National Institute for Occupational Safety and Health



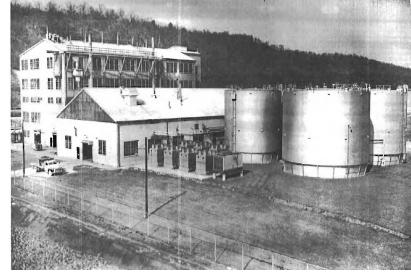
SEC-00253 – Reduction Pilot Plant

Angelica Gheen, MHP Health Physicist

Teleconference Meeting of the Uranium Refining Atomic Weapons Employers (AWEs) Work Group February 17th, 2022

Reduction Pilot Plant

- Huntington, West Virginia
- Operated by International Nickel Company (INCO)
- Manufactured nickel powder for use in gaseous diffusion plants
- DOE Facility: 1951 November 26, 1978
 Remediation: November 27, 1978 May 18, 1979
 Standby Period: May 1, 1963 Nov 26, 1978
- Remediation Contractor: Cleveland Wrecking Company
 02/17/2022



SRDB 85876, p.3

INCO Operations

- The RPP was a 3.47 acre fenced area adjacent to INCO's large nickel plant in Huntington, West Virginia
- The facility was built and operated by INCO starting in 1951
- Security clearances were required
- Operations included use of low enriched uranium-contaminated nickel scrap supplied by the Department of Energy (DOE)
- Facility placed in Standby in 1963; demolished in 1978-1979

Petition SEC-00253

- Received June 25, 2019
- Requested SEC class:
 - All INCO security personnel who worked at any location within the Reduction Pilot Plant during the period from June 7, 1976 through November 26, 1978
- The requested SEC class is within the Standby period
 - Operations end and facility placed in Standby on May 1, 1963 Nov 26, 1978
 - The Standby period was not a covered period under EEOICPA when the petition was received

Petition SEC-00253, continued

- July 31, 2019: NIOSH asked DOL to review the petitioner's claim that the Standby period should be covered under EEOICPA
 - During Standby, INCO was under contract for maintenance and security
- November 15, 2019: DOL notified NIOSH that the Standby period was being added to the DOE facility covered time period
- Petition qualified for review on December 13, 2019 on the basis that NIOSH had no radiation exposure records for the requested class

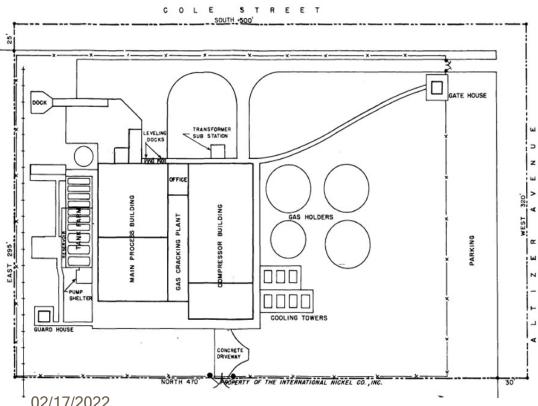
Evaluation Report (ER)

- NIOSH Evaluated Class:
 - All International Nickel Company (INCO) security personnel who worked at any location within the Reduction Pilot Plant during the period from June 7, 1976 through November 26, 1978
- NIOSH approved the ER on April 24, 2020
- NIOSH feasibility determination: dose reconstructions can be completed with sufficient accuracy for all members of the evaluated class

Background Information

- During the period covered by petition SEC-00253 the RPP facility was idle
 - Nickel production at the RPP ended in 1962; the plant was maintained in a standby condition by INCO
 - Security guards were required to check the production building and compressor building once per shift (3 times daily)
 - All maintenance activities were terminated in March 1975; INCO security guards made rounds through November 26, 1978
- Demolition began November 27, 1978
 02/17/2022

Reduction Pilot Plant Layout



The Process Building was a 130
feet long, five-story building. The
Compressor Building was a 150
feet long, single-floor building.
There was a small two-story
structure attached to one corner.

The 3.67-acre rectangular shaped RPP lot measured 500 feet by 320 feet, which indicates a total perimeter distance of 1,640 feet.

Walk-Through Exposure Time

- The ER provided an estimate of the time it took to perform a walkthrough inspection of the RPP
 - The ER estimated 5 minutes (allowing for stops) to walk the length of the Compressor Building based on walking 150 feet at 4.4 feet per second; a factor of 3 was applied to allow for walking through both the Process Building and the Compressor Building, and the RPP grounds
 - This yielded 15 minutes per day at the RPP; 15 minutes per day multiplied by 365 days to provide an exposure time of 91.3 hours per year

National Institute for Occupational Safety and Health



Questions?

02/17/2022