

NRC FORM 327
(10-88)
10 CFR § 70.51(e)(5)
and 74.31(c)(4)

RETURN TO 396-SS
70-687
2.790

DOCKETED
USNRC
OCT 10 1989

**SPECIAL NUCLEAR MATERIAL (SNM)
PHYSICAL INVENTORY SUMMARY REPORT**

U.S. NUCLEAR REGULATORY COMMISSION
Approved by OMB
3150-0139
Expires 11-30-89

LICENSEE NAME: CintiChem, Inc. NMSS MAIL SECTION DOCKET CLERK
FACILITY LOCATION: P.O. Box 8176, Tuxedo, NY 10987-0816

DOCKETED
USNRC
OCT 10 1989
NMSS MAIL SECTION DOCKET CLERK

DESCRIPTION	GRAMS ELEMENT (U or Pu)	GRAMS ISOTOPE (U-233, U-235, or Pu-239 + Pu-241)	DOCKET NUMBER 70-687
BEGINNING INVENTORY	18332	17088	LICENSE NUMBER SNM-639
RECEIPTS Feeds	3323	3094	REPORTING PERIOD FROM 01/05/89 TO 03/02/89
SHIPMENTS	-	-	SPECIAL NUCLEAR MATERIAL CATEGORY <input checked="" type="checkbox"/> HEU <input type="checkbox"/> Pu <input type="checkbox"/> U-233 <input type="checkbox"/> LEU
MEASURED DISCARDS Waste	335	312	LICENSEE'S CERTIFYING OFFICIAL <i>Lowell C. Thelin</i> DATE 3-31-89
ENDING INVENTORY	21161	19727	
NET SUM OF BIASES pertaining to but not included in the above quantities*	±	±	DESCRIPTION
PRIOR PERIOD ADJUSTMENTS**	±	±	GRAMS ELEMENT
			GRAMS ISOTOPE
INVENTORY DIFFERENCE (ID) (The algebraic sum of the above values.)	± (+) 159	± (+) 143	STANDARD ERROR OF THE ID (SEID)
			SEID LIMIT
			ID LIMIT

*If the net sum of all biases is positive, circle the "-" sign; if the net sum of all biases is negative, circle the "+" sign.
**If the sum of prior period adjustments increases the ID, circle the "-" sign, if the sum of prior period adjustments decreases the ID, circle the "+" sign.

ATTACH EXPLANATIONS OR COMMENTS TO THIS FORM ON CORPORATE LETTERHEAD

DEFINITIONS OF QUANTITIES REPORTED

BEGINNING INVENTORY: The quantity of SNM present at the facility as of the beginning of business on the first day of the period covered by the report. This quantity must agree with the ending inventory value (element and isotope) on the last report submitted.

RECEIPTS: The quantity of SNM received at the facility and other increases resulting from the introduction of additional SNM into the inventory during the reporting period.

SHIPMENTS: The quantity of SNM that was shipped from the facility during the reporting period. This includes any samples shipped for off-site analysis and parts of SNM receipts that were returned to the shipper. Measured discards are not to be included, even if shipped during the reporting period for disposal.

MEASURED DISCARDS: The quantity of SNM in the forms of gaseous, liquid and solid waste that has been discarded from the plant during the reporting period. This quantity includes the amounts of discarded SNM that have been transferred to an official holding account, released to the environment under license conditions or methods approved pursuant to 10 CFR 20, or shipped to an authorized recipient for disposal.

ENDING INVENTORY: The quantity of SNM that is indicated to be present at the facility as the result of the physical inventory.

BIAS: A fixed error which remains constant over replicated measurements. (Refer to the license conditions for specific operational procedures for calculating bias.)

PRIOR PERIOD ADJUSTMENTS: The quantity of SNM, increment or decrement, by which the centralized record system was adjusted during the current reporting period for verifiable corrections that were applicable to prior reporting periods. Typically, this quantity will involve corrections of shipments and receipts to reconcile shipper-receiver differences, or corrections of errors associated with the beginning inventory that were detected after the previous report was submitted. Any bias adjustments associated with these corrections should be included.

STANDARD ERROR OF THE INVENTORY DIFFERENCE (SEID): The standard deviation of an inventory difference that takes into account measurement error contributions to the components of the ID.

SEID LIMIT: The applicable quantity in 10 CFR 70.51(e)(5), 10 CFR 74.31(c)(4), 10 CFR 74.59(f)(5) or another quantity assigned to the licensee by the NRC.

ID LIMIT: The applicable quantity in 10 CFR 74.13(b)(1), 10 CFR 74.31(c)(5), 10 CFR 74.59(f)(1)(i) or another quantity assigned to the licensee by the NRC. If exceeded, this quantity of material would prompt an investigation and possibly the submittal of a subsequent special report to the NRC.

8910190046 890302
CF ADDOCK 07000687
CNU

DFX2

25985

FROM 01/05/89 THRU 03/02/89

(ZWN-VAQ) Waste Shipment

(FORM 741)

<u>#</u>	<u>DATE</u>	<u>(E)</u>	<u>(I)</u>	<u>(E)</u>	<u>(I)</u>
612	02/20/89	183.64	171.09	184	171
613	02/27/89	150.89	140.52	151	141
	TOTAL	334.53	311.61	335	312

(FZF-ZWN) Results U²³⁵ (Feeds)

193	01/12/89	657.45	612.50	657	613
194	01/25/89	661.75	615.88	662	616
195	02/09/89	664.72	618.68	665	619
196	02/16/89	664.90	619.23	665	619
197	02/23/89	671.65	625.45	672	625
	TOTAL	3320.47	3091.74	3321	3092

(CBJ-ZWB) U²³⁵ Standard

#7	01/23/89	2.00	1.87	2	2
	TOTAL	2.00	1.87	2	2

2,190

L. Thelin 3-31-89

SNM INVENTORY REPORT

Licensee: Cintichem, Inc. License No. SNM-639
 Plant: Sterling Forest Location: Tuxedo, NY
 Material Balance Period: 01/05/89 To: 03/02/89
 Physical Inventory START DATE: 03/02/89 Material Type (1): U²³⁵-720

		ELEMENT	ISOTOPE (2)
1.	Beginning Inventory	18332	17088
2.	Receipts	3323	3094
3.	Shipments	-	-
4.	Measured Discards	-	-
5.	Decay	-	-
6.	Ending Inventory	21161	19727
7.	MUF	+159	+143
8.	Calculated		
9.	Shipments to Burial	335	312
10.	Accidental Loss		
11.	Cumulative MUF (Since 5/10/74)	-1434	-874
12.	Additions to Process	3323	3094
13.	Removals From Process	335	312
14.	MUF as % of #12 or #13	47.46	45.83
15.	LEMUF as % of #12 or #13		
16.	LEMUF Specification (10 CFR 70/License Condition)		<300

NOTES: (1) Pu, U-235 (> 20%), U-235 (< 20%), U-233
 (2) Not Applicable for Pu

Lowell C. Thelin 3-31-89

REMARKS: 2.790 info

DOCKET NO. 70-687

CONTROL NO. 25985

DATE OF DOC. Mar. 31, 1989

DATE RCVD. October 10, 1989

FCUF _____

PDR _____

FCAF _____

LPDR _____

I & E REF. _____

SAFEGUARDS

FCTC _____

OTHER _____

DATE 10/10/89

INITIAL JAC