DOE/NRC FORM 742 (04-2018) MANDATORY DATA COLLECTION AUTHORIZED BY 10 CFR 30, 40, 50, 70, 72, 74, 75, 150, Public Laws 83-703, 93-438, 95-91

## U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION

MATERIAL BALANCE REPORT

APPROVED BY OMB: NO. 3150-0004

EXPIRES: 04/30/2021

Estimated burden per response to comply with this mandatory collection request: 2 hours for small licensees and 5 hours for large licensees. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0004), Office of Management and Budget, Washington, DC 20503. If a means used an information collection does not display a currently valid OMB control number, to respond to, the

	the NRC may not conduct or sponsor information collection.	
2 LICE	NSE NUMBER(S)	3. REPORTING IDENTIFICATION

FERMI NI	ATIONAL ACCELERATOR LABORATORY	2. LICENSE NOWIBER(S)		SYMBOL (RIS)		
			PRIME DOE CONTRACTOR		CWA	
BATAVIA		4. REPORT PERIOD (MM/DD/YYYY)		5. MATERIAL TYPE		
1	ATHY J. GRADEN, MAIL STOP 371	FROM	TO		mit separate report for each type)	
		1/1/2020	3/31/2020	AME	RICIUM-241: MT 44	
SECTION	A MATERIAL AC	COUNTABILIT	Υ			
PC SEQ			A. ELEMENT WE	IGHT	B. ISOTOPE WEIGHT	
	8. BEGINNING INVENTORY U.S. GOVT-OWNED	)	11		11	
	9. BEGINNING INVENTORY NOT U.S. GOVT-ON	NNED				
	RECEIPTS				7	
	11. PROCUREMENT FROM DOE RIS					
	FROM:					
	13. PROCUREMENT FOR THE ACCOUNT OF DO	)E				
	14. DOD RETURNS USE A	, <u> </u>				
	15. DOD RETURNS USE B	a	1.			
	16. DOD RETURNS OTHER USES					
	21. PRODUCTION					
	22. FROM OTHER MATERIALS a. ICT					
	b. ICT					
	c. ICT					
	30. RECEIPTS REPORTED TO DOE/NRC ON DOE/NRC 741 (not I	isted elsewhere)				
	FROM: RIS					
		4.004.004.004.004.004				
	·			-		
	34. RECEIPTS MISC					
-	37. PROCUREMENT BY OTHERS	OTUEDO				
	38. DONATED MATERIAL FROM U.S. GOVT TO					
	39. DONATED MATERIAL FROM OTHERS TO U. 40. TOTAL (Lines 8-39)		11		11	
	REMOVALS		11		11	
	41. EXPENDED IN SPACE PROGRAMS					
	42. SALES TO U.S. GOVT RIS TO:	3				
	TO:		2.4.484.4481			
	43. SALES TO OTHERS FOR THE ACCOUNT OF U.S. GOVT RIS	3				
	TO:					
	44. DOD USE A	AMPARA CONTRACTOR CONT				
	45. DOD USE B					
	46. DOD OTHER USES					
	47. EXPENDED IN U.S. GOVT TESTS					
	48. ROUTINE TESTS					

RIS

TO:

49. SHIPPER -- RECEIVER DIFFERENCE

51. SHIPMENTS REPORTED TO NRC/DOE ON NRC/DOE 741 (not listed elsewhere)

## DOE/NRC FORM 742

(04-2018) 10 CFR 30, 40, 50, 70, 72, 74, 75, 150, Public Laws 83-703, 93-438, 95-91

#### U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION

## MATERIAL BALANCE REPORT (Continued)

SEC	TION	(Continued)	MATERIAL ACCOUNTABIL	ITY	
PC	SEQ			A. ELEMENT WEIGHT	B. ISOTOPE WEIGHT
		54. SHIPMENTS - MISC	*		
		58. DONATED MATERIAL - TO U	J.S. GOVT BY OTHERS		
		59. DONATED MATERIAL - TO C	THERS BY U.S. GOVT		
		65. ROUNDING ADJUSTMENT	že.		
		71. DEGRADATION TO OTHER MATE	RIALS a. ICT		
			b. ICT		
		72. DECAY		0.0043	0.0043
		73. FISSION AND TRANSMUTAT	ION		
		74. NORMAL OPERATIONAL LOS	SSES/MEASURED DISCARDS		
		75. ACCIDENTAL LOSSES			
Photocolomics		76. APPROVED WRITE-OFFS			
	***************************************	77. INVENTORY DIFFERENCE			
		80. ENDING INVENTORY - U.S.	GOVT OWNED	11	11
		81. ENDING INVENTORY - NOT	U.S. GOVT OWNED		
		82. TOTAL (Lines 41-81)		11	11
		83. BIAS ADJ <b>USTMEN</b> T			
SEC	TION I	3	FOREIGN OBLIGATIONS	, }	
PC	SEQ	1. COUNTRY O		2. ELEMENT WEIGHT	3. ISOTOPE WEIGHT
10	OLG	J. W. I. GOUNHATING	FUBLIGATION	Z. LLLIVILIYI VVLIGITI	3. IGOTOLE VVLIGITI
					-
		4. TOTAL	WEIGHT		
SEC	TION		CERTIFICATION		
To th	e best o	of my knowledge and belief, the info	rmation given above and in any a	ttached schedules is true,	complete, and correct.
	IRF (See i	nstructions for provisions on confidentially)	TITLE		DATE
0,0,0,	Ka	1/ /	ERMILAB NUCLEAR MATERIAL	S REPRESENTATIVE	3/9/2020
	***************************************				

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL, AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECTS. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

DOE/NRC FORM 742 (04-2018) MANDATORY DATA COLLECTION AUTHORIZED BY 10 CFR 30, 40, 50, 70, 72, 74, 75, 150, Public Laws 83-703, 93-438, 95-91

## U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0004

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### **MATERIAL BALANCE REPORT**

51. SHIPMENTS REPORTED TO NRC/DOE ON NRC/DOE 741 (not listed elsewhere)

 REPORTING IDENTIFICATION SYMBOL (RIS) 2. LICENSE NUMBER(S) 1. NAME AND ADDRESS FERMI NATIONAL ACCELERATOR LABORATORY PRIME DOE CONTRACTOR | CWA P.O. BOX 500 BATAVIA, IL 60510 5. MATERIAL TYPE 4. REPORT PERIOD (MM/DD/YYYY) (Submit separate report for each type) ATTN: KATHY J. GRADEN, MAIL STOP 371 FROM Depleted Uranium: MT 10 1/1/2020 3/31/2020 SECTION A MATERIAL ACCOUNTABILITY B. ISOTOPE WEIGHT PC | SEQ A. ELEMENT WEIGHT 8. BEGINNING INVENTORY -- U.S. GOVT-OWNED 261,300 523 9. BEGINNING INVENTORY -- NOT U.S. GOVT-OWNED **RECEIPTS** 11. PROCUREMENT FROM DOE FROM: 13. PROCUREMENT -- FOR THE ACCOUNT OF DOE 14. DOD RETURNS -- USE A 15. DOD RETURNS -- USE B 16. DOD RETURNS -- OTHER USES 21. PRODUCTION 22. FROM OTHER MATERIALS a. ICT b. ICT c. ICT 30. RECEIPTS REPORTED TO DOE/NRC ON DOE/NRC 741 (not listed elsewhere) FROM: RIS 34. RECEIPTS -- MISC 37. PROCUREMENT BY OTHERS 38. DONATED MATERIAL -- FROM U.S. GOVT TO OTHERS 39. DONATED MATERIAL -- FROM OTHERS TO U.S. GOVT 261,300 523 40. TOTAL (Lines 8-39) REMOVALS 41. EXPENDED IN SPACE PROGRAMS 42. SALES TO U.S. GOVT RIS TO: RIS TO: 43. SALES TO OTHERS FOR THE ACCOUNT OF U.S. GOVT RIS TO: 44. DOD -- USE A 45. DOD -- USE B 46. DOD -- OTHER USES 47. EXPENDED IN U.S. GOVT TESTS 48. ROUTINE TESTS 49. SHIPPER -- RECEIVER DIFFERENCE

RIS

TO:

DOE/NRC FORM 742

(04-2018) 10 CFR 30, 40, 50, 70, 72, 74, 75, 150, Public Laws 83-703, 93-438, 95-91

### U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION

## MATERIAL BALANCE REPORT (Continued)

SEC	TION	A (Continued)	MATERIAL ACCOUNTABILI	TY	
PC	SEQ			A. ELEMENT WEIGHT	B. ISOTOPE WEIGHT
		54. SHIPMENTS MISC			
		58. DONATED MATERIAL TO	U.S. GOVT BY OTHERS		
		59. DONATED MATERIAL TO	OTHERS BY U.S. GOVT		
		65. ROUNDING ADJUSTMENT			
,		71. DEGRADATION TO OTHER MA	TERIALS a. ICT		
			b. ICT		
		72. DECAY			
		73. FISSION AND TRANSMUTA	TION		
		74. NORMAL OPERATIONAL LO	DSSES/MEASURED DISCARDS		
		75. ACCIDENTAL LOSSES			
		76. APPROVED WRITE-OFFS			
		77. INVENTORY DIFFERENCE			
		80. ENDING INVENTORY — U.S		261,300	523
		81. ENDING INVENTORY NO	T U.S. GOVT OWNED		
		82. TOTAL (Lines 41-81)		261,300	523
		83. BIAS ADJUSTMENT			
SEC	TION I	3	FOREIGN OBLIGATIONS		
PC	SEQ	1. COUNTRY	OF OBLIGATION	2. ELEMENT WEIGHT	3. ISOTOPE WEIGHT
				-	
4. TOTAL WEIGHT					
SEC	SECTION C CERTIFICATION				
To the	e best c	of my knowledge and belief, the inf	ormation given above and in any att	tached schedules is true,	complete, and correct.
SIGNAT	URE (See i	nstructions for provisions on confidentially)	TITLE		DATE
,	Kath	nstructions for provisions on confidentially)  Ty J. Livaden	FERMILAB NUCLEAR MATERIAL	S REPRESENTATIVE	3/9/2020

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# U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION

## MATERIAL BALANCE REPORT

APPROVED BY OMB: NO. 3150-0004

EXPIRES: 04/30/2021

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SECTION A MATERIAL	ACCOUNTABILIT	V	
	1/1/2020	3/31/2020	DEUTERIUM: MT 86
ATTN: KATHY J. GRADEN, MAIL STOP 371	FROM	TO	(Outsime separate report for each type)
BATAVIA, IL 60510	4. REPORT PER	IOD (MM/DD/YYYY)	5. MATERIAL TYPE (Submit separate report for each type)
	THE BOD C		
P.O. BOX 500	PRIME DOE C	CONTRACTOR	CWA
FERMI NATIONAL ACCELERATOR LABORATORY			SYMBOL (RIS)
NAME AND ADDRESS	2. LICENSE NUMBER	₹(S)	3. REPORTING IDENTIFICATION
	~		

SECTION A MATERIAL ACCOUNTABILITY				
PC	SEQ		A. ELEMENT WEIGHT	B. ISOTOPE WEIGHT
		8. BEGINNING INVENTORY U.S. GOVT-OWNED		78.8
		9. BEGINNING INVENTORY NOT U.S. GOVT-OWNED		
		RECEIPTS		
		11. PROCUREMENT FROM DOE RIS		
	~~~	FROM:		
		13. PROCUREMENT FOR THE ACCOUNT OF DOE		
		14. DOD RETURNS USE A		
		15. DOD RETURNS USE B		
		16. DOD RETURNS OTHER USES		
		21. PRODUCTION		
		22. FROM OTHER MATERIALS a. ICT		
		b. ICT		
		c. ICT		
		30. RECEIPTS REPORTED TO DOE/NRC ON DOE/NRC 741 (not listed elsewhere)	7.5	
		FROM: RIS		
		34. RECEIPTS MISC		
		37. PROCUREMENT BY OTHERS		
		38. DONATED MATERIAL FROM U.S. GOVT TO OTHERS		
		39. DONATED MATERIAL FROM OTHERS TO U.S. GOVT		
		40. TOTAL (Lines 8-39)		78.8
		REMOVALS		
		41. EXPENDED IN SPACE PROGRAMS		
		42. SALES TO U.S. GOVT RIS TO:		
		TO:		
		43. SALES TO OTHERS FOR THE ACCOUNT OF U.S. GOVT RIS		
		TO:		
	1			
		44. DOD USE A		
		45. DOD USE B		
		46. DOD OTHER USES		
		47. EXPENDED IN U.S. GOVT TESTS		
		48. ROUTINE TESTS		
		49. SHIPPER RECEIVER DIFFERENCE		
		51. SHIPMENTS REPORTED TO NRC/DOE ON NRC/DOE 741 (not listed elsewhere)		
		TO: RIS		
				The second secon

DOE/NRC FORM 742

(04-2018) 10 CFR 30, 40, 50, 70, 72, 74, 75, 150, Public Laws 83-703, 93-438, 95-91

### U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION

## MATERIAL BALANCE REPORT (Continued)

SECTION A (Continued) MATERIAL ACCOUNTABILITY					
PC	SEQ			A. ELEMENT WEIGHT	B. ISOTOPE WEIGHT
		54. SHIPMENTS - MISC			
		58. DONATED MATERIAL T	O U.S. GOVT BY OTHERS		
		59. DONATED MATERIAL T	O OTHERS BY U.S. GOVT	A STATE OF THE STA	
		65. ROUNDING ADJUSTMENT			
		71. DEGRADATION TO OTHER M	ATERIALS a ICT		
			b. ICT		
		72. DECAY			
		73. FISSION AND TRANSMUT	ATION		
		74. NORMAL OPERATIONAL	OSSES/MEASURED DISCARDS		
		75. ACCIDENTAL LOSSES			
		76. APPROVED WRITE-OFFS			
		77. INVENTORY DIFFERENCE			
		80. ENDING INVENTORY - U.	S. GOVT OWNED		78.8
		81. ENDING INVENTORY - N	OT U.S. GOVT OWNED		
		82. TOTAL (Lines 41-81)			78.8
		83. BIAS ADJUSTMENT			
SEC	TION	3	FOREIGN OBLIGATIONS	s	'
PC	SEQ	1. COUNTRY	OF OBLIGATION	2. ELEMENT WEIGHT	3. ISOTOPE WEIGHT
		,			
		4. TOT	AL WEIGHT		
SEC	TION		CERTIFICATION		
				(4	
		•	nformation given above and in any a	ttached schedules is true,	
SIGNAT	URE (See	instructions for provisions on confidentially)	TITLE		DATE
	Kath	instructions for provisions on confidentially)	FERMILAB NUCLEAR MATERIAL	LS REPRESENTATIVE	3/9/2020
-		<i>N</i>	RTIFICATE MAY BE SUBJECT TO CIVIL	AND/OD CDIMINAL DENA	LTIES NDC DECULATIONS
			E COMPLETE AND ACCURATE IN ALL		

MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.