

FAX Cover Sheet

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J-6

06-07522-02

03003796

From: Carlos Rivera
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Date: 5/24/05

Pages including this
cover page:

Comments:

136819

NIJ-001 MATERIALS-002

Attachment A

Disposal/Transfer of Radioactive sources:

1. Interoffice memo from August 31, 1973 last item stated **20 millicurie Cadmium-109 source Type D FS-3** from Isotope Production Lab., ser. no. CDX3 was removed from Room 90, Building 140 and transferred to United Aircraft Research Labs. (radioisotope section) for disposal as scrap. Copy of Inter-Plant transfer sheet dated 8/24/1973. As of the date of this letter, this source would have decayed through more than 24 half-lives and remaining activity would be undetectable.
2. Receipt letter from the Ohmart Corporation dated May 10, 1984, acknowledging they received one HM-8 source holder containing one **500-mCi Cesium 137 source** and one Comp. Cell containing **4 mCi Cesium-137** on April 24, 1984. This was used in Middletown Building 140.
3. Receipt letter from Ohmart Corporation dated March 16, 1981, acknowledging they received one **150-mCi Cesium-137 source** serial no. 62677.
4. Receipt and transfer letter from UTRC acknowledging they received seven radioactive sources that were transferred to L.L. Packer, Radioisotope Lab, United Technologies Research Center (UTRC). On July 29, 1985
Sources:
 - a. Americium-241, 10 millicuries, New England Nuclear ser. no. A738
 - b. Americium-241, 10 millicuries, New England Nuclear ser. no. A734
 - c. Americium-241, 10 millicuries, New England Nuclear ser. no. 903
 - d. Americium-241, 10 millicuries, New England Nuclear ser. no. 902
 - e. Americium-241, 14 millicuries, Amersham ser. no. Z3969.
 - f. Americium-241, 14 millicuries, Amersham ser. no. Z3970.
 - g. Americium-241, 45 millicuries, Amersham ser. no. 3641LA.These seven sources were used and stored at Pratt & Whitney's Middletown, Connecticut facility.
5. Receipt disposal of our **310-mCi Cobalt-60 source** model # 424-2 ser. no. 851. An Amersham Service Technician picked it up on September 29, 1989. Memo describing the event by Andrea Giancola dated November 29, 1989. (This source's quantity on 9/18/78 started out at 1.3 curies) Used in Calibration well Room 96 Building 140, Middletown.
6. Sealed source leak test record shows that the **25-mCi Iron-55** New England Nuclear Model NER 461-A was disposed through NDL organization for ultimate disposal at Barnwell South Carolina on May 23, 1986.
7. Memo dated February 1, 1983 by Rich Narus documented the loss of a **100-millicurie tritium source**. It did not appear that the material would present a

substantial hazard to persons in unrestricted areas; therefore, no report of the loss was made to the USNRC or the State of Connecticut (ref: 10 CFR 20.402(a); and Administrative regulations of the State of Connecticut, Department of Environmental Protection Section 19.24-11(c)). Background information is included on the use and the attempts to locate and recover the source. This source, which contained 100 millicuries in 1963, would be less than 10 millicuries today.

8. Receipt letter from Hewlett-Packard dated January 4, 1991 acknowledging they had disposed of a **15 millicuries Nickel-63 source**. Cell Model number HP 18713A, Cell serial number ser. no. H2470, Cell Foil number S4597.
9. Shipping documentation of a **0.00002 mCi Chlorine-36 source** sent back to the manufacturer (New England Nuclear) dated July 17, 1981. A memo dated August 15, 1988 documents a Chlorine 36 calibration source sent back to the manufacturer (Dupont) for disposal. A copy of the return receipt from the manufacturer is attached to the memo.
10. Receipt letter from Kevex Instruments dated September 24, 1991 acknowledging they have received the **Cadmium-109**, source and that they will properly dispose of the source.
11. Receipts of 2 sources; **Cadmium 109 and Americium-241**, total activity level of 42 millicuries. The source serial no. was 7695LA; holder serial no. A-010. Sources were used in the Kevex 6600 Analyzer.
12. Inter office memo dated January 31, 1978 of transfer of the **2 millicurie Cadmium-109 source** from the Panametrics Panalyzer 4000 to the UTRC Radioisotope Lab.
13. Receipt report from AccuRay Process Control Systems dated October 11, 1973, for two Industrial Nucleonics Fuel Density Gages, **50 microcuries each of Cesium-137**; model no. SH 301, serial numbers CS 9482 (X-8 Stand); CS 9487 (X-104 Stand).
14. Interoffice memo dated January 2, 1980 of disposal of **two Industrial Nucleonics Fuel density gages, 1.5 curies each of Cesium-137**, were shipped to Nuclear Research Corporation. Serial numbers CS 15037 (X-104 Stand); CS 15129 (X-8 Stand). A representative of Accuray Process Control Systems, Industrial Nucleonics Corp., was present for the removal, packaging, labeling, and wipe testing of each gage. A receipt acknowledging the receipt of the two sources from Accuray Corporation is attached to the memo.
15. Interoffice memo dated May 30, 1980 regarding a **20 millicurie Cadmium-109** source, accelerator produced, serial #3397 removed from the Kevex 6500 Analyzer, BT #441767, located in the Department 29 Chip Well. A new source

had been ordered for the instrument. A sealed-source leak test indicated <0.005 microcuries of removable activity. The source was returned to the original vendor, Isotope Products Lab, Burbank, California.

16. Shipping order dated July 1, 1983 of a **20 millicurie Cadmium-109** source in Kevex Model 102 holder, serial #3397 returned for credit. Kevex 6500 Analyzer B.T.#441767, located in the Department 29 Chip Well. Returned to the Kevex Corporation.
17. Shipping order form dated 3/27/80 addressed to New England Nuclear for one **15-millicuries Cadmium-109** source used in a G.E. Portable Analyzer BT# 517839 in K Building, East Hartford, quality control. New England Nuclear Model NER-466A.
18. Shipping order form dated 4/18/84 addressed to New England Nuclear for one **16.3 millicuries Cadmium-109** source used in a G.E. Portable Analyzer BT# 517839, returned to New England Nuclear by Federal Express.
19. Shipping order form dated 12/19/86 addressed to New England Nuclear for one **17.1 millicuries Cadmium-109** source used in a G.E. Portable Analyzer BT# 517839 source model NER-466A. Note on leak test record source was returned by Federal Express. This unit was no longer required by Pratt & Whitney and was being dismantled.
20. A certificate of disposition of materials from Varian Instruments dated 5/5/84, for **two tritium sources, 1 curie each**, model 02-001681-00 serial nos. 1022 and 369.
21. A certificate of disposition of materials from Varian Instruments dated 7/2/86 for one **8-mCi Nickel-63** source. Used in a Varian GC series 2700, detector cell model no. 02-965-00.
22. Letter of acknowledgement from the Amersham Corporation stating that they had received the **30-millicurie Plutonium-238** source, serial no. S2578, Kevex Code PPC-X/0132.
23. Receipt dated February 21, 2002 from former Nuclear Research Corporation (now Canberra Industries) acknowledging they had received **2 Cesium-137, 1500-millicurie sources**, model no. SH-302-S6, serial numbers, CS-15037, CS15129.
24. Letter dated April 15, 2004 requesting the closure of license number 06-07522-02 with decommissioning area surveys and transportation records for the **Gadolinium-153 gages** from P&W to UTRC in 1996 and 1999.
25. Letter from Dr. Albert D. Notation, RSO from Quinnipiac College, acknowledging the transaction of the Perkin-Elmer Electron Capture Detector.

Containing the **130-millicurie tritium foil 130** in a detector cell (Perkin Elmer Corp., Model 008-0644).

26. A **Strontium 90, 1 Curie Source Model DH-# S-6** was returned to Industrial Nucleonics on 7/14/1966. Listed on a distribution summary sheet from ABB Inc.
27. **Strontium-90 sealed source, 100 millicuries** (U.S. Radium Corp. Model LAB-277) to be used in a Victoreen Instrument Model A-717A. This sensing element for a remote area monitor was sent to UTRC for proper disposal on 5/14/1973.
28. **2 Krypton-85 sealed sources** from American Atomic Corporation, Drawing number SK1075, **200 millicuries per source**. These devices were to be used for experimental calibration of short-wave ultraviolet flame indication in jet engine exhausts. Inter-Plant Transfer Receipt from P&WA to UTRC on 11/14/1972.