

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM

ELIMINATION REPORT TIPPINS, INCORPORATED FORMERLY THE HEPPENSTALL COMPANY 4620 HATFIELD STREET PITTSBURGH, PENNSYLVANIA

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INTRODUCTION

The Department of Energy (DOE) Office of Environmental Restoration has reviewed the past activities of the Atomic Energy Commission (AEC) with the Heppenstall Company in Pittsburgh, Pennsylvania, and has completed a preliminary radiological survey of the site, which is presently occupied by Tippins, Incorporated.' DOE has determined that the conditions at this site are in compliance with current radiological guidelines and standards.² Therefore, this site requires no remedial action and is no longer under consideration for inclusion in the Formerly Utilized Sites Remedial Action Program (FUSRAP).

The material in this report consists of information from documents supporting the determination that the radiological conditions at the former Heppenstall Company site, currently occupied by Tippins, Incorporated, site are in compliance with radiological guidelines and standards determined to apply to this site and provides assurances that use of this site will not result in any measurable radiological hazard to site occupants or the general public.

Through the Office of Administrative Services, this elimination report is being placed in DOE's Freedom of Information (FOI) Public Reading Room in Washington, D.C., so that it will be accessible to the general public.

BACKGROUND

<u>Site Function</u>

In 1955 the Mallinckrodt Chemical Company, a prime AEC contractor, subcontracted to the Heppenstall Company to heat, press, and water quench uranium metal. Work was performed by Heppenstall for approximately six months, during which time the plant processed approximately 100,000 pounds of normal uranium metal (i.e., uranium processed from natural ores containing naturally occurring decay products). Records indicate that the forging was done on a 1000 ton press on a schedule of two days per month by a Heppenstall crew of eight men. Mallinckrodt supplied the salt bath furnace used to heat the metal to forging temperatures and a quenching tank to Heppenstall. The equipment was returned to Mallinckrodt upon completion of the work.

Site Description

The Heppenstall Plant is located at 4620 Hatfield Street, Pittsburgh, Pennsylvania, in the Lawrenceville District. The facility is of substantial size, but uranium handling took place only within a limited area in the north corner of the plant near the powerhouse.

Heppenstall owned the facility at the time the work was performed, and continued ownership until 1979. Tippins, Inc., purchased the Heppenstall Plant in 1979. All metal-working equipment contained in the plant, including the forging press and manipulator used to handle uranium metal, was sold separately at auction or private sale as part of the liquidation of Heppenstall assets. Reportedly, Tippins never had ownership of that equipment. Furnaces were subsequently dismantled and scrapped.

Radiological History and Status

Health physics services were provided during these periods of operation by representatives of the AEC Health & Safety Laboratory of the New York Operations Office. However, no records have been found that indicate radiological surveys were conducted after the work was completed and the Mallinckrodt equipment was removed from the Heppenstall plant. Representatives from Mallinckrodt and AEC apparently observed the operations and maintained accountability for the uranium metal.

In 1988, the current owner contracted with Earth Sciences Consultants, Inc., to conduct an independent radiological survey of the plant. The conclusion of their survey was that the plant had been adequately cleaned after forging operations and that there was no uranium present above the Nuclear Regulatory Commission's no-action level of 10 pCi/g for soils. All but two samples contained below background levels of uranium. The higher of the two samples measured 10 pCi/g above background.

A radiological screening survey was conducted by the Oak Ridge National Laboratory (ORNL) during June 1989. Measurements of gamma radiation levels, concentrations of radionuclides in soil and dust samples, and direct and removable alpha and beta-gamma measurements were all well below DOE guidelines. Except for two above-background readings attributable to naturally occurring radionuclides in bricks, all measurements were at or near background levels for the Pittsburgh, Pennsylvania area.

Elimination Analysis

The results of the radiological survey performed by ORNL indicate radiation levels and radionuclide concentrations are typical of natural background in the area. Based on the information summarized in this report, DOE's Office of Eastern Area Programs, Office of Environmental Restoration, has eliminated the Former Heppenstall Company site from further consideration under the Formerly Utilized Site Remedial Action Program.

References

- W.D. Cottrell, J.W. Crutcher, and J.L. Quiller, "Results of the Radiological Survey at the Former Heppenstall Company Site, 4620 Hatfield Street, Pittsburgh, Pennsylvania," Oak Ridge National Laboratory, Oak Ridge, Tennessee, ORNL/RASA-89/19 (January 1991).
- 2. U.S. Department of Energy, "Guidelines for Residual Radioactivity at Formerly Utilized Sites Remedial Action Program and Remote Surplus Facilities Management Program Sites," (Revision 2, March 1987).
- 3. T.E. Myrick and B.A. Berven, "State Background Radiation Levels: Results of Measurements Taken During 1975-1979," Oak Ridge National Laboratory, ORNL/TM-7343 (November 1981).