U.S. NUCLEAR REGULATORY COMMISSION

REGION 111

Report No. 04008760/85001

Docket No. 04008760

License No. SMC-1377

Licensee: Edlow International Company 1815 H Street, N.W., Suite 910 Washington, D.C. 20006

Licensee Facility Name: Edlow International, East St. Louis Facility

Inspection Conducted: August 29, 1985

Inspector:

D. R. Bibbons Radiation Special

Approved By: D. G. Wiedeman, Chief

Nuclear Materials Safety Section 1

Inspection Summary

Inspection on August 29, 1985 (Report No. 04008760/85001(DRSS)) Areas Inspected: Close-out inspection of a facility used for the storage of uranium oxide and uranium hexafloride. Residual radiation and radioactive contamination appear to be below levels listed in Regulatory Guide 1.86. The inspection involved seven hours of onsite time by one NRC inspector, and one inspector from the Illinois Department of Nuclear Safety (IDNS). Results: Of the areas inspected, no violations were identified.

DETAILS

1. Persons Contacted

Mr. Robert Priester, Facility Custodian *Mr. Robert A. Rich, Executive Vice President

*Mr. N. L. Ravenscroft, Vice President of Operations

*Contacted Ly telephone

2. Disposition of Material

- a. All of the material was transferred to other facilities. The last shipment was on August 19, 1985. A company representative forwarded a Form 314 to the Region III office on August 20, 1985. See NRC Form 314, which is part of Attachment A.
- b. The licensee performed a survey on August 19 and 20, 1985, to confirm that no residual radiation, or radioactive contamination existed after the final removal of the uranium oxide (U₃0⁸) and uranium hexafloride (UF₆). That survey was performed with an Eberline E-120 with and HP 270 probe. The survey indicated that no residual radiation, or radioactive contamination existed above background levels. The results of the survey are listed in Attachment A.

3. Confirmatory Surveys

The NRC confirmatory survey consisted of measurements for fixed and removable alpha and beta radiation. Measurements of fixed contamination were performed with a Ludlum Model-19 (Micro-R Meter) NRC Serial No. 010617, calibrated July 25, 1985, and an Eberline Pulse Rate Meter, PRM-5-3, Serial No. 2786 with a 2 x 2 NaI ESPA-3 Probe, Serial No. 1289, calibrated April 26, 1985. Attachments B, C, D, and E indicate the areas surveyed. The surveys were performed throughout the complete facility by positioning the probes at 4-6" from ground level, and along grids, or line spaced 3 feet apart. No fields in excess of 20 micro-R/hr were detected.

Measurements of removable contamination were performed by taking $100~\text{cm}^2$ swipes of selected areas and counting them using a Canberra/TRS-80~Alpha/Beta Analysis System on September 3, 1985. Locations of the swipe samples are shown in Attachments B, C, D, and E. Counting results are given in Attachment F. As seen in Attachment F, no levels above two (2) times background were apparent.

Measurements of selected areas were conducted using an Eberline Pulse Rate Meter, PRM-5-3, Serial No. NRC 007309, calibrated April 3, 1985, with an AC-3 probe attachment. Measurements were made with the probe at contact with the surfaces of those areas surveyed. No readings above normal background were detected.

Two water samples were collected and counted using standard laboratory counting procedures. One sample was from a well located at the north central area of the facility. Counting results are given in Attachment G.

Soil samples were collected at selected areas and counted. Results are given in Attachment H.

4. Burial of Waste

No radioactive material or radioactive waste has been buried at this facility. All material was transferred as stated in Paragraph 2a.

5. Records and Reports

Transfer records and other records pertaining to this facility are being maintained by the licensee.

6. Conclusions

The inspection revealed no radioactive contamination which would be in excess of limits listed in the decontamination guidelines. These facilities can be released for unrestricted use.

Attachments:

- 1. Attachment A, Licensee's Survey, and NRC Form 314
- 2. Attachment B, Outline of complete facility including sample locations
- 3. Attachment C, Concrete surface area locati in of December 1983 fire
- 4. Attachment D, Northeast storage area
- 5. Attachment E, Southeast storage area
- 6. Attachment F, Swipe count results
- 7. Attachment G, Water sample results
- 8. Attachment H, Soil sample results