

OAK RIDGE NATIONAL LABORATORY

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NUCLEAR DIVISION



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January 15, 1981



Mr. W. J. Dircks, Director
Office of Nuclear Material
Safety and Safeguards
U.S. Nuclear Regulatory Commission
7915 Eastern Avenue
Silver Spring, Maryland 20910

Dear Mr. Dircks:

Enclosed is the monthly progress report for December 1980 for the project "Evaluation of Docket Files of Terminated Licenses" (FIN A9085-7).

Sincerely yours,

A handwritten signature in cursive script, appearing to read "P. S. Rohwer".

Paul S. Rohwer, Head
Technology Assessments Section
Health and Safety Research Division

PSR:JPW:rod

Enclosure

cc: J. P. Witherspoon
File-NoRC

NRC Research and Technical
Assistance Report

8108050032

INTERIM REPORT

	ACCESSION NO. _____ ORNL/HASRD-108
Contract Program or Project Title:	Evaluation of Docket Files of Terminated Licenses
Subject of this Document:	Technical Progress
Type of Document:	Monthly Progress Report
Author(s):	C. F. Holoway and J. P. Witherspoon Health and Safety Research Division*
Date of Document:	December 1980
Responsible NRC Individual and NRC Office or Division:	William T. Crow Fuel Processing and Fabrication Branch Office of Nuclear Material Safety and Safeguards

This document was prepared primarily for preliminary or internal use. It has not received full review and approval. Since there may be substantive changes, this document should not be considered final.

Prepared for
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
Under Interagency Agreement(s) DOE #40-549-75
NRC FIN No. A9085-7

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Oak Ridge, Tennessee 37830
operated by
Union Carbide Corporation
for the
Department of Energy

INTERIM REPORT

**NRC Research and Technical
Assistance Report**

MONTHLY PROGRESS REPORT FOR DECEMBER 1980
EVALUATION OF DOCKET FILES OF TERMINATED LICENSES
(189 No. A9085-7)

PRINCIPAL SCIENTISTS: C. F. Holoway and J. P. Witherspoon

Objectives:

The technical objective of this project is to review terminated licenses in the Nuclear Regulatory Commission (NRC) Docket File System, extract pertinent data, create a computer file of these data and identify which previously licensed sites potentially could constitute residual radiological safety hazards.

Major Accomplishments:

During December, the remaining 49 dockets were group analyzed as shown in Table 1.

Table 1. Group analysis of docket files
for month of December

Category	Categorization before group analysis	Categorization after group analysis
No	7	26
Un	42	0
OK	0	23
Total	49	49

The 26 dockets categorized as No after group analysis are tabulated in Attachment 1.

Group members conducted a final analysis of 523 dockets group categorized as No or Uncertain to assure the use of consistent criteria. Changes were made in the screening criteria during the course of the project and, in some cases, additional information pertaining to a particular site was found in other folders and boxes. The completed data base was also checked to determine if superseding licenses had been entered into the file. A chart was prepared comparing the distribution of results from initial screening, group analysis and final analysis of 7287 licenses. Approximately 12% of the licenses (873 of 7287) were originally categorized as No or Un. Following group analysis, approximately 7% (523) remained as No or Un, and after final analysis approximately 5% (398) remained as No.

In cases where the final category was changed from an Uncertain or a No, an additional update was entered.

NRC Research and Technical
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The number of Part 30 dockets screened by individual analysts is 7287, 7265 of which are computer retrievable. Twenty-two records have been deleted due to duplication.

Status of Project:

A preliminary screening has been made and data analysis/computer input forms prepared for 7287 dockets representing all of the licenses in the 103 boxes of Part 30 docket files. All 103 boxes have been entered on the permanent file, and group and final analysis completed. The final report has been drafted and is being edited.

Table 2. Initial and group analysis results of 7287 dockets

	OK	Un	No	Total after group analysis	Changes made when super- seding licenses found
OK	6414	278	72	= 6764	6889
Un	0	24	4	= 28	0
No	0	359	136	= 495	398
Total original screening	6414	661	212	= 7287	7287

Manpower and Cost Summary:

Efforts in Man Months			Cost K\$			Remaining funds to completion (est.)
Dec. 1980	FY 1981	Total to date	Dec. 1980	FY 1981	Total cost to date K\$	
0.00	0.0	70.4	18.1	31.3	554.21	\$1,778

Attachment 1.

ERC/ORNL

Group
Docket Analysis

Date: December 3, 1980

No.	Record No.	License No.	Licensee	Orig. Cat.	Group Cat.	Comments
831	7169	12-3536-02	Hinsdale Sanitarium and Hospital, Radioisotope Dept., 120 N. Oak St. Hinsdale, IL	2Un	2No	Disposition of 100 mCi Sr-90 medical applicator unknown. Presently hold license 12-3536-03 and -04.
832	7177	10-0779-03	Holmes & Brown, Drs. Radiology Dept. 1467 Harper St. Augusta, GA	2Un	2No	No, unless license 10-0779-04 shows proper disposition of 25 mCi of Sr-90 in medical applicator.
833	7181	39-6668-01	Hood, Willis S., M.D. 107 E. North St. Greenville, SC	2Un	2No	No, unless license 39-6668-02 shows proper disposition of 100 mCi of Sr-90 in medical applicator.
834	7184	20-3507-01	Horrigan & Turner, M.D.'s Springfield, MA	2Un	2No	No, unless license 20-3507-02 shows proper disposition of 1200 Ci of Co-60 in sealed teletherapy unit. Potential external radiation hazard.
836	7203	04-1267-05	Loma Linda Univ. White Memorial Hosp. Radiology Dept. College of Medical Evangelists 1720 Brooklyn Ave. Los Angeles, CA	2Un	2No	Potential external radiation hazard from 2500 Ci Co-60 teletherapy sealed source.
839	7223	04-0911-02	Tracerlab, Div. of Laboratory for Electronics 2030 Wright Ave. Richmond, CA	2Un	2No	No, unless license 04-0911-03 shows proper disposition of 10 Ci of B.P.-3-83 waste materials.

Attachment 1. (continued)

ERC/ORNL

Group
Docket Analysis

Date: December 3, 1980

No.	Record No.	License No.	Licensee	Orig. Cat.	Group Cat.	Comments
841	7251	31-01-57-03	Dr. Jack Lehman 4157 74th St. Jackson Heights, NY	2Un	2No	Potential external radiation hazard from a 1200 Ci Co-60 teletherapy sealed source.
844	7255	47-2611-02	Milton J. Lilly, Jr. M.D. 1105 Virginia St., East Charleston, WV	2No	2No	No, unless license 47-2611-03 shows proper disposition of 100 mCi of Sr-90 in medical applicator. Presently hold license 47-2611-03.
845	7261	35-2576-01	Dave B. Lhevine and Sol Wilner, M.D.'s 2-7 Medical Arts Bldg. Tulsa, OK	2Un	2No	No, unless license 35-2576-02 indicates proper disposition of 1350 Ci Co-60 teletherapy sealed source. Potential external radiation hazard.
846	7270	48-2122-01	Luther Hospital 310 Chestnut St. Eau Claire, WI	1No	2No	Disposition of 3420 Ci of Co-60 in sealed teletherapy source unknown. Potential external radiation. Presently hold license 48-2122-04 and -05.
847	7274	17-0532-03	Louisiana State University, Nuclear Science Ctr. Baton Rouge, LA	2No	2No	No, unless license 17-0532-04 shows proper disposition of 10,500 Ci of Co-60 sealed source and 500 Ci of Co-60 in unsealed form. Potential external radiation hazard.
848	7283	37-2458-01	Jay G. Linn, Jr., M.D. 401 Jenkins Bldg. Pittsburgh, PA	2Un	2No	No, unless license 37-2458-03 shows proper disposition of 40 mCi of Sr-90 in medical applicator. License 37-2458-03 retired.
849	703	37-0435-03	Birdwell Surveys Radioactive Tracer Dept. 21 Holley Ave. Bradford, PA	2No	2No	No, unless license 37-0435-04 shows proper disposition of 10 Ci of Ac-227 in 10 sealed sources of 1 Ci.

Attachment 1. (continued)

ERC/ORNL

Group
Docket Analysis

Date: December 3, 1980

No.	Record No.	License No.	Licensee	Orig. Cat.	Group Cat.	Comments
850	1288	04-1964-01	Lockheed Aircraft Corp., Missile Systems Div. Nuclear Physics & Engineering Dept. Palo Alto, CA	2Un	2No	Potential external radiation hazard from 100 Ci Co-60 sealed source. License no. 04-1964-01 retired. Presently hold license 04-1964-07 and -08. License no. 04-1964-01 retired.
851	1317	16-0836-01	University of Louisville, Dept. Chemistry Louisville, KY	2Un	2No	Potential external radiation hazard from 1150 Ci of Co-60 in four sealed sources not to exceed 300 Ci each.
852	1339	04-1897-01	Los Angeles County General Hospital Medical Unit, Radiology, Medicine & Urology Depts. 1200 N. State St. Los Angeles, CA	2Un	2No	Disposition of 100 mCi of Sr-90 in medical applicator unknown.
855	1643	04-0672-02	McCullough Tool Co. Oil Well Logging Dept. 5820 S. Alameda St. Los Angeles, CA	2No	2No	No, unless license 04-0672-04 shows proper disposition of 600 Ci of Ac-227 in sealed source.
856	1898	31-1417-04	Grumman Aircraft Engineering Corp. S. Oyster Bay Rd. Bethpage, NY	2No	2No	One by-product unknown, only amendment present in file to indicate quantity and form of B.P. material.
858	2800	31-3307-01	Wm. M. Howard, M.D. Dept. of Ophthalmology 389 Linwood Ave. Buffalo, NY	2Un	2No	No, unless license 31-3307-02 shows proper disposition of 50 mCi of Sr-90 in medical applicator.

Attachment 1. (continued)

ERC/ORNL

Group
Docket Analysis

Date: December 3, 1980

No.	Record No.	License No.	Licensee	Orig. Cat.	Group Cat.	Comments
860	3089	17-0363-02	Gamma Industries, Inc. 622 Oklahoma St. Baton Rouge, LA	2Un	2No	No, unless license 17-0363-03 shows proper disposition of 70 Ci and 50 Ci Cs-137 sealed sources. Potential external radiation hazard.
863	4311	37-1091-01	U.S. Army, Ordnance Corps, Frankford Arsenal, Pitman-Dunn Labs. Philadelphia, PA	2Un	2No	Disposition of 40 mCi of Sr-90 in unsealed form. Presently hold license 37-1091-04.
865	4523	42-3292-01	Shoultz & Ramsey, Jr., M.D.'s 1101 N. 19th St. Abilene, TX	2Un	2No	No, unless license 42-3292-02 shows proper disposition c. 50 mCi of Sr-90 in medical applicator.
868	4876	44-0728-02	Univ. of Vermont College of Medicine Dept. of Pharmacology Burlington, UT	2Un	2No	No, unless license 44-0728-05863 shows proper disposition of 200 Ci of Co-60 in sealed source. Potential external radiation hazard.
870	5043	31-0718-03	Dept. of the Navy, Bureau of Ships, N.Y. Naval Shipyard, Nucleonics Section (Code 962) Brooklyn, NY	2Un	2No	No, unless license 31-0718-07 shows disposition of 120 Ci of Co-60 in sealed source. Potential external radiation hazard.
871	5054	37-1993-01	Dept. of the Navy, U.S. Naval Air Development Ctr. Aeronautical Electronic/Elect. Dept. Johnsville, PA	2Un	2No	No, unless license 37-1993-08 shows disposition of 300 Ci of Co-60 in sealed source. Potential external radiation hazard. Lic. # 37-1993-03. Renewal pending on license 37-1993-13. Presently hold license 37-1993-03.

Attachment 1. (continued)

ERC/DRNL

Group
Docket Analysis

Date: December 3, 1980

No.	Record No.	License No.	Licensee	Orig. Cat.	Group Cat.	Comments
873	5202	37-2262-02	Armstrong Cork Co. Liberty & Charlotte Streets Lancaster, PA	2No	2No	Disposition of 25 mCi of Sr-90 in sealed source unknown.

DISTRIBUTION

INTERNAL DISTRIBUTION

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2. S. V. Kaye
3. F. R. Mynatt
4. P. S. Rohwer
5. J. P. Witherspoon
6. ORNL Laboratory Records Department, R.C.

EXTERNAL DISTRIBUTION

- 7-8. DOE Technical Information (DOE-TIC)
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