U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Nos. 50-277/85-31
50-278/85-28

Docket Nos. 50-277
50-278

License Nos. DPR-44 Priority - Category C
DPR-56

Licensee: Philadelphia Electric Company
2301 Market Street
Philadelphia, PA 19101

Facility Name: Peach Bottom Atomic Power Station

Inspection At: Delta, PA

Inspection Conducted: July 29 - August 1, 1985

Inspectors: H. J. Bicehouse, Radiation Specialist — date 8/20/85

Approved by: W. J. Pasciak, Chief, BWR Radiological Protection Section — date 8/20/85

Inspection Summary: Inspection on July 29 - August 1, 1985 (Combined Report Nos. 50-277/85-31; 50-278/85-28)

Areas Inspected: Special, announced inspection of the licensee's transportation activities (i.e. radioactive materials shipping/receipt and radioactive waste disposal) including: previously identified items, quality assurance/quality control, indoctrination and training, procedures, procurement and reuse of packagings, implementation of the program and incidents. The inspection involved 33 inspector-hours onsite by a regionally-based inspector.

Results: Three violations were identified, i.e. failure to provide accurate radionuclide activities in shipping papers (Detail 9.2), certifying transported materials were accurately described when they were not (Detail 9.2), and contamination exceeding 220dpm/cm^2 on the exterior of a shipping package (Detail 9.3).

DETAILS

1.0 Persons Contacted

During the course of this special inspection, the following personnel were contacted or interviewed:

1.1 Licensee Personnel

D. Ahmuty, Administrative Assistant-Training
T. Donnell, Quality Control Supervisor
*A. Hilsmeir, Senior Health Physicist
*W. Knapp, Director, Corporate Radiation Protection Section
G. McCarty, Support Health Physicist
J. McElwain, Quality Control Engineer
*R. Moore, Lead Auditor, Quality Assurance
C. Nelson, Applied Health Physicist
P. Pauly, Radwaste Supervisor
*D. Smith, Superintendent-Operator
R. Smith, Physicist
D. Wheeler, Test Engineer, Reactor Engineer
J. Wilson, Quality Assurance Supervisor

Other licensee personnel were also contacted or interviewed during this inspection.

1.2 NRC Personnel

T. Johnson, Senior Resident Inspector
*J. Williams, Resident Inspector

*Attended the exit interview on August 1, 1985.

2.0 Purpose

The purpose of this special safety inspection was to review the licensee's transportation activities in the areas of radioactive materials receipt and shipping and radioactive waste (radwaste) disposal with respect to the following elements:

-- Previously Identified Items
-- Quality Assurance/Quality Control
-- Indoctrination and Training
-- Procedures
-- Procurement and Reuse of Packagings
-- Implementation
-- Incidents

3.0 Previously Identified Items

3.1 (Closed) Inspection Followup Item (50-277/84-09-05) Determine if audits are adequate. Audit Report No. AP84-67HPL, Radwaste/Material Handling and Shipping", (October 16, 1984 - December 10, 1984), was reviewed relative to criteria to 10 CFR 50, Appendix B applicable to shipping. Audit Report No. AP84-67HPC addressed each criterion of 10 CFR 50, Appendix B and was comprehensive in terms of the licensee's site shipping activities. The audit was conducted by a trained quality assurance auditor. This item is closed. See related information in Section 4.1 of this report.

3.2 (Closed) Violation (50-277/84-42-02) Failure to provide QC Program in accordance with 10 CFR 20.311(d)(3). Actions described in the licensee's letter (dated February 28, 1985), were reviewed. The licensee completed actions as described in the response letter. This item is closed.

3.3 (Closed) Inspection Followup Item (50-277/84-42-03) Licensee's actions regarding NRC Information Notice No. 84-72 for solified contamination resin shipment. The licensee developed Special Procedure 769, "Final Verification of Opening And Venting of CNS 6-80-2 Cask", (June 24, 1985), and Special Procedure 775, "Gas Sampling of Cask Using Marinelli Beaker", (January 23, 1985), in response to this item. The procedures adequately addressed gas generation concerns. This item is closed.

4.0 Quality Assurance (QA)/Quality Control (QC)

A QA program is required for transport packages in accordance with the provisions of 10 CFR 71, Subpart H. A Commission approved QA program which satisfies the applicable criteria of Appendix B of 10 CFR 50 and which is established, maintained and executed with regard to transport packages is acceptable to meet the requirements of 10 CFR 71, Subpart H. The licensee elected to apply their currently established 10 CFR 50, Appendix B, QA program to the packaging and transportation of radioactive material.

In addition to the general QC provisions required by 10 CFR 50, Appendix B, specific QC requirements to assure compliance with 10 CFR 61.55 and 61.56 are required by 10 CFR 20.311.

The packaging and transportation QA/QC activities implemented by the licensee's site QA and QC organizations was reviewed.

4.1 Audits/Appraisals

The licensee's program for audits of radwaste/material shipment activities (including radwaste preparation and classification) was reviewed against requirements, commitments and guidance provided in:

-- 10 CFR 50, Appendix B, Criterion XVII, "Audits";

-- Technical Specification 6.5, "Review And Audit";
-- Peach Bottom Atomic Power Station, Units 2 and 3 Quality Assurance Plan; and
-- NRC-IE Information Notice 84-50, "Clarification of Scope of Quality Assurance Programs for Transport Packages Pursuant to 10 CFR 5C, Appendix B."

The licensee's performance in this area was determined by interviews of site QA personnel, examination of Quality Assurance Division Procedures for scheduling, performing, reporting and closing audits and review of Audit Reports Nos. AP 84-67HPC and AP 83-04HPC.

The inspector noted that:

-- corrective action measures initiated as a result of audit findings are reviewed for implementation on followup audits;
-- adequate QA procedures and checklists were used in auditing shipping activities; and
-- a review of the QA program was conducted in 1984 to ensure that the licensee had adequate procedures to implement the QA plan for transport packages.

Within the scope of this review, no violations were identified. The licensee has implemented an audit program for shipping activities addressing applicable criteria in 10 CFR 50, Appendix B.

4.2 Surveillance/Inspection Activities

The licensee's program for surveillance and inspection activities was reviewed against criteria provided in 10 CFR 50, Appendix B, Criterion X, "Inspections" and commitments in the licensee's approved QA plan. The licensee's performance relative to these standards was determined by interviews of site QC personnel, review of procedures and other documents and observation of QC inspection activities during Shipment No. 173-85.

The site QC organization provides surveillance and inspections covering radwaste/material shipment activities (including radwaste preparation). Detailed Monitoring Checklists have been developed for surveillance activities. Mandatory inspection hold points in plant operating procedures related to shipping require witnessing or inspection by QC personnel prior to continuation of the procedures.

Within the scope of this review, no violations were noted. The licensee has implemented a generally effective surveillance and inspection program.

4.3 Radwaste Generator QC Program

Under 10 CFR 20.311(d)(3), each licensee is required to conduct a quality control program to assure compliance with 10 CFR 61.55 and

61.56 requirements for waste classification and waste characteristics. The licensee's performance in this area was determined by:

-- review of procedures for preparation of radwaste shipments;

-- examination of records relating to shipments of dewatered resins, control rod blades and dry active waste;

-- review of actions taken regarding findings in Combined Inspection Reports Nos. 50-277/84-09; 50-278/84-09 and 50-277/84-42; 50-278/84-34; and

-- discussions with cognizant health physics and operations personnel.

Within the scope of this review, no violations were noted.

5.0 Indoctrination and Training

The general indoctrination and specific training of personnel assigned to radioactive materials shipping activities were reviewed relative to criteria provided in 10 CFR 50, Appendix B, Criterion II, "Quality Assurance Program", and commitments in the licensee's response to NRC-IE Bulletin No. 79-19, "Packaging of Low-level Radioactive Wastes for Transport and Burial". Selected training records for operations, health physics, quality control and maintenance personnel were reviewed and representatives from each group were interviewed regarding training for use of the FSV-1 cask in irradiated control rod shipments and dewatered resins in HN-100 series casks.

Within the scope of this review, no violations or deviations were noted.

6.0 Procedures

The licensee's procedures for selected shipping and receiving activities were reviewed relative to criteria provided in 10 CFR 20.205, 10 CFR 71 and Technical Specification 6.8, "Procedures", Procedures in the HPO/CO-71 series, HPO/CO-17 series and selected fuel handling procedures were reviewed to determine if instructions concerning acceptance criteria and regulatory limits were provided for:

-- receipt of shipments containing radioactive materials, i.e. previously used casks supplied by contracted vendors;

-- selection of packaging for licensee-initiated shipments;

-- preparations for shipments;

-- maintenance of packaging;

-- marking and labeling shipments and placarding vehicles;

-- monitoring shipments for radiation and contamination; and

-- providing shipments of radwaste meeting disposal site acceptance criteria.

In addition, the licensee's procedures for preparation, classification, packaging and shipping radwaste were reviewed against criteria contained in:

-- 10 CFR 20.311, "Transfer for Disposal and Manifests"; and

-- NRC-NMSS Low-level Waste Licensing Branch, "Final Waste Classification and Waste Form Technical Position Papers", (May 1983).

6.1 Health Physics/Chemistry Operating (HPO/CO) Procedures

The licensee's procedures for receipt of radioactive materials, (HPO/CO-16), shipment of radioactive materials, (HPO/CO-17 series), handling high integrity containers, (HPO/CO-70), and selected casks shipments, (HPO/CO-71 series) were reviewed and discussed with health physics personnel. Special emphasis was placed on the review of QC hold and inspection points.

Within the scope of this review, the following items were noted:

HPO/CO-17C, "Compliance with 10 CFR Part 61", Revision 0 (March 19, 1984) contained several errors in technical content:

-- Section B, (Page 2), referred to Appendix D, however, the correct reference was Appendix C of the procedure;

-- Section D, (Page 4), indicated that a description of the Atomic Industrial Forum's method of waste classification was provided in Appendix C, but it was not;

-- Section F.1.d (Page 6) omitted the words, "explosive reaction", while discussing requirements in 10 CFR 61.56(a)(4);

-- Appendix A, Table 1 "Classification of Wastes" did not list Nb-94 and had incorrect units for transuranic materials with half lives greater than 5 years (i.e. Pu-241 and Cm-242) listing those materials in curies per cubic meter instead of nanocuries per gram; and

-- Appendix A, Table 2 listed incorrect Class B limits for Sr-90, incorrect Class C limits for Sr-90 and an incorrect limit for unacceptable levels of Sr-90.

In addition, HPO/CO-17C failed to discuss 10 CFR 61.55(a)(5) concerning classification by long and short-lived radionuclides and the "sum of the fractions" rules in 10 CFR 61.55(a)(7).

These errors in technical content in HPO/CO-17C were discussed with the licensee and will be reviewed in a subsequent inspection, 50-277/85-31-01; 50-278/85-28-01.

6.2 Fuel Handling (FH) Procedures

The following fuel handling procedures related to the preparation, packaging and shipping of irradiated control rod blades were reviewed:

-- FH-48A, "Control Rod Corner Shearing Procedure", Revision 2, (May 15, 1985);

-- FH-48B, "Control Rod Burial Liner Loading Procedure", Revision 3, (June 13, 1985);

-- FH-48C, "Handling of the FSV-1 Casks", Revision 13, (July 24, 1985); and

-- FH-48D, "Radiation Survey of Spent Control Blades", Revision 0, (March 7, 1984).

Previous revision (to Revision 0) of FH-48A, FH-48B and FH-48C were also reviewed to note developments technical changes in the licensee's handling and shipping of irradiated control rod blades since 1983.

Within the scope of this review, the following items were noted:

-- FH-48C failed to provide acceptance criteria for radiation dose rates associated with collected drainage water from the loaded FSV-1 cask at Step H-4. Although health physics technicians were required to record measured dose rates on small quantities of collected drainage water, acceptable dose rates for collected water were not provided. Acceptance criteria were necessary since the dose rates could be high if radioactive chips associated with the shearing of the satellite rollers were contained in the drainage. In addition, the collected drainage water discharged to a floor drain and the water's acceptability to the liquid radwaste shipment must be determined prior to discharge.

-- FH-48C failed to instruct crafts and quality control personnel to ensure that the entire sealing surface was "soap" tested at Step H-21. This "soap" test provides a test for cask leakage following pressurization in earlier steps. If the entire sealing surface being tested is not covered with soap solution, an uneven pressure differential is created between the pressurized cask and the surrounding atmosphere. Leakage gas would need to overcome the soap solution surface tension plus atmospheric pressure in one area and only atmospheric pressure

in unsoaped areas. The sensitivity of the leak test method could thus be compromised.

-- Final cask draining to remove water trapped in the two inverted control rods' velocity limiters at Step H-2 and succeeding steps could lead to radioactive contamination of the trunion area. See related item in Section 9.3 of this report.

These items were discussed with the licensee and will be reviewed in a subsequent inspection. 50-277/85-31/02; 50-278/85-28-02.

6.3 QC Procedures

The following Detailed Monitoring Checklist (DMC) used by QC inspectors reviewing radwaste preparation and shipping operations were reviewed:

-- DMC 4.1, "Radwaste Shipping", (August 27, 1984);
-- DMC 4.2, "Radwaste Packaging and Storage", (March 1984); and
-- DMC 4.3, "Radwaste Solidification", (April 3, 1984).

Within the scope of this review, no items of noncompliance were noted.

7.0 Procurement and Reuse of Packagings

The licensee's program for selection of packages was reviewed against requirements of 10 CFR 71.12, "General License: NRC Approved Package", and the DOT requirements of 49 CFR 173, "Shippers - General Requirements for Shipments and Packagings". Records for 21 shipments were reviewed and discussed with the licensee to determine that:

-- for shipment in packages which the licensee had registered to use, the licensee possessed copies of the specific NRC or Agreement State Certificate of Compliance, drawings, procedures and referenced documents;

-- the licensee's practices regarding use and maintenance were in accordance with the applicable certificates and other documents referenced in the certificate; and

-- for NRC-certified packages, the licensee had registered with NRC-NMSS prior to the first use of the package.

Within the scope of this review, no violations were identified.

8.0 Implementation

The implementation of the licensee's program for transportation of radioactive material was reviewed against criteria contained in 10 CFR 71, 49 CFR 172-173 and the licensee's procedures. For radwaste shipments,

criteria in 10 CFR 20.311 and 10 CFR 61.55 and 61.56 were also used in the review. Each shipment examined was reviewed to determined the adequacy of:

-- radiation and contamination measurements;
-- shipping paper documentation;
-- package marking and labeling;
-- loading and storage of packages;
-- vehicle placarding; and
-- notification to state agencies for shipments of radwaste (as applicable under 10 CFR 71.97).

The licensee's performance relative to these requirements was determined by:

-- observation of shipment No. 173-85 (dewatered resin shipment);
-- review of shipping records and other documents related to 8 Low Specific Activity (LSA) solidified drum and dry active waste box shipments, 8 irradiated control rod blade shipments in 1984 and 1985 and 5 Certificate of Compliance cask shipments of dewatered resins; and

-- discussion with licensee personnel.

Within the scope of this review, no violations were noted.

9.0 Incidents

Three problems associated with radwaste shipments reported by the licensee were reviewed to determine that:

-- the event was reported in a timely manner;
-- the report made by the licensee was adequate;
-- the licensee took prompt corrective actions; and
-- those corrective actions were adequate to prevent recurrence.

9.1 Shipment No. 103-85 (Solidified Waste Drum)

On May 30, 1985, a representative of the State of Washington, Department of Social and Health Services identified a "puncture hole" in Drum No. S-146-85 (one of a number of low specific activity (LSA) drums in Shipment No. 103-85). This problem was the subject of enforcement action by the State of Washington and a Notice of Violation from the NRC (see Combined Inspection Report Nos. 50-277/85-27; 50-278/85-25).

Actions taken by the licensee to identify the cause(s) of this problem and to take corrective action were reviewed. The licensee verified that a "puncture hole" in Drum No. S-146-85 was present and postulated that it was caused by fork lift handling devices used by the licensee. Corrective actions included:

-- revision of HPO/CO-71G, "Loading of a Radioactive Waste Shipping Van", and HPO/CO-71I, "Solidification, Packaging and Inspection of Liquid and Materials in Preparation for Shipment", to reduce the likelihood of damage during handling preparatory to shipment;

-- examination of fork lift handling devices for possible causes;

-- precautionary instructions to fork lift operators; and

-- increased attention by QC personnel.

Although the licensee's actions appeared to be adequate, it was unclear that handling preparatory to shipment had punctured the drum.

9.2 Shipment No. 145-85 (FSV-1 Cask)

On July 7, 1985, an FSV-1 cask containing 4 irradiated control rod blades was sent for disposal at the low-level waste burial site in South Carolina. Shipping papers sent with shipment indicated that the cask contained 4 irradiated control rod blades in cask liner No. 10. In reality, cask liner No. 98 had been loaded and shipped in the FSV-1 cask. The differences between the original shipping papers description and the actual description of the shipment are shown below:

	Original Shipping Papers	Actual Shipment
°Liner No.	10	98
°Total Activity	4,984.6 curies	7,643.5 curies
°Tritium Activity	166.26 "	224.6 "
°Carbon-14	0.194 "	0.269 "
°Technetium-99	0.0047 "	0.0065 "
°Iodine-129	4.8E-8 "	4.8E-8 "
°Waste class	C	C
°Dose Rate (liner contact R/hr)	12,300.	19,600.

Advance notification to the states (under 10 CFR 71.97) sent by the licensee's Reactor Engineering group on June 28, 1985 correctly indicated a total activity of 7,645 curies and reflected the radionuclidic activities in liner No. 98. The original shipping papers contained a certification that the transport materials were properly described in the shipping manifest (shipping papers). The following violations associated with Shipment No. 145-85 were identified:

-- 10 CFR 71.5(a) requires each licensee who delivers licensed material to a carrier for transport to comply with the requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Parts 170

through 189. 49 CFR 176.203(d)(iii) requires that the activity contained in each shipment be included in the shipping papers.

Contrary to these requirements, shipping papers accompanying Shipment No. 145-85 on July 7-9, 1985, incorrectly listed the individual radionuclide activities and the total activity. Failure to include accurate activities in Shipment No. 145-85 shipping papers constitutes a violation of 10 CFR 71.5(a) 50-277/85-31-03; 50-278/85-28-03.

-- 10 CFR 20.311(c) requires, in part, that each shipping manifest include a certification by the waste generator that the transported materials are properly described.

Contrary to this requirement, the shipping manifest accompanying shipment No. 145-85 on July 7-9, 1985, certified that the transported materials were properly described when the individual and total activities of the radionuclides listed on the shipping, manifest were incorrect. Certification that the transported materials were properly described when the individual activities and total activity in shipment were incorrectly listed constitutes a violation of 10 CFR 20.311(c). 50-277/85-31-04; 50-278/85-28-04.

On July 9, 1985, during discussions between Reactor Engineering and Health Physics personnel, the licensee recognized that shipping papers and manifests accompanying shipment No. 145-85 were incorrect. The following corrective actions were taken:

-- Shipping papers and manifests reflecting the correct activities were prepared;

-- The low-level waste burial site was telephoned and requested to hold Shipment No. 145-85 to prevent removal and burial of the liner;

-- A physicist was sent to South Carolina on July 9, 1985 with the corrected shipping papers and waste manifest;

-- The licensee informed the Senior Resident Inspector of the problem on July 9, 1985;

-- Procedure HPO/CO-71Y, "Shipment of the FSV-1", Revision 0, (July 24, 1985) was prepared which provided a verification by Health Physics and QC personnel that the liner serial number in the FSV-1 cask was consistent with the serial number on the shipping papers and waste manifest;

-- Procedure FH-48C, "Handling of the FSV-1 Cask", was revised to include a QC verification of liner serial number (Step F-2 of the procedure); and

-- The licensee suspended control rod blade shipments voluntarily until the corrective measures were in place.

The inspector noted that the safety significance of this incident was lessened by the following considerations:

-- actions to be taken in the event of a mishap in transport would not have been significantly affected by the errors in total activity and liner contact radiation levels; and

-- actions to prevent exposure at the low-level waste burial site for these shipments are based on contact liner dose rates up to 30,000 R/hr.

9.3 Shipment No. 169-85 (FSV-1 Cask)

On July 26, 1985, the licensee shipped a FSV-1 cask containing 4 irradiated control rod blades to the low-level waste disposal site in South Carolina. On July 30, 1985, the licensee reported that representatives of the low-level burial site had discovered removable radioactive contamination on the trunion cup area of the FSV-1 cask/trailer interface. This area is accessible for contamination measurements only when the cask is separated from the trailer. The contamination levels reported by the low-level waste burial site operator were 18,000 disintegrations per minute per 100 centimeters squared (dpm/100^2), 32,000 dpm/100cm^2, and 48,000 dpm/100cm^2. On July 30, 1985, a physicist and a test engineer were sent to the low-level waste burial site by the licensee to investigate the contamination.

On July 31, 1985, the physicist reported that measurements made by the licensee confirmed the presence of removable contamination on the trunion cup area of the FSV-1 cask/trailer interface. Other areas of the FSV-1 cask and trailer were uniformly measured to be less than 1,000 dpm/100cm^2 removable contamination. Recorded removable contamination measurements made by the licensee on July 26, 1985, also showed less than 1,000 dpm/100 cm^2 on the accessible areas of the FSV-1 cask and trailer immediately prior to shipment. However, the trunion cup had not been measured for removable contamination since the loaded cask had been joined to the trailer.

During the licensee's review of the events surrounding the removable contamination, a contractor health physics technician reported that he had observed residual water in the vent/drain operation as the venting apparatus was being removed. The vent/drain operation removes residual fuel pool water retained by the two inverted control rods' velocity limiters. During this operation, the cask and trunion cup are mated and the cask is lowered from a vertical orientation to one approximately 30 degrees from the horizontal. Nitrogen gas

pressure is applied to expel the final residual fuel pool water in the velocity limiters which has been mobilized by placing the cask at the 30 degree angle to the horizontal. Removal of the vent tube causes the escape of small amounts of retained fuel pool water. The vent tube apparatus is positioned in an area that would allow drainage between the cask and the trunion cup area.

On August 6, 1985, the NRC Region II State Agreement Officer contacted the South Carolina Department of Health and Environmental Control. The State of South Carolina's radiological controls personnel have evaluated the removable radioactive contamination associated with Shipment No. 169-85. No action was taken by the state because the surface contamination was not accessible because (1) it was located inside the trunion cup and (2) the area was wrapped.

The following violation associated with Shipment No. 169-85 was noted:

-- 10 CFR 71.87(i)(2) requires, in part, that levels of non-fixed (removable) radioactive contamination on the external surfaces of each package offered for shipment as exclusive use shipments not exceed 220 dpm/cm^2 at any time during transport.

Contrary to this requirement, non-fixed radioactive contamination in the trunion cup area of the FSV-1 cask/trailer used in Shipment No. 169-85 to the low-level waste burial site in South Carolina exceeded 220 dpm/cm^2 on July 30, 1985, upon arrival. Non-fixed radioactive contamination was measured to be 320 and 480 dpm/cm^2. The presence of non-fixed radioactive contamination on Shipment No. 169-85 exceeding 220 dpm/cm^2 upon arrival at the low-level waste burial site constitutes a violation of 10 CFR 71.87(i)(2). 50-277/85-31-05; 50-278/85-28-05. The inspector noted that the presence of the removable radioactive contamination in the trunion cup area presented little risks to the public since the area is inaccessible during transport. However, the removable contamination was accessible during cask unloading and presented a radioactive contamination problem to the low-level waste burial site operators.

10.0 Exit Interview

The inspector met with the licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection. The inspector summarized the scope of the inspection and the findings. The inspector expressed his concern over the problems noted in the control rod blade shipments. The licensee's representative indicated that licensee management shared that concern and intended to take additional action to identify and correct the causes for the problem.

At no time during this inspection was written material provided to the licensee by the inspector. No information except from disclosure under 10 CFR 2.790 is discussed in this report.

Transaction Type

M-3

NRC:1 Form 6 Rev. Oct 80 (Side 1)

- [X] New Item
- [ ] Modify
- [ ] Delete

OUTSTANDING ITEMS FILE
SINGLE DOCKET ENTRY FORM

Docket #: 50-277

Bicehouse
Originator

W. Pasciak
Reviewing Supervisor Name

Item Number	Type	Module #	Area	Resp	Action Due Date (MM-DD-YY)	Updt/Clsout Rpt #	Date O/M/Clsd (MM-DD-YY)
85-31-05	NC3	86721	ROP	R/R	11-01-85	- -	08-01-85

Originator: Bicehouse

Modifier/Closer:

Descriptive Title

contamination exterior surface FSV-1 cask >220 dpm/cm2-10CFR 71.87(i)(2)

Item Number	Type	Module #	Area	Resp	Action Due Date (MM-DD-YY)	Updt/Clsout Rpt #	Date O/M/Clsd (MM-DD-YY)
- -				/	- -	- -	- -

Originator:

Modifier/Closer:

Descriptive Title

Item Number	Type	Module #	Area	Resp	Action Due Date (MM-DD-YY)	Updt/Clsout Rpt #	Date O/M/Clsd (MM-DD-YY)
- -				/	- -	- -	- -

Originator:

Modifier/Closer:

Descriptive Title

Item Number	Type	Module #	Area	Resp	Action Due Date (MM-DD-YY)	Updt/Clsout Rpt #	Date O/M/Clsd (MM-DD-YY)
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Originator:

Modifier/Closer:

Descriptive Title

NRC:1 Form 6 Rev. Oct 80 (Side 1)

Transaction Type

- [X] New Item
- [ ] Modify
- [ ] Delete

OUTSTANDING ITEMS FILE
SINGLE DOCKET ENTRY FORM

Docket # 50-277

Bicehouse — Originator

W. Pasciak — Reviewing Supervisor Name

Item Number	Type	Module #	Area	Resp	Action Due Date (MM DD YY)	Updt/Clsout Rpt #	Date O/M/Clsd (MM DD YY)
85-31-01	IFI	86721	RDP	R/R	11-01-85		08-01-85

Originator: Bicehouse

Modifier/Closer:

Descriptive Title: Revise HPCI/CO-17C to remove technical content errors

Item Number	Type	Module #	Area	Resp	Action Due Date (MM DD YY)	Updt/Clsout Rpt #	Date O/M/Clsd (MM DD YY)
85-31-02	IFI	86721	RDP	R/R	11-01-85		08-01-85

Originator: Bicehouse

Modifier/Closer:

Descriptive Title: Revise FH-84C to include acceptance criteria and eliminate containment isolation external to FSV-1 cask

Item Number	Type	Module #	Area	Resp	Action Due Date (MM DD YY)	Updt/Clsout Rpt #	Date O/M/Clsd (MM DD YY)
85-31-03	NC3	86721	RDP	R/R	11-01-85		08-01-85

Originator: Bicehouse

Modifier/Closer:

Descriptive Title: Failure to include accurate activities in shipping papers-10 CFR 71.5(a)

Item Number	Type	Module #	Area	Resp	Action Due Date (MM DD YY)	Updt/Clsout Rpt #	Date O/M/Clsd (MM DD YY)
85-31-04	NC5	86721	RDP	R/R	11-01-85		08-01-85

Originator: Bicehouse

Modifier/Closer:

Descriptive Title: Improper certifications on radwaste shipment manifest-10 CFR 20.311(c)

Transaction Type

☐ New Item

☒ Modify

☐ Delete

M-3

NRC:1 Form 6 Rev. Oct 80 (Side 1)

OUTSTANDING ITEMS FILE
SINGLE DOCKET ENTRY FORM

Docket # 50-277

Bicehouse — Originator

W. Pascali — Reviewing Supervisor Name

Item Number	Type	Module #	Area	Resp	Action Due Date (M M D D Y Y)	Updt/Clsout Rpt #	Date O/M/Clsd (M M D D Y Y)
84-07-05				/	- -	85-31-0	08-01-83

Originator: | Modifier/Closer: Bicehouse

Descriptive Title:

Item Number	Type	Module #	Area	Resp	Action Due Date (M M D D Y Y)	Updt/Clsout Rpt #	Date O/M/Clsd (M M D D Y Y)
84-12-02				/	- -	85-31-0	08-31-85

Originator: | Modifier/Closer: Bicehouse

Descriptive Title:

Item Number	Type	Module #	Area	Resp	Action Due Date (M M D D Y Y)	Updt/Clsout Rpt #	Date O/M/Clsd (M M D D Y Y)
84-12-03				/	- -	85-31-0	08-01-85

Originator: | Modifier/Closer: Bicehouse

Descriptive Title:

Item Number	Type	Module #	Area	Resp	Action Due Date (M M D D Y Y)	Updt/Clsout Rpt #	Date O/M/Clsd (M M D D Y Y)
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Originator: | Modifier/Closer:

Descriptive Title: