual radioactive material.

Based on the above and other inquiries made by Ed Dvorchak, Crane believes that the uranium machining program at Indian Orchard Plant was properly concluded and there was proper disposal of the residual material. Further, that there is no evidence of radioactivity on the site at this time.

If you have any questions concerning the above please call the undersigned at (212) 415-7243.

Very truly yours,



Thomas J. Ungerland

0751C

AFFIDAVIT

EDWARD DVORCHAK, being duly sworn deposes and says:

1. That deponent is making this affidavit at the request of his former employer, Crane Co., in response to a request from the U.S. Department of Energy to Crane Co. relating to the machining and processing of uranium rods at the Chapman Valve Company during the period 1947-1948.

2. Deponent was first employed by Chapman Valve Co. in 1940, as a member of the Heat Treating Department. Thereafter, deponent served in various capacities including Time Study, Foreman of Maintenance Group and General Foreman/Welding, all in the Chapman Valve Facility in Indian Orchard, Massachusetts. During the period in question, 1947 and 1948, deponent was a tinsmith in the machine shop at Chapman Valve Co. At that time deponent's supervisor was Alan Burnett who is now deceased. Chapman became part of Crane Co. in 1959. Deponent retired from Crane Co. in 1984 and currently continues in that status.

3. Chapman and, later, Crane Co. engaged in the manufacture and sale of valves and fittings for more than seventy-five years at the Chapman facility in Indian Orchard, Massachusetts. An iron foundry, steel foundry, and brass foundry were also maintained at the Chapman facility. It is my understanding that during the year 1947 Chapman made an agreement with a customer to machine and form certain radioactive materials received in the form of rods, for the customer's use in a classified program. I recently became aware that the customer was Brookhaven Laboratory and that the rods to be machined in the program were uranium rods for nuclear applications. This was known as a "hush-hush" project at Chapman. In 1947 Chapman set aside approximately one-third of Department No. 40 at the Chapman Plant Site, 203 Hampshire Street, Indian Orchard, Massachusetts to engage in this program for Brookhaven Labs. The set aside facility was separated from the remainder of the building by a floor to ceiling wooden partition. The area set aside measured approximately 200 feet long and 60 feet wide. The ceiling was more than 50 feet high. During the first month of operation in 1948 I visited the restricted portion of the building on a daily basis to provide the services including building shields, quenching tanks, suction systems and duct work for the facility. Thereafter I visited the facility several times a month to do similar

work as required by John Jones, the General Manager of the facility who is now deceased. As a result of those regular visits I was able to observe the operation in that facility as described below.

4. During 1948 at the start of each shift all workman would be admitted to the restricted portion of Department No. 40 by a guard. They would remove their clothes and pass through a doorway into a second room where they received white coveralls. They then proceeded into the manufacturing area to begin work. During the course of operations uranium rods were brought to the facility by railroad car on a track which ran immediately adjacent to the building. The rods were cut by a mechanical saw and then machined to the shape requested by the customer. The floors were very carefully swept every night. Cuttings from the machining process were stored in drums and disposed of periodically by Brookhaven Labs and again at the end of the contract period which I believe was the end of 1948. The workmen wore radioactivity sensitive badges on their uniforms which were for the purpose of detecting any excess radioactivity on site. Periodically inspectors would pass through the site carrying Geiger Counters to determine any excess level of radioactivity.

During this period I did not become aware of any problems with regard to the radioactivity either concerning the individuals or any unusual disposal of any bi-products of the machining process. Deponent does not know of any off site location that was effected by this program. At one point, however, there was a significant fire at the site and I believe that it related to the highly volatile nature of the rods that were being machined. I was recently advised by legal counsel to Crane Co. that the fire had been reported to the appropriate authorities at the time. At the completion of a days work the employees would return to the dressing room and remove their white coveralls. Each employee was then required to shower as a safety measure.

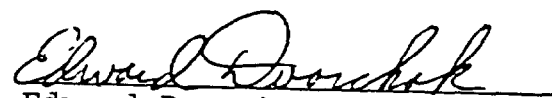
5. When the program was complete at the end of 1948 all the machinery and equipment used in the program and the wood block floors were removed by the customer's agent and never returned. Any uranium cuttings which were still on site were set aside and also removed. After the equipment and residual cuttings were removed a crew entered the premises and washed down the walls with detergents. The wash-water collected on the floor and was mopped up and placed in 55 gallon drums. An inspector

then came on to the premises with a Geiger Counter. Apparently the readings were not satisfactory because the walls were washed at least five more times. This was in keeping with the very tight safety controls which were in effect during the time of this program. The former safety director, Bob Cochrane is now deceased.

6. -- On November 17, 1987, deponent visited Department 40 where the uranium machining had taken place in the 1947-48. The building is still standing and in reasonably good condition. The walls have been painted since 1948 and the wooden partition separating it from the remainder of Department 40 has been removed. The space is currently vacant since Crane discontinued all manufacturing at Indian Orchard early in 1987.

7. Other workman on the program with whom I was familiar include Alan Burnett, the general foreman of maintenance, John Montaneri, the yard supervisor, John Austin, the electrical general foreman. All of these individuals are now deceased. It is my understanding that the records with regard to this program were kept at the second floor offices of the main plant building on Pinerail Street which is part of the Crane-Chapman

facility; however, they were moved to another building more than ten years ago and that building was subsequently sold and I believe that the records were destroyed. I have no personal records which relate to the 1947-1948 program described above.

  
Edward Dvorchak

Sworn to before me this  
8th day of December, 1987

  
Notary Public

0731C

WILLIAM E. BURLAND  
COMMISSION EXPIRES  
AUG. 12, 1988



**CRANE**

INDIAN ORCHARD PLANT

RECEIVED

NOV 24 1987

THOMAS J. UNGERLAND

CRANE CO. • 203 HAMPSHIRE STREET • INDIAN ORCHARD, MASSACHUSETTS 01151

November 19, 1987

→ Crane Company  
757 Third Avenue  
New York, New York 10017

Attention: Thomas J. Ungerland

Gentlemen:

The writer surveyed Department 40 and its perimeter for radiation readings as you requested. No radiation readings found.

Equipment Used

Victoreen, Model 492 survey meter.  
Serial No. 4436.  
Scale readings 0 to 1,000 MR/HR.  
Meter calibration date 11-4-87, Expires 2-4-88.

Writers Qualifications

Radiation Safety Officer since 1978. (Liaison for Crane Company, Indian Orchard Plant and the NRC).  
SNT-TC-1A Level III since 1979. (Training and testing of Level I and Level II employees in Industrial Radiography and Radiation Safety).  
Industrial Radiography. Twenty four (24) years of experience.



Charles A. Sedelow  
Crane Valve Services

CAS/tvk