DOE/NRC FORM 742 (94-2018) ORY 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**

# U.S. NUCLEAR REGULATORY COMMISSION

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 to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

#### **MATERIAL BALANCE REPORT**

1. NAME AND ADDRESS Fermi National Accelerator Laboratory	2. LICENSE NUMBER	(S)	3. REPORTING IDENTIFICATION SYMBOL (RIS)	
, and the second se	Prime DOE Co	ntractor	CWA	
Batavia, IL 60510	4. REPORT PERIO	OD (MM/DD/YYYY)	5. MATERIAL TYPE (Submit separate report for each type)	
ATTN: Kathy J. Graden, Mail Stop 371	FROM	то	(Submit separate report for each type)	
	04/01/2020	9/30/2020	Americium-241: MT 44	

		04/01/2020		9/30/2020	Ailici	icium-241: MT 44
SECTION A	MATERIAL ACC	OUNTABILI				
PC SEQ				ELEMENT WE	EIGHT	B. ISOTOPE WEIGHT
	8. BEGINNING INVENTORY U.S. GOVT-OWNED		11			11
	9. BEGINNING INVENTORY NOT U.S. GOVT-OWN	ED				
	RECEIPTS					
1	1. PROCUREMENT FROM DOE RIS					
	FROM:					
	2 DDOCUDEMENT FOR THE ACCOUNT OF DOC					
	3. PROCUREMENT FOR THE ACCOUNT OF DOE 4. DOD RETURNS USE A					
	5. DOD RETURNS USE B					
	6. DOD RETURNS OSE B					
	1. PRODUCTION					
	2. FROM OTHER MATERIALS a. ICT					
	b. ICT					
	c. ICT					
3(	). RECEIPTS REPORTED TO DOE/NRC ON DOE/NRC 741 (not liste	d elsewhere)				
	FROM: RIS	a cisewiicie)				
	THOM:					
3	4. RECEIPTS MISC					
	7. PROCUREMENT BY OTHERS					
	8. DONATED MATERIAL FROM U.S. GOVT TO OT	HERS				
	9. DONATED MATERIAL FROM OTHERS TO U.S.					
	0. TOTAL (Lines 8-39)		11			11
	REMOVALS					
4	1. EXPENDED IN SPACE PROGRAMS					
4	2. SALES TO U.S. GOVT RIS TO: RIS					
	TO:					
4:	B. SALES TO OTHERS FOR THE ACCOUNT OF U.S. GOVT RIS					
	TO:					
	4 DOD LISE A					
	4. DOD USE A 5. DOD USE B					
	6. DOD USE B 6. DOD OTHER USES					
	7. EXPENDED IN U.S. GOVT TESTS					
	8. ROUTINE TESTS					
	9. SHIPPER RECEIVER DIFFERENCE					
	9. SHIPPER RECEIVER DIFFERENCE I. SHIPMENTS REPORTED TO NRC/DOE ON NRC/DOE 741 (not lis	ted elsewhere)				
	TO: RIS	ica diddinidid)				
	io. No					
						<u> </u>

NRC FORM 742 (04-2018) Page 1 DOE/NRC FORM 742

(04-2018) 0, 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 ACCOUNTABIL	ITY	
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		0.0087	0.0087
		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	11	11	
		81. ENDING INVENTORY NO	T U.S. GOVT OWNED		
		82. TOTAL (Lines 41-81)		11	11
		83. BIAS ADJUSTMENT			
SEC	TION	В	FOREIGN OBLIGATIONS	8	
PC	SEQ	1. COUNTRY	OF OBLIGATION	2. ELEMENT WEIGHT	3. ISOTOPE WEIGHT
		4. TOTA	L WEIGHT		
SEC	TION	C	CERTIFICATION		
To th	e best	of my knowledge and belief, the in	formation given above and in any at	tached schedules is true,	complete, and correct.
SIGNAT	URE (See	instructions for provisions on confidentially) J. Lhaden	TITLE Fermilab Nuclear Materials Represent	ative	DATE 9/21/2020
Ē	11 mg	0,-	Terminao Nucieai Materiais Represent	au ve	
WARI	NING: F	ALSE STATEMENTS IN THIS CERTI	FICATE MAY BE SUBJECT TO CIVIL,	AND/OR CRIMINAL PENAL	TIES. 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.

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DOE/NRC FORM 742 (94-2018) ORY 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**

### U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0004 EXPIRES: 04/30/2021

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MATERIAL BALANCE REPOR	R.	0	Р	E	R	Ε	C	N	LA	Α	3	. E	١L	IΑ	R	Έ	١Τ	Α	M
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NAME AND ADDRESS     Fermi National Accelerator Laboratory	2. LICENSE NUMBER	(S)	3. REPORTING IDENTIFICATION SYMBOL (RIS)	
P.O. Box 500	Prime DOE Cor	ntractor	CWA	
Batavia, IL 60510	4. REPORT PERIO	OD (MM/DD/YYYY)	5. MATERIAL TYPE	
ATTN: Kathy J. Graden, Mail Stop 371	FROM	то	(Submit separate report for each type)	
	04/01/2020	9/30/2020	Depleted Uranium: MT 10	

		04/01/2020	9/30/2020	Deple	eted Uranium: MT 10
SECTION	A MATERIAL ACCOU	JNTABILIT	Υ		
PC SEQ			A. ELEMENT WE	IGHT	B. ISOTOPE WEIGHT
	8. BEGINNING INVENTORY U.S. GOVT-OWNED		261,300		523
	9. BEGINNING INVENTORY NOT U.S. GOVT-OWNED	)			
	RECEIPTS				
	11. PROCUREMENT FROM DOE RIS				
	FROM:				
	40 PROCUREMENT FOR THE ACCOUNT OF POE				
	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 el	sewhere)			
	FROM: RIS				
	34. RECEIPTS MISC				
	37. PROCUREMENT BY OTHERS				
	38. DONATED MATERIAL FROM U.S. GOVT TO OTHE	RS			
	39. DONATED MATERIAL FROM OTHERS TO U.S. GO				
	40. TOTAL (Lines 8-39)		261,300		523
	REMOVALS		201,200		023
	41. EXPENDED IN SPACE PROGRAMS				
	42. SALES TO U.S. GOVT RIS TO: RIS				
	TO:				
	10.				
	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				
	51. SHIPMENTS REPORTED TO NRC/DOE ON NRC/DOE 741 (not listed	elsewhere)			
	TO: RIS				
	1.0.				
PC EOPM 742 ((					

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(04,291,8)0, 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 ACCOUNTABIL	.ITY	
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	rerials a. ICT		
			b. ICT		
		72. DECAY			
		73. FISSION AND TRANSMUTA			
		74. NORMAL OPERATIONAL LC	SSES/MEASURED DISCARDS		
		75. ACCIDENTAL LOSSES			
		76. APPROVED WRITE-OFFS			
		77. INVENTORY DIFFERENCE			
		80. ENDING INVENTORY U.S.	261,300	523	
		81. ENDING INVENTORY NOT			
		82. TOTAL (Lines 41-81)		261,300	523
		83. BIAS ADJUSTMENT			
SEC	TION	В	FOREIGN OBLIGATIONS	S	
PC	SEQ	1. COUNTRY (	OF OBLIGATION	2. ELEMENT WEIGHT	3. ISOTOPE WEIGHT
		4. TOTA	L WEIGHT		
SEC	TION (	C	CERTIFICATION		
To the	e best o	of my knowledge and belief, the inf	formation given above and in any a	ttached schedules is true,	complete, and correct.
SIGNATI	URE (See	instructions for provisions on confidentially)	TITLE		DATE
	Katty	instructions for provisions on confidentially) J. Linader	Fermilab Nuclear Materials Represen	tative	9/21/2020

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.

NRC FORM 742 (04-2018) Page 2

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# **U.S. DEPARTMENT OF ENERGY**

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#### **MATERIAL BALANCE REPORT**

NAME AND ADDRESS     Fermi National Accelerator Laboratory	2. LICENSE NUMBER	(S)	3. REPORTING IDENTIFICATION SYMBOL (RIS)	
•	Prime DOE Cor	ntractor	CWA	
Batavia, IL 60510	4. REPORT PERIO	DD (MM/DD/YYYY)	5. MATERIAL TYPE	
ATTN: Kathy J. Graden, Mail Stop 371	FROM	ТО	(Submit separate report for each type)	
	04/01/2020	9/30/2020	Deuterium: MT 86	

,		04/01/2020	9/30/2020	Deuterium: MT 86
SECTION A	A MATERIAL ACCO	OUNTABILIT	ГΥ	
PC SEQ			A. ELEMENT WE	EIGHT B. ISOTOPE WEIGHT
	8. BEGINNING INVENTORY U.S. GOVT-OWNED			78.8
	9. BEGINNING INVENTORY NOT U.S. GOVT-OWNE	ΞD		
•	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)		
	FROM: RIS			
	34. RECEIPTS MISC			
	37. PROCUREMENT BY OTHERS			
	38. DONATED MATERIAL FROM U.S. GOVT TO OTH	HERS		
	39. DONATED MATERIAL FROM OTHERS TO U.S. G	TVO		
	40. TOTAL (Lines 8-39)			78.8
"	REMOVALS			<u>'</u>
	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			
	51. SHIPMENTS REPORTED TO NRC/DOE ON NRC/DOE 741 (not liste	ed elsewhere)		
	TO: RIS	2.2.2.2.2.3.0,		
	io. No			
RC FORM 742 (0				

NRC FORM 742 (04-2018) Page 1 DOE/NRC FORM 742

(04,291,8)0, 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 ACCOUNTABIL	ITY	
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			
		74. NORMAL OPERATIONAL LC	SSES/MEASURED DISCARDS		
		75. ACCIDENTAL LOSSES			
		76. APPROVED WRITE-OFFS			
		77. INVENTORY DIFFERENCE			
		80. ENDING INVENTORY U.S.		78.8	
		81. ENDING INVENTORY NOT	TU.S. GOVT OWNED		
		82. TOTAL (Lines 41-81)			78.8
		83. BIAS ADJUSTMENT			
SEC	TION	В	FOREIGN OBLIGATIONS	S .	'
PC	SEQ	1. COUNTRY (	OF OBLIGATION	2. ELEMENT WEIGHT	3. ISOTOPE WEIGHT
		4. TOTA	L WEIGHT		
SEC	TION	C	CERTIFICATION		
To th	e best o	of my knowledge and belief, the in	formation given above and in any at	tached schedules is true,	complete, and correct.
SIGNAT	URE (See	instructions for provisions on confidentially)	TITLE		DATE
	Katty	instructions for provisions on confidentially) J. Divader	Fermilab Nuclear Materials Represent	ative	9/21/2020

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