

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Report No. 040-01266/97-002

Docket No. 040-01266

License No. SUB-466 (Retired)

Licensee: Tenneco Chemicals, Incorporated
Meadow Lane
Fords, New Jersey

Facility Name: Tenneco Polymers, Inc., Fords, New Jersey

Inspection At: Industrial Boulevard
Fords, New Jersey

Inspection Conducted: April 1, 10, and 25, 1997

Inspector:

Todd J. Jackson
Todd J. Jackson, CHP
Health Physicist

May 6, 1997
date

Approved By:

Ronald R. Bellamy
Ronald R. Bellamy, Ph.D., Chief
Decommissioning and Lab Branch
Division of Nuclear Materials Safety

May 6, 1997
date

Inspection Summary: Routine, announced visits to the formerly licensed site. The objective of the visits was to observe facility status and review progress of remediation activities for the uranium contamination at the site. (Inspection Report No. 040-01266/97-002)

Results: The licensee's contractor continued remediation work, which was progressing in a controlled and deliberate manner. Additional areas of uranium contamination had been identified and were being characterized. The contractor was performing surveys and removing contaminated materials. The contractor had produced reports describing the work for February and March, 1997.

DETAILS

1.0 PERSONS CONTACTED

- *D. Evans, SECOR International, Incorporated
- *R. Gupta, SECOR International, Incorporated
- *A. Schwartz, SECOR International, Incorporated
- J. Johnson, Ph.D., CH₂, Consultant
- G. Malone, Huls America

2.0 ORGANIZATIONAL CHANGES

During April the SECOR Project Manager, Mr. Dale Evans, resigned and left SECOR (contractor for the former licensee, Tenneco). His role for the contractor on this project was taken over by Mr. Ravi Gupta, Principal-in-Charge for the SECOR office in New Jersey.

The contractor also informed the inspector of a recent change in the organization of the successor for the former licensee. Tenneco Energy was sold by Tenneco to El Paso Energy Corporation, which now has responsibility for remediation of the Fords site with the company name of EPEC Polymers, Incorporated. Mr. Roger Towe remains the former licensee's representative and point of contact.

3.0 PURPOSE

The purpose of these inspections was to monitor the progress of decontamination and decommissioning work at the formerly licensed site.

4.0 RADIATION SURVEYS

The contractor had begun to decontaminate the interior of building K-12. Most work was focusing in the west end of the building in what was believed to be the "catalyst preparation room" (due to the catalyst preparation activity which had been conducted in the room during plant operation). Portions of the floor concrete had been removed to follow drain pipes from a sump in the room. The pipes and the soil around them had been found to be contaminated. The termination point for the drain pipes had not yet been located. Work was also progressing to remove surface concrete from the floor sections to decontaminate them, and to remove the surface from the brick walls of the room to decontaminate them. Soil and materials removed from the room were taken to building 31 for processing. The method used for processing is discussed in more detail below. Three sumps outside of building K-12 were found contaminated, to the east, south, and west of the building.

Scaffolding had been erected in the converter room at the east end of building K-12 to access the high-bay walls for complete survey and decontamination as necessary. A water-filled chamber beneath the concrete floor was discovered, sampled, and found to be not contaminated.

5.0 PROCESSING OF CONTAMINATED MATERIALS

Small quantities of contaminated soil and other materials were collected in building K-12 and taken to building 31 for processing. Plastic sheeting was spread out on the floor of building 31 to prevent the spread of contamination. Material was dried in ovens as necessary, and surveyed using a shielded pancake GM probe. A linear correlation had been established between the survey probe reading and the concentration of uranium in the soil based on gamma spectroscopy measurements. A reading of less than 65 cpm corresponded to less than 35 pCi/g, the limit for free release of soil materials. Readings between 65 and 99 cpm were considered potentially contaminated and the materials were surveyed more carefully. Materials reading greater than 99 cpm were classified as contaminated and placed into DOT 7A qualified shipping drums. Drums were being tracked with unique identification, correlating to a record of contents.

The contractor was observed to be approaching the work in a deliberate and careful manner, taking precautions to minimize the spread of contamination or recontamination of cleaned areas.

6.0 SURVEY INSTRUMENTS

The contractor had received a new calibration source for the on-site gamma spectrometer. The new source contained nine radionuclides providing 11 different energy peaks to use for calibration, versus the original source which provided a three point calibration. This was a refinement of the calibration which will provide additional confidence in the precision of analytical results.

7.0 RADIATION PROTECTION

Personnel were observed wearing shoe covers and protective clothing where appropriate. Some scabbling was being performed in building K-12, on walls and floors to remove fixed surface contamination. The inspector discussed with the contractor the need to monitor airborne uranium concentrations of respirable dust in order to confirm that personnel exposures were acceptable. Internal exposures were not expected to be significant based on the amount of surface contamination to be removed by scabbling, however the scabbling process can produce a lot of airborne dust. The inspector stated that records of air monitoring measurements will be reviewed during a future inspection.

8.0 REPORTS

The inspector reviewed the contractor's reports of activities at the site for February, 1997, and for March, 1997. The reports provided a detailed overview of activities in progress at the site during the subject periods.

9.0 EXIT MEETINGS

The inspector discussed the results of each visit to the site with those contractor personnel present. SECOR personnel present during the discussions are denoted in Section 1.0 of this report. The inspector summarized the purpose, scope, and findings of the inspections at that time.