

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-264/85002

Docket No. 50-264

License No. R-108

Safeguards Group V

Licensee: Dow Chemical Company  
Building 1803  
Midland, MI 48640

Facility Name: Dow TRIGA Research Reactor Facility

Inspection At: Dow TRIGA Research Reactor Facility, Building 1602  
Midland, MI

Inspection Conducted: June 3-4, 1985

Date of Last Material Control and Accounting Inspection: April 5 and 6, 1983

Type of Inspection: Unannounced Material Control and Accounting Inspection

Inspectors: *J. R. Knealey for*  
J. L. Belanger  
Physical Security Inspector

6/12/85  
Date

*J. R. Knealey for*  
T. J. Madeda  
Physical Security Inspector

6/12/85  
Date

Approved By: *J. R. Knealey for*  
J. R. Creed, Chief  
Safeguards Section

6/12/85  
Date

Inspection Summary

Inspection on June 3-4, 1985 (Report No. 50-264/85002(DRSS))

Areas Inspected: Special Nuclear Materials Control and Accountability Inspection including possession and use of SNM and control and accounting of SNM. The inspection involved ten inspector-hours onsite by two NRC inspectors and was begun during regular hours.

Results: The licensee was found to be in compliance with NRC requirements in the areas examined during the inspection. The licensee's program for controlling and accounting of Special Nuclear Material was found to be adequate.

(Attachment - 10 CFR 2.790(d) INFORMATION)

ATTACHMENT CONTAINS  
10 CFR 2.790(d) INFO

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PDR ADOCK 05000264  
Q PDR

## REPORT DETAILS

### 1. Key Persons Contacted

In addition to the key members of the licensee's staff listed below, the inspectors interviewed other licensee employees and members of the MC&A organization. The asterisk (\*) denotes those present at the Exit Meeting.

\*D. Berry, Reactor Committee Chairman, Research Manager

\*C. W. Kocher, Reactor Supervisor

\*T. W. Parsons, Senior Industrial Hygienist

G. Erndahl, Radiation Safety Officer

### 2. Followup on Previous Inspection Findings (MC 92701, 92702, 92703)

There were no violations, unresolved or open items noted on the previous inspection. (Inspection Report 50-264/83001)

### 3. Entrance and Exit Interviews (MC 30703):

At the beginning of the inspection, the most senior material control and accountability (MC&A) organization management representative available was informed of the functional areas to be examined and the purpose of this visit. No written material pertaining to the inspection was left with licensee.

The inspectors met with the licensee representatives denoted in Section 1 at the conclusion of the inspection on June 4, 1985. A brief description of the scope of the inspection was provided. Listed below is a brief description of the subjects discussed and the expressed positions of licensee management.

Two recommendations to improve the licensee's MC&A program were discussed. The first recommendation by the inspectors concerned the updating of MC&A procedures to accurately reflect the actual MC&A program that is being implemented. The latter recommendation requested that licensee personnel responsible for filing 741's (Nuclear Material Transaction Reports) review updated instructions for NUREG/BR-006, Revision 2 (Instructions for Completing 741's) which became effective March 1, 1985. The licensee agreed to both of the recommendations.

No violations, deviations, unresolved or open items were identified during the Material Control and Accounting Inspection. Exhibit A, which is enclosed with the report reflects the enriched Uranium activity for the inspection period.

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10 CFR 2.790(d) INFO

4. Clear Functional/Program Areas Inspected:

Listed below are the areas which were examined by the inspectors within the scope of this inspection in which no violations, deviations, unresolved or open items were identified. The areas were reviewed and evaluated as deemed necessary by the inspectors generally using the specified Section 02 "Inspection Requirements" of the applicable Office of Inspection and Enforcement, Inspection procedure. The inspectors also pursued matters deemed appropriate in addition to the listed "Inspection Requirements."

Our sampling reviews included interviews with cognizant individuals, observation of activities, testing of equipment and procedure implementation, and record reviews. The depth and scope of these activities were conducted and deemed appropriate and necessary for the Program Area and current operational status of the security system.

Number      Functional/Program Area and Inspection Requirements Reviewed

85012      Material Control and Accounting - Reactors: (01) Possession and Use of SNM; (02) Control and Accounting of SNM.

5. Material Control and Accounting - Reactors (MC 85012): Two inspector recommendations were identified and presented to the licensee regarding updating procedural requirements of their MC&A program.

- a. Inspection review showed that Sections 8 and 9 of Part 3.4.3 of the Instruction Manual for the Dow TRIGA Research Reactor implied that uranium burnup adjustments shall not be made more frequently than once every two years on material status reports (742's) and that transfers or receipts shall be reported to NRC Region III. Inspection review showed that both of these requirements are outdated and require procedural updating. Inspection results showed that in actual practice the licensee is recording and filing burnup as required by the regulation (10 CFR 70.54) and that receipts or transfers would be sent to the appropriate office. Based on our findings the licensee has agreed to review the entire MC&A procedure and to update the two sections in question and update other sections that may need modification. The licensee stated the review and update would be completed by December 1, 1985.
- b. Review of 741's (Transfer Reports) showed that the licensee was not documenting this action code portion of 741's for onsite losses. NUREG/BR-0006, Revision 2, at Section II.7 states that this action code block is used to identify this type of transaction event being reported on the 741. M is the letter designation to be used in reporting a one-party transaction such as burnup. Inspection results showed that the licensee was not aware that the action code block was required to be filled out. This type of failure does not represent a violation since the actual burnup figures were properly

submitted but was a failure to properly document the form from an administrative view point. Based on our findings the licensee has agreed that the personnel responsible for submitting 741's will review the reporting instructions in NUREG/BR-006 to assure that all future 741's are properly filled out.

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10 C.R. 2.7.10(D) INFO