

PA.4-5

CERTIFICATION DOCKET

WESTINGHOUSE ATOMIC POWER DEVELOPMENT PLANT
EAST PITTSBURGH PLANT
FOREST HILLS
PITTSBURGH, PENNSYLVANIA

Department of Energy
Office of Nuclear Energy
Office of Terminal Waste Disposal and Remedial Action
Division of Remedial Action Projects

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CERTIFICATION DOCKET
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INTRODUCTION

The Department of Energy (DOE), Office of Nuclear Energy, Office of Terminal Waste Disposal and Remedial Action Projects has reviewed the past activities of the Atomic Energy Commission (AEC) at the Westinghouse Atomic Power Development Plant, East Pittsburgh Plant, Forest Hills, Pittsburgh, Pennsylvania. On the basis of a preliminary radiological survey of the site, DOE has determined that the conditions at this site are in compliance with current radiological guidelines and standards¹ and that no potential for radiological exposure to persons exists beyond those resulting from natural background. Therefore, this site requires no remedial action and is not being considered for inclusion in the Formerly Utilized Sites Remedial Action Program.

Purpose

The material in this docket consists of documents supporting the certification that the radiological conditions at Westinghouse Atomic

¹ U.S. Department of Energy Interim Residual Contamination and Waste Control Guidelines for Formerly Utilized Sites Remedial Action Program (FUSRAP) and Remote Surplus Facilities Management Program (SFMP) Sites, March 21, 1984.

Power Development Plant are in compliance with current radiological guidelines and standards determined to apply to this site and provides assurance that use of this area will not result in any measurable radiological hazard to the general public.

The certification docket is to be archived by the Department of Energy through the Assistant Secretary for Management and Administration. Copies of this docket will be maintained by the Department at the DOE Reading Room in Washington, D.C., so that it will be accessible to members of the general public.

Docket Contents

A brief summary of the site description, history, and activities of AEC are discussed in Exhibit I of the certification package.

Exhibit II of the certification docket contains copies of reports and correspondence supporting certification, a copy of the certification statement, and a copy of the Federal Register notice.

EXHIBIT I

Summary of Activities at the Westinghouse Atomic Power Development Plant, East Pittsburgh Plant, Forest Hills, Pittsburgh, Pennsylvania

SITE HISTORY

Westinghouse Atomic Power Development Plant, Pittsburgh, Pennsylvania, prepared uranium metal for Enrico Fermi's Stagg Field experiment, research and development on uranium oxide fuel elements, and pilot-scale production of uranium oxide fuel elements. The process involved uranium separation using a laboratory-scale magnetron. The numbers of three Manhattan Engineer District contracts with Westinghouse were identified: W-7407-Eng-2 (August 1, 1941), W-7407-Eng-31 (August 7, 1944), and W-7407-Eng-132 (December 18, 1943). Based on available data, it is not clear whether all of these contracts applied to the work performed at this facility.

The plant is owned and operated by Westinghouse Electric Corporation.

SITE DESCRIPTION

The facility is located near Route 30 in East Pittsburgh (Forest Hills) (Figure 1). The area used in the project was located in "L" Building and was designated Lab 2L. Renovations to the lab were underway at the time of the survey visit in October 1976 and included the dismantling of a partition.

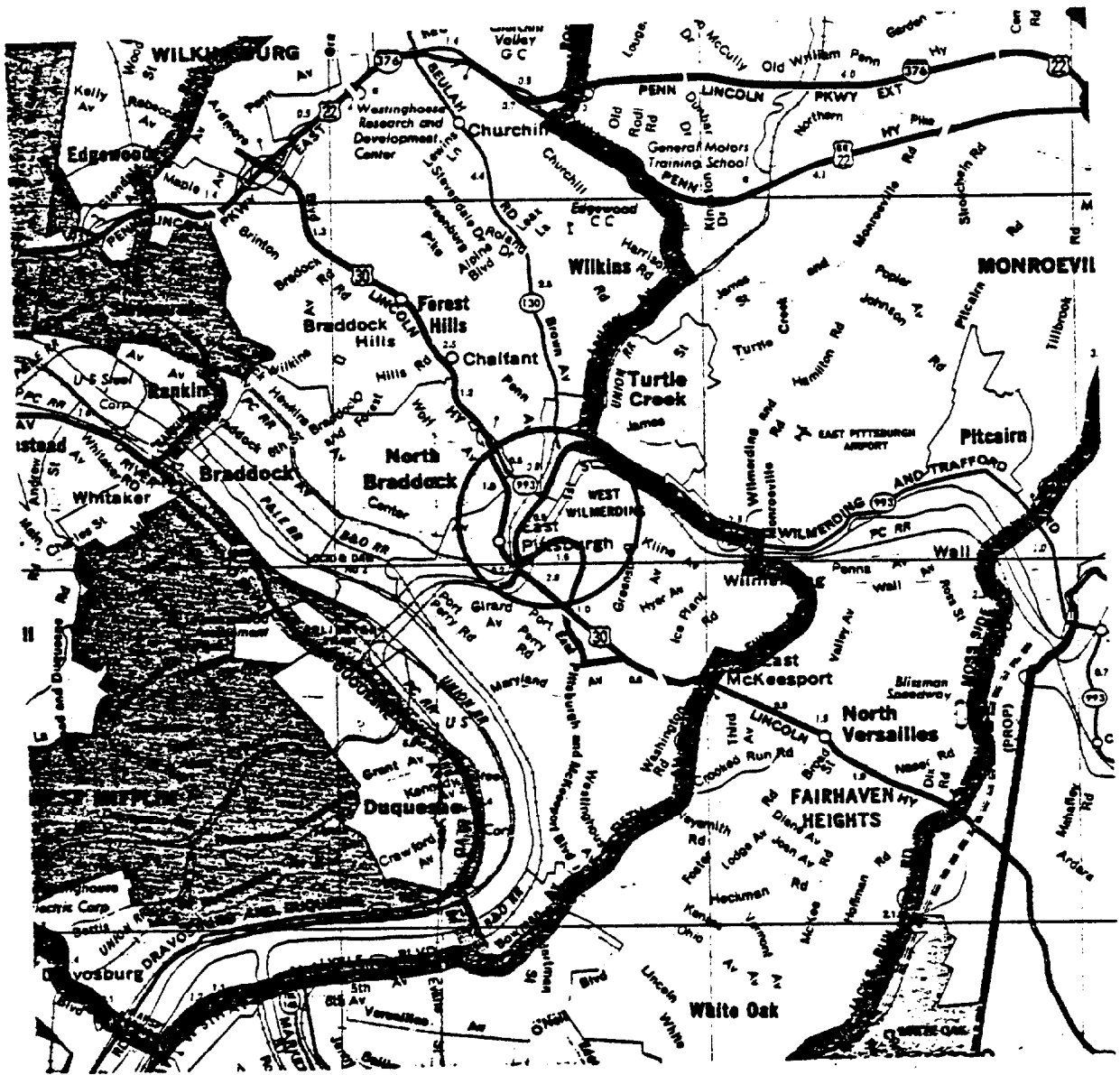


Figure 1. Location of the Westinghouse Electric Corporation Plant in East Pittsburgh, PA

RADIOLOGICAL HISTORY AND STATUS

Westinghouse personnel indicated that the area used was cleaned, and tools and equipment had been decontaminated, sealed in drums, and shipped to other locations when the project ended. At the time of the cleanup, an Atomic Energy Commission (AEC) industrial hygiene group surveyed and cleared the site, but no records are available. On October 22, 1976, Oak Ridge National Laboratory personnel surveyed "L" Building, including the original brick and wooden floors and brick wall. The survey indicated alpha and beta measurements were within background levels and the maximum gamma measurement was 6 microroentgens/hour. Oak Ridge National Laboratory issued a preliminary survey report that suggests no additional radiological measurements are warranted.

EXHIBIT II

Documents Supporting the Certification of
the Westinghouse Atomic Power Development Plant,
East Pittsburgh Plant,
Forest Hills, Pittsburgh, Pennsylvania

- o Preliminary Survey of Westinghouse Electric Corporation, East Pittsburgh, Pennsylvania, performed by Oak Ridge National Laboratory, March 1980.

PRELIMINARY SURVEY OF
WESTINGHOUSE ELECTRIC CORPORATION
EAST PITTSBURGH, PENNSYLVANIA

Work performed
by the
Health and Safety Research Division
Oak Ridge National Laboratory
Oak Ridge, Tennessee 37830

March 1980

OAK RIDGE NATIONAL LABORATORY
operated by
UNION CARBIDE CORPORATION
for the
DEPARTMENT OF ENERGY
as part of the
Formerly Utilized Sites--
Remedial Action Program

WESTINGHOUSE ELECTRIC CORPORATION
EAST PITTSBURGH, PENNSYLVANIA

At the request of the Department of Energy (DOE, then ERDA), a preliminary survey was performed at the Westinghouse Electric Corporation's East Pittsburgh Plant in East Pittsburgh, Pennsylvania (see Fig. 1), on October 22, 1976, to assess the radiological status of those facilities utilized under AEC/MED contract during an early phase of the Manhattan project. Wayne Bickerstaff, Jerry Brady, Dave Whitehead, and Paul Curtis provided background information about the project and assisted in locating facilities used in the project. The area used in the project was located in "L" Building and was designated Lab 2L (approximate dimensions: 24 x 45 ft with a 24-ft ceiling). The process involved uranium separation using a laboratory-scale magnetron. Uranium was prepared for the Stagg Stadium reactor at the University of Chicago.

From information obtained in discussions during the survey, the area utilized was apparently cleaned, and tools and equipment were decontaminated and subsequently sealed in drums and shipped to other locations when the project ended. An industrial hygiene group surveyed the area and issued clearance at that time; however, there are no remaining records. Apparently, all historical records pertaining to the project were put on microfilm and were stored in a cave near Butler, Pennsylvania.

Present Use of Facilities

The area utilized in the AEC/MED project was being renovated at the time of the survey. A partition in the lab was being dismantled.

Results of Preliminary Survey

The preliminary survey was conducted by H. W. Dickson of the Oak Ridge National Laboratory and W. T. Thornton of the DOE/Oak Ridge Operations Office. A survey of the area of the "L" Building was performed and consisted of gamma-ray exposure-rate measurements made at 1-m heights above the floor surfaces and direct alpha activity and direct beta-gamma dose-rate measurements made on the surface of floors, walls,

and potentially contaminated spots such as cracks in brick and wooden floors, etc.

Results of the survey measurements of the direct surfaces indicated that alpha and beta-gamma activity were all within background levels. The maximum gamma exposure rate at 1 m above the surface of the floor was 6 μ R/hr. It appears that additional radiological measurements are not required at this site.

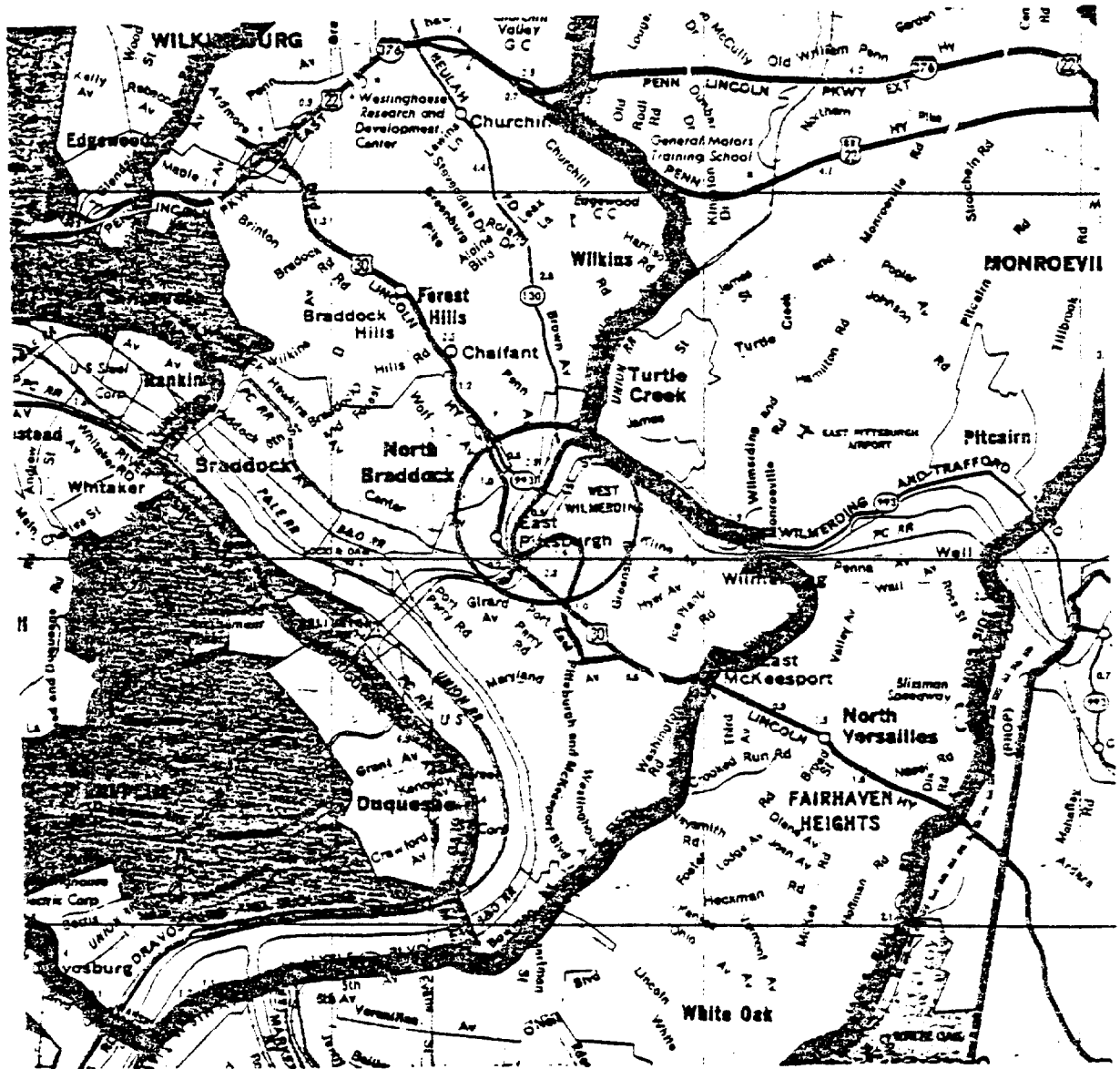


Fig. 1. Location of the Westinghouse Electric Corporation Plant in East Pittsburgh, Pennsylvania.

Statement of Certification
Westinghouse Atomic Power Development Plant
East Pittsburgh Plant,
Forest Hills, Pittsburgh, Pennsylvania

The Office of Terminal Waste Disposal and Remedial Action has reviewed and analyzed the radiological survey report on the Westinghouse Atomic Power Development Plant, Pittsburgh, PA. Based on this analysis, the Department of Energy certifies that the Westinghouse Atomic Power Development Plant site is in compliance with applicable radiological guidelines and standards. This certification of compliance provides assurance that the use of these properties will result in no radiological exposure above applicable criteria and standards to members of the general public or to site occupants. Therefore, this site is not being considered for inclusion in the Formerly Utilized Sites Remedial Action Program.

By: _____

Date: _____

William R. Voigt, Jr.
Acting Director
Office of Terminal Waste Disposal
and Remedial Action