

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 040-08526/87-002

Docket No. 040-08526

License No. SUC-1275

Priority 3

Category E


Licensee: U.S. Department of the Army

Facility Name: Seneca Army Depot

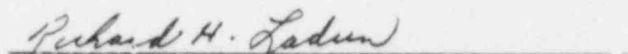
Inspection At: Romulus, New York

Inspection Conducted: October 29, 1987

Inspectors:

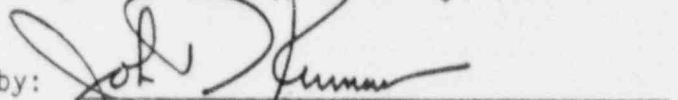

Elizabeth Ulrich, Health Physicist

4/25/88
date signed


Richard Ladun, Health Physicist

4-24-88
date signed

Approved by:


John D. Kinneman, Chief
Nuclear Materials Safety Section A

4/28/88
date signed

Inspection Summary: Closeout inspection on October 29, 1987 (Inspection No. 040-08526/87-002).

Areas inspected: Announced, closeout inspection limited to a survey of Bunkers E0801-E0811 for residual contamination prior to release of the facilities for unrestricted use. Twenty-seven wipes were taken and assayed for removable alpha and beta activity. Specified areas of the facility were surveyed to identify fixed radioactive contamination. Two soil samples and a water sample were analyzed for gamma activity.

Results: No violations were identified. No detectable removable radioactive contamination was found. No radiation levels above background were found. No levels of activity above naturally occurring environmental concentrations were detected. The licensee's survey report enclosed with their letter dated May 26, 1987 accurately reflects the condition of the portions of the facilities surveyed.

DETAILS

1. Persons Contacted

*Thomas Stincic, Radiation Protection Officer
*Thomas Battaglia, Safety Director
*Col. William R. Holmes, Commander

*denotes those present at the exit interview.

2. Background

Seneca Army Depot covers approximately 10,000 acres, a large portion of which is occupied by munitions bunkers. Eleven of these bunkers were used in the 1940's to store approximately 2000 barrels of pitchblende ore. After removal of the ore, normal storage of munitions was resumed.

Radioactive contamination in the vicinity of the eleven bunkers was identified in 1976 by ERDA, as part of the "Formerly Utilized MED/AEC Sites Remedial Action Program". The Seneca Safety Office coordinated the decontamination of the bunkers in July 1985. The U.S. Army Radiation Control Team (RADCON) performed the initial assessment and on-site health physics assistance during decontamination. Soil analysis and other health physics support were provided by the U.S. Army Belvoir Research and Development Center. Whole-body counting for workers was done at Bethesda Naval Hospital by Uniformed Services University of Health Sciences (USUHS). The U.S. Army Environmental Hygiene Agency (AEHA) provided a close-out survey of the area. Results of these efforts were documented, and copies sent to NRC Region I in May 1987.

A close-out survey of the bunkers was conducted by the inspectors on October 29, 1987. A 10 minute videotape documenting the decontamination procedures was viewed and records were examined. Documents submitted to the NRC Region I Office were reviewed, and are enclosed as Attachments.

The eleven bunkers (E0801-E0811) are located along road E0800 within a secured area. Each bunker is approximately 25 feet wide by 80 feet long. A 6 foot by 6 foot concrete pad is located at the north end of each bunker, in front of the door. A gravel area extends from the pad to the road. The remaining area around the bunkers is field grass. The bunkers are currently empty, and there are no plans for use in the near future.

3. Instrumentation Used

Gamma radiation level measurements were made with a Ludlum Model 19 Micro-R Meter, Serial No. NRC-019637. The background radiation level was approximately 12 microrems per hour with this instrument.

Wipes were counted on a Tennelec Model LB 5100 gas flow proportional counter in the Region I Laboratory. The minimum detectable activity for this unit was calculated to be 24 disintegrations per minute (dpm) for beta, and 3 dpm for alpha.

Soil and water samples were counted on an intrinsic germanium detector and a multichannel analyzer in the Region I Laboratory.

4. Radiation Survey Results

Radiation level surveys were done in and around the bunkers. No radiation levels above background were detected throughout the areas surveyed.

5. Survey for Removable Contamination

Twenty-seven wipes were taken from floor surfaces inside the bunkers. Analysis of these wipes show no areas above the minimum detectable activity.

A water sample and a soil sample were taken on the east side of the pad in front of bunker E0804, an area from which contaminated soil had been removed. Analysis of the water sample showed no identifiable gamma peaks. Analysis of the soil sample showed only environmental levels of cesium-137 and potassium-40. A second soil sample was taken from the pad area of bunker E0804. Analysis of this sample showed environmental levels of potassium-40 and thallium-208.

6. Receipt and Transfer of Licensed Material

The inspectors reviewed the licensees records for the disposal of the licensed materials.

No violations were identified.

7. Personnel Monitoring

Dosimetry and bioassay records on personnel involved in the decontamination of the bunker were reviewed.

No violations were identified.

8. Exit Interview

The scope and results of the inspection were discussed with the individuals identified in Section 1.

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Attachments

1. Department of the Army Headquarters letter, May 26, 1987
2. D A, Belvoir R & D letter August 22, 1985
3. AEHA report 2843-0025-86 with letters dated September 8, 1986; August 21, 1986, and August 15, 1986
4. Special Publication BRL-SP-56 "Radiological Survey of Seneca Army Depot"