



OCCUPATIONAL RADIATION PROTECTION PROGRAM ANNUAL RAD. REVIEW

SCOTIA DEPOT
Serial Number 32 (Ann. Review)
ANNUAL RADIATION REVIEW Per 10 CFR 20.1101(c)
With assistance from Dewey Blair, RPO at Scotia

December 16-17, 2013

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DLA/SM-H8-ME

OCCUPATIONAL RADIATION PROTECTION PROGRAM SURVEY

SCOTIA DEPOT

EXECUTIVE SUMMARY

On December 16-17, 2013, Robert L. Skruck, Radiological Safety Officer and Dewey Blair, Radiation Protection Officer at Scotia performed a annual radiation review of the radiological operations at the SM Scotia Depot in Scotia, NY. The Depot no longer holds any licensed radioactive material; the last licensed material (tungsten concentrates) was shipped to a buyer on March 23, 2007 and three (3) drums of UN2910 Radioactive Materials Waste disposal on 19Jun08 on Manifest No. DLA2007-009-TOXCO. Results of the survey indicated that the depot had an effective Occupational Radiation Program. There were no health and safety concerns identified as a result of the storage and handling of radioactive material at Scotia. SM has maintained it's policy of limiting personnel exposure to "as low as reasonably achievable" (ALARA).

DISCUSSION

I. ADMINISTRATION

Mr. Dewey Blair was designated as the Radiological Protection Officers (RPOs) at Scotia Depot and also assisted myself in gathering information for this annual radiation review.

LICENSE

Radiological operations were authorized under NRC license STC-133, Amendment No. 36, issued September 11, 2013, expiring on February 29, 2020. The license authorizes the storage, sampling, repackaging, transfer and site cleanup activities for natural uranium and thorium ores, concentrates and solids. Radiation Safety Officer for this license is Robert L. Skruck.

INVENTORY

The license authorizes SM to possess a total of 2,000,000 kg of radioactive material in the form of uranium and thorium contained in ores, concentrates, and solids. Inventories at specific locations were not limited. We no longer have any licensed material at Scotia or any other SM depot.

II. DOSIMETRY

Personal dosimetry & monitoring was terminated at Scotia on 30 September 2004 and TLD's are no longer utilized at this facility.

PUBLIC DOSE COMPLIANCE

Due to the absence of licensed radioactive materials, there are no public dose issues at this facility. Outside the warehouses the dose rate is at background.

III. TRAINING

Training of the guard force and general worker training were discontinued due to the absence of licensed materials.

IV. . EMERGENCY RESPONSE

The depot has an Emergency Response Plan dated April 22, 2013. Emergency response personnel from Scotia Fire Department is the primary emergency response team. Material safety data sheets are maintained at the security office for an emergency.

V. RADIATION SURVEYS

The last annual survey conducted at this site was completed by Mr. Michael Pecullan on June 6-7, 2007. This survey was completed using the E-120 survey meter with HP270 probe (Ser.# 10044 last calibrated 20 January 2007). The depot now stores tungsten ores and concentrates. These lots contain unlicensed material (Less than 0.05% combined) of naturally occurring U & Th. A survey was conducted which involved measuring for gamma dose rate. Background was measured at 0.02 mr/hr. Dose rates at the outer face of the exterior wall of each warehouse was also at background. Interior dose rates at approximately 1.0 feet from the blockstacks of material (unlicensed tungsten O&C and aluminum oxide containing small amounts of NORM) ranged from background to 0.1 mr/hr. in warehouse 505 sec.1, bay 5A, row 1, sec.2, bay 12C, row 2, sec 3, bay 18G, row 3, sec 4, bay 261 and row 4. In warehouse 506 readings also ranged from background to 0.1 mr/hr Sec. 1, bay 6J, row 1, sec. 2, bay 13G, row 2, sec. 3, bay 19C, row 3, sec. 4, bay 28A, and row 4. . NORM is "Naturally Occurring Radioactive Materials".

Instrumentation used to perform this survey was an Eberline E-120 Geiger Counter survey meter S/N 10044 with a probe S/N 13720 both calibrated 29Apr13.

VI. RECEIPTS, SHIPMENTS, AND DISPOSAL

Last shipment of licensed material was made on June 19, 2008. All shipping documents are in order and are maintained at the installation.

VII. INSTRUMENTATION

The depot has two instruments that are calibrated at all times.

- A. Eberline E-120 Geiger Counter with probe calibrated 29Apr13
- B. ASP-2 with probe calibrated 26Apr13

VIII. INCIDENTS

No incidents were reported since the last survey.
The warehouses are locked with all areas and egress controlled by the depot manager/group leader.

IX. . STORAGE AREAS

Radioactive materials are no longer stored at the depot. Licensed material was formerly stored in warehouses 505 and 506.

POSTING

Both NRC Form 3 (5-2005) and Section 206, Public Law 93-438 are posted on bulletin boards located in the main office and in building #14.

XI. OTHER

A Final Status Survey will be completed at this facility when the remaining commodities are shipped from this location and warehouse sections in 505 and 506 are empty. This will be completed before 2020. STC-133 Amendment #36 dated 11Sep13 states the Radiation Safety Officer for this License is now Robert L. Skruck. A Notice Of Violation (NOV) dated 17Sep13 was issued to Strategic Materials for violation of 10 CFR 20.1101© for failure to perform an Annual Radiation Review at Scotia. Also a violation of 10 CFR 40.42(d) (3) for failure to notify the NRC of no principal activities under the license for a period of 24 months. Letter to NRC written on 17Sep13 and response by Judith Joustra on 18Oct13 notifying DLA/SM-H8-ME this letter was received and actions will be examined during a future inspection by NRC of our licensed program.

CONCLUSION

The ORPP, at the SM Scotia Depot, was effective but basically dormant due to the absence of licensed radioactive materials.

ANNUAL RADIATION TRAINING AT NEW HAVEN DEPOT 2013 (Annual Review)

No longer required as all radioactive material has been shipped from this location on 19June08.