Department of Energy

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SFP 2 9 1987

Dr. L. R. Solon, Director Bureau of Radiation Control New York City Department of Health 111 Livingston Street New York, New York 11201

Dear Dr. Solon:

As was noted in a telephone discussion between you and Mr. Andrew Wallo of my staff, the Department's records investigations conducted as part of the Formerly Utilized Sites Remedial Action Program have identified a site within your jurisdiction that is potentially contaminated with residual radioactive material. The company, Wolff-Alport Chemical Corporation, was a commercial producer of rare earths from monazite sands and operated during the late 1940's and early 1950's. The facility was located at 1127 Irving Avenue, Brooklyn, New York. The enclosed summary report provides the results of our investigations regarding this site.

The analysis of records collected indicated that the company sold residues from its commercial operations to the Atomic Energy Commission (AEC). However, the operation was commercial in nature and the AEC was not involved in its operation. The residues were tailings from its commercial operation. As a result, the Department does not have authority under the Atomic Energy Act of 1954, as amended, to conduct remedial actions at the site if they are determined to be needed. We are, therefore, notifying your Bureau and the State and the U.S. Environmental Protection Agency, by copy of this letter, of these findings so that appropriate reviews can be accomplished.

If we can be of assistance in the radiological evaluation of this site, or if you have any questions regarding this letter or the enclosed material. please call Andrew Wallo at 301-353-5439.

Sincerely,

ames J. Fiore. Director Division of Facility and Site

Decommissioning Projects Office of Nuclear Energy

Enclosure

NE-23

9**/28**/87

NE-23

cc:

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FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM SUMMARY REPORT AND DESIGNATION/ELIMINATION ANALYSIS FOR WOLFF-ALPORT CHEMICAL CORPORATION BROOKLYN, NEW YORK

U.S. Department of Energy
Office of Nuclear Energy
Office of Remedial Action and Waste Technology
Division of Facility and Site Decommissioning Projects

SUMMARY REPORT AND DESIGNATION/ELIMINATION ANALYSIS FOR WOLFF-ALPORT CHEMICAL CORPORATION BROOKLYN, NEW YORK

INTRODUCTION

The U.S. Department of Energy (DOE), Office of Nuclear Energy. Office of Remedial Action and Waste Technology, Division of Facility and Site Decommissioning Projects has reviewed the past activities of the former Wolff-Alport Chemical Corporation in Brooklyn, New York, Based on the type of work that may have been performed by this company at its Brooklyn location, it is possible that there could be residual contamination from processing operations and storage of naturally occurring radioactive materials. However, no evidence. radiological survey reports, have been discovered to support any conclusions concerning the potential for radiological exposure. Records assembled to date indicate that Wolff-Alport was a supplier of process residues containing thorium oxide to the Atomic Energy Commission (AEC). However, no documents have been found that would provide DOE authority to conduct remedial action under the Formerly Utilized Sites Remedial Action Program at this site. Therefore, the site has been eliminated from further consideration under this program.

BACKGROUND

Site Function

The Wolff-Alport Chemical Corporation supplied thorium compounds to the AEC in the late 1940's to very early 1950's. A 1949 listing of manufacturing companies in New York State, held in the Buffalo Municipal Library reference collection, shows an address of 1127 Irving Avenue, Brooklyn, New York for Wolff-Alport. The company is not listed in the 1953 edition.

wolff-Alport processed monazite sands in order to recover rare

earths for commercial markets. The company had disposed of the thorium content of the monazite by running the liquors to a sewer (Ref. 10). This practice was ordered to a halt in the Fall of 1947 by the AEC. Thereafter, the thorium was precipitated as an oxalate sludge and sold to the AEC, which subsequently stored the materials at Middlesex.

To provide an indication of the magnitude of Wolff-Alport's operations, available records were examined for references to amounts of materials handled. A summary of the oxalate sludge which was sold to the AEC in the 1948 to 1951 time period is shown below (Ref. 1, 2, 9, 11):

1948 10,899 kg thorium oxalate sludge

1949 at least 3,406 kg sludge

1950 6,111 kg thorium oxalate sludge

1951 (7,762 lbs of thorium oxalate sludge in June inventory)

In addition, Mr. Harry W. Wolff, presumably one of the principals of the firm, sold 238 drums of thorium oxalate and/or 400 lbs. of thorium nitrate to the AEC in 1954 (Ref. 3, 6, 8, 13). The nitrate had allegedly been in storage for 15 years prior to the sale offering. Concerns of health and safety problems due to the accumulation of thoron gas were raised at the time, but there is no evidence that any actions were taken (Ref. 3).

Site Description

The 1127 Irving Avenue property is located in a mixed light industrial-residential area, on the end block of Irving Avenue (Figure 1). Although it is referred to as Brooklyn, this last block of Irving Avenue is actually in the Borough and County of Queens. In addition, street signage indicates that this one block of Irving Avenue east of Cooper Street is now called Cooper Avenue. Local usage still favors Irving Avenue. The legal description of 1127 Irving Avenue is Block 3725, Lot 44 in Queens.

There appears to be one building on 1127 Irving Avenue, which is

about 20 feet wide and 12 feet high. It has one garage door and one entrance door facing Irving Avenue. There is an unused rail siding behind the building. The area behind the building is covered with dense brush and may be inaccessible from the street.

Two businesses have placed signs on the building:

Lynda Knitwear 1127 Irving Avenue Ridgewood, NY 11385 phone 718-497-2478

Meadows Knitting Mill, Inc. 1127 Irving Avenue Ridgewood, NY 11385 no phone listing

There is one property between the subject property and the intersection of Irving Avenue and Cooper Street (Figure 2). It is the location of:

Ridgewood Supermarket. Cooper St. and Irving Ave. Ridgewood, NY 11385 no phone listing

On the other side of the property is located a beverage distributor:

Bett-A-Way Beverage Dist. Inc. 1129A Irving Avenue Ridgewood, NY 11385 718-898-4050

Radiological History and Status

No information on the radiological history of the 1127 Irving Avenue site has been discovered to date. The present radiological status of the site is unknown. Based on the type of work that may have been performed by Wolff-Alport at the Irving Avenue location, it is possible that there could be residual contamination from processing operations and storage of radioactive materials.

AUTHORITY ANALYSIS

Wolff-Alport was a commercial producer of rare earths and the sale of thorium process residues to the AEC was incidental to the operation of that process. It would, in general, have resulted in the reduction of residual radioactivity at the site or properties in its vicinity.

Information collected to date indicates that the AEC neither owned nor controlled the property or the operation. It appears that the owner had responsibility for the processing operation and controlled its health and safety aspects as well. On the basis of the information collected and the associated analysis, the Department of Energy has no authority under the Atomic Energy Act of 1954, as amended, to conduct remedial Therefore, the site has been eliminated from action at this site. further consideration under the Formerly Utilized Sites Remedial Action Program. However, due to the quantity of material processed and the evidence suggesting the possibility of sewer contamination, further investigations, including radiological surveys, may be warranted to assess the potential for radiological contamination at the former Wolff-Alport site. This information will be transmitted to appropriate Federal, State, and local agencies that may have authority to address this site.

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