United States Nuclear Regulatory Commission

Protecting People and the Environment

NUREG/BR-0006
Revision 9

Instructions for Completing Nuclear Material Transaction Reports

(DOE/NRC Forms 741 and 740M)

Final Report

Office of Nuclear Material Safety and Safeguards

AVAILABILITY OF REFERENCE MATERIALS IN NRC PUBLICATIONS

NRC Reference Material

As of November 1999, you may electronically access NUREG-series publications and other NRC records at the NRC's Public Electronic Reading Room at http://www.nrc.gov/reading-rm.html. Publicly released records include, to name a few, NUREG-series publications; *Federal Register* notices; applicant, licensee, and vendor documents and correspondence; NRC correspondence and internal memoranda; bulletins and information notices; inspection and investigative reports; licensee event reports; and Commission papers and their attachments.

NRC publications in the NUREG series, NRC regulations, and Title 10, "Energy," in the *Code of Federal Regulations* may also be purchased from one of these two sources.

1. **The Superintendent of Documents**
   U.S. Government Publishing Office
   Washington, DC 20402-0001
   Internet: http://bookstore.gpo.gov
   Telephone: 1-866-512-1800
   Fax: (202) 512-2104

2. **The National Technical Information Service**
   5301 Shawnee Road
   Alexandria, VA 22161-0002
   http://www.ntis.gov
   1-800-553-6847 or, locally, (703) 605-6000

A single copy of each NRC draft report for comment is available free, to the extent of supply, upon written request as follows:

U.S. Nuclear Regulatory Commission
Office of Administration
Multimedia, Graphics and Storage & Distribution Branch
Washington, DC 20555-0001
E-mail: distribution.resource@nrc.gov
Facsimile: (301) 415-2289

Some publications in the NUREG series that are posted at the NRC's Web site address http://www.nrc.gov/reading-rm/doc-collections/nuregs are updated periodically and may differ from the last printed version. Although references to material found on a Web site bear the date the material was accessed, the material available on the date cited may subsequently be removed from the site.

Non-NRC Reference Material

Documents available from public and special technical libraries include all open literature items, such as books, journal articles, transactions, *Federal Register* notices, Federal and State legislation, and congressional reports. Such documents as theses, dissertations, foreign reports and translations, and non-NRC conference proceedings may be purchased from their sponsoring organization.

Copies of industry codes and standards used in a substantive manner in the NRC regulatory process are maintained at—

The NRC Technical Library
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852-2738

These standards are available in the library for reference use by the public. Codes and standards are usually copyrighted and may be purchased from the originating organization or, if they are American National Standards, from—

American National Standards Institute
11 West 42nd Street
New York, NY 10036-8002
http://www.ansi.org
(212) 642-4900

Legally binding regulatory requirements are stated only in laws; NRC regulations; licenses, including technical specifications; or orders, not in NUREG-series publications. The views expressed in contractor-prepared publications in this series are not necessarily those of the NRC.

The NUREG series comprises (1) technical and administrative reports and books prepared by the staff (NUREG-XXXX) or agency contractors (NUREG/CR-XXXX), (2) proceedings of conferences (NUREG/CP-XXXX), (3) reports resulting from international agreements (NUREG/IA-XXXX), (4) brochures (NUREG/BR-XXXX), and (5) compilations of legal decisions and orders of the Commission and Atomic and Safety Licensing Boards and of Directors' decisions under Section 2.206 of NRC's regulations (NUREG-0750).

DISCLAIMER: This report was prepared as an account of work sponsored by an agency of the U.S. Government. Neither the U.S. Government nor any agency thereof, nor any employee, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for any third party's use, or the results of such use, of any information, apparatus, product, or process disclosed in this publication, or represents that its use by such third party would not infringe privately owned rights.

United States Nuclear Regulatory Commission

Protecting People and the Environment

NUREG/BR-0006
Revision 9

Instructions for Completing Nuclear Material Transaction Reports

(DOE/NRC Forms 741 and 740M)

Final Report

Manuscript Completed: August 2020
Date Published: August 2020

Prepared by:
Mirabelle Shoemaker

Office of Nuclear Material Safety and Safeguards

ABSTRACT

U.S. Nuclear Regulatory Commission (NRC) regulations require licensees that ship, receive, or adjust their physical inventory of source or special nuclear material to document and report such activities. The reports are submitted using U.S. Department of Energy (DOE)/NRC Form 741, "Nuclear Material Transaction Report." Licensees may need to provide additional information on some imports or exports of source or special nuclear material. The additional information is reported using DOE/NRC Form 740M, "Concise Note." This NUREG contains instructions for preparing these forms.

Paperwork Reduction Act Statement

The information collections contained in this NUREG are covered by DOE/NRC Forms 741 and 740M, which the Office of Management and Budget (OMB) approved under approval numbers 3150-0003 and 3150-0057. The estimated burden per response to comply with this mandatory collection request is 1 hour 15 minutes for DOE/NRC Form 741 and 45 minutes for DOE/NRC Form 740M. The information is required for International Atomic Energy Agency accounting reports that show changes in the inventory of nuclear materials. Send comments on burden estimates to the NRC Information Services Branch (T-6 A10M), 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 (3150-0003, 3150-0057), OMB, Washington, DC 20503.

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

CONTENTS

ABSTRACT iii
ACRONYMS AND ABBREVIATIONS vii
1 INTRODUCTION 1
1.1 Material Transaction Reports 1
1.2 Regulations 2
1.3 Reporting and Distribution Requirements 3
1.4 Methods for Preparing and Submitting Data to the Nuclear Materials Management and Safeguards System 4
1.5 Documentation and Distribution 4
2 GENERAL INSTRUCTIONS 7
2.1 Instructions for Completing DOE/NRC Form 741 Reports 7
2.1.1 Reporting Shipper's Data 7
2.1.2 Reporting Receiver's Data 18
2.2 Preparation of DOE/NRC Form 741 in Computer-Readable Format 21
2.3 Distribution of DOE/NRC Form 741 21
2.3.1 Shipper 21
2.3.2 Receiver 21
3 INSTRUCTIONS FOR ONSITE GAINS AND LOSSES (M ACTION CODE) 23
3.1 Instructions for Completing DOE/NRC Form 741 23
3.2 Preparation of DOE/NRC Form 741 in Computer-Readable Format 25
3.3 Distribution of DOE/NRC Form 741 25
4 INSTRUCTIONS FOR CORRECTING A DOE/NRC FORM 741 (C, D, AND M ACTION CODES) 27
4.1 Originator 27
4.2 Receiver 28
4.3 Distribution of Corrections to DOE/NRC Form 741 28
5 INSTRUCTIONS FOR COMPLETING DOE/NRC FORM 740M 29
6 DOE REPORTING REQUIREMENTS FOR PROPRIETARY INTERESTS OF THE GOVERNMENT 31
7 NMSS REFERENCES 33
APPENDIX A COMPOSITION CODES **A-1**

APPENDIX B INVENTORY CHANGE TYPE CODES FOR COMPLETING BLOCKS 26C AND 27C OF DOE/NRC FORM 741 ..... B-1

APPENDIX C EXAMPLE DOCUMENTATION OF SHIPPER AND RECEIVER DATA (BLOCKS 26 AND 27) C-1

APPENDIX D GLOSSARY D-1

APPENDIX E U.S. DEPARTMENT OF ENERGY/U.S. NUCLEAR REGULATORY COMMISSION FORM 741, "NUCLEAR MATERIAL TRANSACTION REPORT" (BLANK) AND U.S. DEPARTMENT OF ENERGY/U.S. NUCLEAR REGULATORY COMMISSION FORM 740M, "CONCISE NOTE" (BLANK) E-1

APPENDIX F SUPPLEMENTAL INSTRUCTIONS FOR COMPLETING BLOCKS 17, 18, 19, 20, AND 21 ON U.S. DEPARTMENT OF ENERGY/U.S. NUCLEAR REGULATORY COMMISSION FORM 741 ..... F-1

APPENDIX G SUPPLEMENTAL INSTRUCTIONS FOR POSSESSORS OF NUCLEAR MATERIAL OUTSIDE FACILITIES REPORTING PURSUANT TO THE MODIFIED SMALL QUANTITIES PROTOCOL…… G-1

ACRONYMS AND ABBREVIATIONS

A	addition to inventory
BI	beginning inventory
CFR	*Code of Federal Regulations*
DOE	U.S. Department of Energy
EI	ending inventory
EURATOM	European Atomic Energy Commission
FA	facility attachment
g	gram
HEU	highly enriched uranium
IAEA	International Atomic Energy Agency
ICR	inventory change report
ICT	inventory change type
ID	inventory difference
kg	kilogram
KMP	key measurement point
LEU	low-enriched uranium
MBA	material balance area
MBR	material balance report
MF	material unaccounted for
MT	material type
NMIS	Nuclear Material Information System
NMMSS	Nuclear Materials Management and Safeguards System
NRC	U.S. Nuclear Regulatory Commission
OMB	Office of Management and Budget
OMP	other measurement point
Pu	plutonium
R	removal from inventory
RA	rounding adjustment
RIS	reporting identification symbol
SAMS	Safeguards Management Software
SNM	special nuclear material

SRD	shipper-receiver difference
TFA	transitional facility attachment
U	uranium
UF_6	uranium hexafluoride
UK	United Kingdom
WR	former Soviet Union weapons material

U.S. NUCLEAR REGULATORY COMMISSION INSTRUCTIONS FOR COMPLETING NUCLEAR MATERIAL TRANSACTION REPORTS

U.S. DEPARTMENT OF ENERGY/U.S. NUCLEAR REGULATORY COMMISSION FORMS 741 AND 740M

1 INTRODUCTION

The U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Energy (DOE) jointly use the Nuclear Materials Management and Safeguards System (NMMSS). This system is the U.S. Government's national database used by the DOE and the NRC for tracking certain nuclear material.

Common reporting forms and formats are used to minimize the reporting burden on licensees[1] that are required to provide nuclear material data to one or both agencies in accordance with current regulations or contractual obligations. In this manner, licensees can file one report to meet the reporting requirements of both the NRC and the DOE. The agency that requires the particular data monitors compliance with specific reporting requirements. NRC regulations require licensees to submit the reports in computer-readable form.

The DOE requires all NRC licensees to report to NMMSS all receipts, transfers, and inventory adjustments of DOE-owned, -loaned, or -leased material in their possession. Reports to NMMSS for all DOE-owned, -loaned, or -leased material must follow the U.S. Government's reporting requirements as specified in DOE Order 470.4B, "Safeguards and Security Program," and DOE Order 474.2, "Nuclear Material Control and Accountability."

1.1 Material Transaction Reports

DOE/NRC Form 741, "Nuclear Material Transaction Report," is the means by which licensees submit transaction data to NMMSS. Licensees must complete DOE/NRC Form 741 in accordance with the instructions in this NUREG and must submit the form in computer-readable format. NMMSS Report D-24, "Personal Computer Data Input for Nuclear Regulatory Commission Licensees," gives instructions for creating the computer-readable submittal.

Licensees use DOE/NRC Form 741 to report physical transfers of nuclear materials between facilities and to report exchanges of foreign obligations on material between facilities even when no physical transfer occurs. The form is also used to report onsite transactions such as inventory corrections that otherwise increase or decrease foreign obligation balances or nuclear material categories within a facility.

The NMMSS database relies heavily on the quality of the data reported by the facilities involved in nuclear activities. The data submitted to NMMSS are subject to evaluation according to the restrictions placed on nuclear activity by the policies of various governing agencies of the United States. The NMMSS database receives the data after they are verified through the use of "edit checks" as acceptable within the restrictions of the system.

[1] The term "licensee" here denotes an NRC or Agreement State licensee or an NRC certificate holder.

NRC licensees must provide a DOE/NRC Form 741 to NMMSS in a computer-readable format following the instructions in this NUREG and NMMSS Report D-24. Both the shipper and the receiver are required to submit DOE/NRC Form 741. The receiver should confirm that the quantity received is consistent with the shipper's report. When statistically significant shipper-receiver differences (SRDs) are identified, as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) 74.31, "Nuclear Material Control and Accounting for Special Nuclear Material of Low Strategic Significance," 10 CFR 74.43, "Internal Controls, Inventory, and Records," or 10 CFR 74.59, "Quality Assurance and Accounting Requirements," they must be resolved and their root causes corrected. The regulatory intent is to require material control and accounting systems to promptly detect and resolve all significant SRDs. Comparisons of shippers' and receivers' reports are necessary to confirm the acceptability of shippers' and receivers' values for establishing the book accounting amounts for received material and to detect unacceptable shippers' or receivers' values. Comparisons typically involve item verification, seal integrity, gross weights, nondestructive assay measurements (if appropriate), and destructive measurements (if appropriate).

1.2 Regulations

NRC regulations in 10 CFR Part 74, "Material Control and Accounting of Special Nuclear Material," require each licensee that transfers or receives or otherwise adjusts its inventory of special nuclear material (SNM) in a quantity of 1 gram or more of contained uranium (U)-235, U-233, or plutonium to complete in a computer-readable format a Nuclear Material Transaction Report (DOE/NRC Form 741).

In addition, NRC regulations in 10 CFR 40.64, "Special Requirements for Issuance of Specific Licenses," require each licensee that in any manner transfers, receives, or adjusts the inventory of source material of foreign obligations by 1 kilogram or more, or imports or exports 1 kilogram or more of uranium or thorium source material, or who uses 1 kilogram or more of any uranium or thorium source material in enrichment services, downblending uranium that has an initial enrichment of the U-235 isotope of 10 percent or more, or in the fabrication of mixed-oxide fuels must complete DOE/NRC Form 741 in a computer-readable format in accordance with instructions in this NUREG.

NRC regulations in 10 CFR 150.16, "Submission to Commission of Nuclear Material Transaction Reports," require Agreement State licensees to report nuclear material transactions of source material and SNM as described above and to follow the reporting instructions described in this NUREG.

NRC regulation 10 CFR 75.31, "General Requirements," requires licensees reporting transactions for source material or SNM in accordance with an agreement with the International Atomic Energy Agency (IAEA) to complete and distribute DOE/NRC Form 741 for all source material or SNM inventory changes, including shipments, receipts, onsite gains and losses, and any other inventory adjustments. Licensees should follow the requirements of their transitional facility attachment (TFA) when reporting the DOE/NRC Form 741. Licensees reporting nuclear material transactions in accordance with the Modified Small Quantities Protocol (INFCIRC/366) should follow the instructions in Appendix G to this NUREG.

The reporting periods for submitting DOE/NRC Form 741 are as follows:

- Each licensee that transfers material shall report the transfer by completing and submitting the DOE/NRC Form 741 as specified in this NUREG no later than the close of business the next working day after the material is transferred.

- Each licensee that receives the material shall report the receipt by completing and submitting the DOE/NRC Form 741 within 10 days after the material is received.

The submission of DOE/NRC Form 741 may be required as a matter of contract or lease administration for all DOE-owned nuclear material transferred. Possessors of DOE-owned material should refer to DOE Order 470.4B and DOE Order 474.2 for additional information on reporting nuclear material transactions.

1.3 Reporting and Distribution Requirements

Reports are required whenever nuclear material in the types and amounts stated in the preceding section moves between locations or operations that have been assigned different reporting identification symbols (RISs) and whenever SNM and source material inventories change. These transactions refer to both physical transfers and administrative transfers, like foreign obligation exchanges, and the licensees shall report such transfers to NMMSS in the timeframe specified in the applicable regulations identified in the previous section on regulatory authority and as specified in Section 2.1 of this NUREG. Licensees must document and report the nuclear material change data (including burnup, production, measured discards, category changes, and decay) in the NMMSS before or at the same time as the physical inventory taking, unless the NRC has authorized another arrangement.

The shipper initiates a DOE/NRC Form 741. If the licensee is involved in a transfer of material with a party that is not required to prepare a DOE/NRC Form 741, the licensee must prepare and submit both the shipper's and the receiver's section of the form. In the most common situation, a domestic facility is involved in an import activity. The domestic facility that receives the import must obtain the information necessary to complete the shipper's side of DOE/NRC Form 741 for the imported SNM and source material. In the case of exports, the shipper initiates a DOE/NRC Form 741 report, and NMMSS subsequently generates a DOE/NRC Form 741 report using the shipper's information to produce the receiver's side of the form. However, if a significant SRD is identified between the U.S. shipper and foreign receiver (as defined in 10 CFR 74.31, 10 CFR 74.43, and 10 CFR 74.59 for SNM, or if there is an indication of loss, theft, or diversion of quantities of source material as delineated in 10 CFR 40.64(c)(1)), the shipper shall document the foreign party's values in a DOE/NRC Form 741 report to NMMSS. Submittal for a foreign facility does not indicate responsibility for the other facility or its shipment and receipt of materials.

Reports of physical shipments between RISs must document the actual movement of material. In addition, licensees must report any reportable information associated with the material. In particular, the foreign obligation of material by a foreign entity must follow the physical movement of material between RISs. The transfer of foreign obligations between RISs with no physical movement of material is reported by using action codes X and Y.

1.4 Methods for Preparing and Submitting Data to the Nuclear Materials Management and Safeguards System

The Safeguards Management Software (SAMS) is a free facsimile of NMMSS that allows the user to import and export data; complete a quality review in the form of "edit checks"; generate various reports; and create material balance, inventory, and transaction data. It can export data into the required NMMSS predefined computer-readable format outlined in NMMSS Report D-24. The SAMS program is available upon request by email (nmmss@nnsa.doe.gov).

Licensees can submit data to NMMSS through the following two methods:

(1) Electronic Data Submission

Licensees should submit DOE/NRC Forms 742, "Material Balance Report," and 742C, "Physical Inventory Listing," in a computer-readable format. NMMSS Report D-24 provides instructions on packaging, data format requirements, acceptable media types, and the mailing address for the submittal of data on computer media.

Licensees can request a copy of the most current fillable forms installer kit by e-mailing the NMMSS staff. These forms can be completed, saved at the licensee site, and submitted to NMMSS at this e-mail address. Licensees may also contact the NRC program manager for questions about fillable forms and electronic data submission by e-mail (nmmss.resource@nrc.gov). Licensees should adhere to their facility's encryption policy for transmitting electronic data to NMMSS.

Licensees may also download data onto electronic media and mail the data to NMMSS. Contact the NMMSS staff to confirm the mailing address before sending mail.

(2) New and Modified Methods of Transferring Electronic Data

The NRC may authorize new and modified methods of transferring electronic DOE/NRC Form 741 data to NMMSS. Licensees may confirm authorization to use additional methods for the transfer of these data by contacting the NMMSS staff.

1.5 Documentation and Distribution

Licensees shall submit the completed DOE/NRC Form 741, in a computer-readable format, to NMMSS in a timely manner. Licensees can confirm the address and mechanism for providing data by contacting the NMMSS staff directly. Specific submission instructions depend on whether the DOE/NRC Form 741 is classified or unclassified information. Sections 2.3, 3.3, and 4.3 of this NUREG contain additional distribution information.

Licensees submitting a classified DOE/NRC Form 741 must document and handle the information in accordance with all pertinent security requirements. Submissions that are not classified are considered to be proprietary material control and accounting information and may be requested to be withheld in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding." Each person who is to receive a copy of the report must be verified as a qualified recipient before distribution. Licensees should confirm the address before sending documents to NMMSS or other recipients. They should also formally provide classification guidance to the NMMSS staff after deciding to classify, declassify, or make

any change in previously submitted guidance. To submit safeguards information, licensees should use DOE/NRC Form 740M, “Concise Note,” stating that the submission is safeguards information and should be handled in accordance with 10 CFR 73.21, “Protection of Safeguards Information: Performance Requirements.”

2 GENERAL INSTRUCTIONS

2.1 Instructions for Completing DOE/NRC Form 741 Reports

If the DOE/NRC Form 741 report is documenting an onsite gain or loss, the licensee should review the instructions for block 6 (ACTION CODE) and the special instructions for the M action code in Section 3 of this NUREG before completing the form.

The numbered instructions below correspond to the numbered blocks on the paper copy of DOE/NRC Form 741. Each shipper of reportable quantities of SNM or source material (refer to blocks 26n and 26q) must send a DOE/NRC Form 741 report to NMMSS and a copy to the receiver's business address no later than the close of business the next working day.

In the case of spent fuel shipments, in accordance with 10 CFR 73.37, "Requirements for Physical Protection of Irradiated Reactor Fuel in Transit," the date of shipment is considered safeguards information until 10 days after the shipment or the last shipment in a series of shipments is received. Therefore, the shipper should identify the DOE/NRC Form 741 as safeguards information and submit a DOE/NRC Form 740M (Concise Note) stating that the submission is safeguards information and should be handled in accordance with 10 CFR 73.21. The Concise Note should also contain other pertinent information, such as whether this is a single shipment or part of a series and the shipment number and total within the series.

For disposals, the burial site operator must prepare and transmit the DOE/NRC Form 741 to NMMSS to document receipt and disposal. NRC regulations stipulate that DOE/NRC Form 741 reports shall be submitted in a computer-readable format. NMMSS Report D-24 gives the electronic formats and field sizes for DOE/NRC Form 741 submissions.

2.1.1 Reporting Shipper's Data

Licensees should complete DOE/NRC Form 741 in accordance with the following instructions:

1. SHIPPER'S RIS[2]—Enter the shipper's RIS.

2. RECEIVER'S RIS—Enter the receiver's RIS.

3. TRANSACTION NO.—Enter a number for the same shipper–receiver combination. Numbers in the series must be consecutive (i.e., no skipped numbers).

4. CORRECTION NUMBER—This block is used to identify a transaction that is an adjustment to a previously submitted DOE/NRC Form 741. Leave this block blank for an original submission of a DOE/NRC Form 741. Use consecutive numbers, starting with 1, for adjustments. For corrections requiring changes only to NMMSS data (and not to the other party's data), use letters (A, B, etc.) instead of numbers. See Section 4 of this NUREG.

[2] NMMSS Reports D-2, "The DOE Directory of Reporting Identification Symbols," D-3, ""The NRC Directory of Reporting Identification Symbols," and D-15, "International Nuclear Facilities Codes Manual," document RISs.

5. PROCESSING CODE—Enter processing code A, C, or D:

- "A" refers to the initial entry of data.
- "C" refers to the replacement of data. With the concurrence of the other party to the transaction, the entire data set may be replaced at any time before the close of the NMMSS processing period in which the initial submittal was made.
- "D" refers to the deletion of data. An entire data set may be deleted at any time before the close of the NMMSS processing period in which the initial submittal was made, with the concurrence of the other party to the transaction.

6. ACTION CODE—This block is used to identify the type of transaction being reported on DOE/NRC Form 741 as specified in 6a and 6b below.

6a. SHIPPER—Enter one of the following action codes:

A The shipper is reporting a transaction that has taken place between the stated parties.

C The shipper is adjusting the initial DOE/NRC Form 741 for the shipment or a previous adjustment to the same initial report, acknowledging an adjustment originated by the receiver, or accepting and agreeing with the receiver's adjustment to DOE/NRC Form 741. See Section 4 of this NUREG.

M The shipper is reporting a one-party transaction or an adjustment to a one-party transaction (e.g., an onsite gain or loss of material as the result of burnup, production, measured discards, category changes). This is also known as an onsite adjustment. DOE/NRC Form 742 shows such inventory changes. See Section 3 of this NUREG.

R The shipper is identifying a one-party transaction to remove a designation of former Soviet Union weapons material (WR) from material in the inventory. This code applies only to WR after initiation of irradiation in a reactor core of the fresh low-enriched uranium (LEU). Use of this code implies a removal of WR material associated with LEU in the facility's inventory; therefore, the value should be entered as a positive number.

X The shipper is reporting a transfer of foreign obligation that involves no physical movement of material. No foreign obligation transfers of WR material are permitted. Do not enter shipper (block 26) or receiver (block 27) detail data.

6b. RECEIVER—Enter one of the following action codes:

B The receiver is reporting receipt of a shipment and acceptance of the weights that the shipper reported on DOE/NRC Form 741 as final receipt values.

E The receiver is reporting that a shipment was received, that independent measurements were made, and that values resulting from the independent measurements are being reported.

D The receiver is adjusting the initial DOE/NRC Form 741 that documented the receipt of a shipment or a previous adjustment to the same initial report, acknowledging an adjustment originated by the shipper, or accepting and agreeing with the shipper's adjustment to DOE/NRC Form 741. See Section 4 of this NUREG.

M The receiver is reporting a one-party transaction or an adjustment to a one-party transaction (i.e., an onsite gain or loss of material as the result of burnup, production, measured discards). This is also known as an onsite adjustment. DOE/NRC Form 742 shows such inventory changes. See Section 3 of this NUREG.

N The receiver is reporting physical receipt of a shipment but will delay the quantity determinations for the shipment of material for more than 10 days but no more than 60 days for source and LEU, or no more than 45 days for highly enriched uranium (HEU). When the determinations are completed, the receiver will prepare DOE/NRC Form 741 with a B or E action code to report the receiver's quantity determinations. Use of this code (N) requires no entry of detailed data (block 27) by the receiver.

Y The receiver is reporting an acceptance of transfer of foreign obligation that involves no physical movement of material. Do not enter shipper (block 26) or receiver (block 27) detailed data.

7. DOCUMENTATION—This block is for paper-copy submissions only. Enter the number of pages if the submission is classified.

8. SHIPPER—Leave blank.

9. RECEIVER—Leave blank.

10. NUMBER OF DATA LINES—After completing block 26 (SHIPPER'S DATA) or block 27 (RECEIVER'S DATA), enter the total number of detail lines in block 26 or 27. The shipper and receiver must report the same number of entries, and the material types must agree line for line.

11. NATURE OF TRANSACTION—Leave blank.

12. SHIPPED FOR ACCOUNT OF—Leave blank.

13. SHIPPED TO ACCOUNT OF—Leave blank.

14. TRANSFER AUTHORITY—Leave blank.

15. EXPORT OR IMPORT TRANSFERS—For all export or import transfers, enter the NRC export or import license number under which SNM or source material is transferring. When transfers are authorized by an NRC general license, enter GEN-LIC. In some cases, the transfer may be exempt from licensing, such as exports of IAEA safeguards samples; in such cases, enter LIC-EXEMPT. If several batches authorized by separate NRC import or export licenses are combined into one shipment, complete a separate DOE/NRC Form 741 for the portion associated with each import or export license.

16. MATERIAL TYPE AND DESCRIPTION—Leave blank. Note: Material type code should be provided only in fields 19, 26g, and 27g of DOE/NRC Form 741.

17. (FOREIGN OBLIGATION) LINE NUMBER—Enter a sequential line number beginning with the number 1.

18. COUNTRY OF OBLIGATION—Enter the two-character country or entity designation from Table 1 in Appendix F to this NUREG for the line numbers entered in block 17. See Appendix F for further instructions.

19. MATERIAL TYPE—Enter the material type to which the foreign obligation is attached. Refer to Table 2 in Appendix F. For domestic transactions, the only material types to be reported are 10, 20, 50, 70, 81, and 88. For imports and exports of foreign obligated nuclear material, report the material type code using the appropriate IAEA code obligated.

20. OBLIGATED ELEMENT WEIGHT—Enter the weight of the foreign obligated amount of the element for material types 10, 50, 81, or 88 and the element weight associated with the foreign obligated enriched uranium. See Appendix F for further instructions. For onsite inventory adjustments or corrections, enter the positive or negative values to appropriately account for material addition or removal, respectively. Reports with an action code of A, B, E, N, R, X, or Y must be reported with a positive weight. All others can be reported with a positive or negative weight. The sum of foreign obligated element weight for a material type cannot exceed the sum of the element weight values listed in the detail lines (see fields 26n and 27n).

21. OBLIGATED ISOTOPE WEIGHT—FOR ENRICHED URANIUM ONLY—Enter the weight of the foreign obligated amount of the isotope U-233 or U-235. For onsite inventory adjustments or corrections, enter positive or negative values to appropriately account for material addition or removal, respectively. Reports with an action code of A, B, E, N, R, X, or Y must be reported with a positive weight. All others can be reported with a positive or negative weight. The sum of foreign obligated isotope weight for a material type cannot exceed the sum of the isotope weight value listed in the detail lines (see field 26q or 27q).[3]

22. ACTION DATE—Follow the instructions below for blocks 22a through 22e.

22a. SHIPMENT (entry required by shipper)—Enter the date the nuclear material is shipped.

22b. SHIPPER'S CORRECTION (entry required by shipper)—If the DOE/NRC Form 741 document is an acknowledgment of, or a correction to, a previously submitted DOE/NRC Form 741, enter the date the correction is recorded or the acknowledgment made, as appropriate. However, dates on acknowledgments must not precede the action date listed on the receiver's correction. Note that if a date preceding the current unreconciled period is used, the effect of the correction will be reflected in the current period, not the previous period, or periods, covered by postdated documents.

---

[3] Note that for enriched uranium, the foreign obligation is assigned to the U-233 and U-235 isotopes. Report the quantity of uranium element that contains the foreign obligated U-233 and U-235 in field 20.

22c. RECEIPT (entry required by receiver)—Enter the date the nuclear material is received.

22d. RECEIVER'S MEASUREMENT (entry required by receiver)—This entry is required only if the receiver's action code is E. Enter the date the receiver measures the nuclear material.

22e. RECEIVER'S CORRECTION (entry required by receiver)—If the DOE/NRC Form 741 document is an acknowledgment of, or a correction to, a previously submitted DOE/NRC Form 741, enter the date the correction is recorded or the acknowledgment made, as appropriate. However, dates on acknowledgments must not precede the action date listed on the receiver's correction. Note that if a date preceding the current unreconciled period is used, the effect of the correction will be reflected in the current period, not the previous period, or periods, covered by postdated documents.

Note that in the case of all imports (and for some exports; see Section 1.3), licensees must complete a separate DOE/NRC Form 741 to document the foreign party action, including action dates in blocks 22a and 22c, as applicable.

23a. MISCELLANEOUS—Leave blank.

23b. CONCISE NOTE ATTACHED—Check the indicator box if submitting paper report. Leave blank if reporting data by XML.

23c. UK REPORTABLE—Facilities reporting material transfers involving facilities in the United Kingdom must indicate in this block (23c) whether the shipment is for peaceful nuclear activities (reportable to the IAEA) or for nonpeaceful nuclear activities (not reportable to the IAEA). Insert "R" to indicate that the transfer should be reported to the IAEA or "N" to indicate that the transfer should not be reported to the IAEA.

Note that, typically, all licensee shipments to and from the United Kingdom are reportable.

24. TOTAL GROSS WEIGHT—Enter the total gross weight of the shipment rounded to the nearest kilogram. An approximate or estimated gross weight rounded to the nearest kilogram is acceptable. Shippers are required to complete block 24; however, no entry is needed for M action code transactions, receipts, foreign obligation transfers, and correction documents.

25. TOTAL VOLUME *(Waste Transfers Only)*—For transfers of nuclear material to nuclear waste sites (i.e., receiver RIS begins with the letter V), enter the volume of the material to be buried, stated in cubic feet rounded to the nearest cubic foot. An entry in block 25 is not required for transfers to nuclear laundry services.

26. SHIPPER'S DATA—Enter the shipper's data in block 26. Enter the receiver's data in block 27. Receivers should review the additional instructions for block 27 before completing the form. Facilities reporting receipts of material from a foreign shipper should complete block 26 to provide the shipper's data.

Shipper and receiver measurement data are entered on DOE/NRC Form 741 for each batch of material. Batch names are a required field for transactions and should be reported consistent with the instructions in block 26d.

A batch is a portion of nuclear material that is handled as a unit for accounting purposes at a key measurement point (KMP) and whose composition and quantity are defined by a single set of specifications or measurements. The batch may be in bulk form or contain a number of separate items. If the shipment is an export or is being reported in accordance with 10 CFR Part 75, "Safeguards on Nuclear Material—Implementation of Safeguards Agreements between the United States and the International Atomic Energy Agency," list fuel assemblies or loose rods or fuel pins separately with the identifying label serving as a unique batch name. Fuel assemblies can be reported as "average" enrichment as long as the appropriate accounts (material types 10, 20, 81, etc.) are properly adjusted. Otherwise, material being transferred may be listed on one line of DOE/NRC Form 741 if the material is all of the same material type, composition, ownership, and weight percent of isotope (except as noted in the next paragraph). Material differing in any of these data elements must be listed on separate lines.

It may be necessary to use two or more lines to describe a single batch (e.g., spent fuel assemblies, mixed-oxide fuel). If a batch consists of several material types, use several consecutive lines to describe the batch. Repeat the batch name on all lines used to describe a single batch. In block 26e, repeat the number of items on all lines with the same batch name.

The above general rules for grouping material for reporting purposes apply to all licensees reporting material transactions. Batch reporting plays an integral role in "transit matching" at the domestic and international level. At the international level, the IAEA relies on NMMSS-provided data to match U.S.-reported transactions with those reported by other member states. To facilitate efficient transit matching, facilities reporting imports or receipts of material pursuant to 10 CFR Part 75 shall report the shipper's batch name on DOE/NRC Form 741.

26a. BACK-REFERENCE NUMBER—Enter the appropriate back-reference number to make adjustments to previously submitted DOE/NRC Form 741 documents.

Licensees must enter the back-reference numbers for action codes C and D and for action code M when reporting adjustments. Licensees must report both the back-reference change digit and the back-reference line number.

The back-reference change digit represents the change digit of the document being corrected for a nullifying entry and the change digit of the document now being completed for a correcting entry. For example, if the DOE/NRC Form 741 being corrected is the original, or if the line being entered represents an addition only, enter 0 (zero).

The back-reference line number is a two-digit number that represents the line number of the line being corrected for a nullifying entry and the line number of the corresponding nullifying line for a correction entry. If the line being entered represents an addition only or represents a net change, enter two zeros.

26b. LINE NUMBER—In providing detailed measurement data, enter a line number beginning with 1 for the first line of detailed shipper's data, and increase the line number by one for each additional line of detailed shipper's data entered on the form. When two or more lines of measurement data refer to a single batch, repeat the unique batch name for each line of the batch data. For example, repeat the batch name when different material

types of multienrichment fuel rods are entered on separate lines or when uranium hexafluoride (UF_6) product material and UF_6 heel material in a cylinder are reported on separate lines.

26c. TYPE OF INVENTORY CHANGE—Report all changes to inventory that meet the reporting criteria on DOE/NRC Form 741.

Appendix B to this NUREG explains the inventory change type (ICT) codes and indicates whether they are to be entered in block 26c. Enrichment facilities may use the two-digit numerical value for indicating a change type or proceed as directed by the NRC. When shipping to a waste RIS (that begins with the letter "V"), the shipper must use ICT code 74 or LD. A measured discard can be documented as an onsite transfer, as a discard into a pond or lagoon, or as transferred to a holding area. Discharges to lagoon and movement to holding areas are documented with a suffix attached to the RIS:

- Use L when material is discarded into a pond or lagoon.
- Use H when material is transferred to a holding area (refer to the term "holding account" in the glossary in Appendix D to this NUREG) at the facility pending possible shipment off site for disposal.

Note that the use of a holding or lagoon account requires the establishment of an RIS code and prior approval by the NRC.

The shipper should enter its RIS in block 1 (SHIPPER'S RIS) and the same RIS in block 2 (RECEIVER'S RIS), but append an L or H to the receiver's RIS as appropriate. For example, if a facility with RIS XYZ discards material to a lagoon, the transaction on DOE/NRC Form 741 would be from XYZ to XYZL.

26d. IDENTIFICATION (ITEM/BATCH NAME)—Enter a name or number, or a combination of both, that identifies the batch of material being shipped. All transactions shall include a batch identification number that identifies a unique portion of nuclear material handled as a unit for accounting purposes. For fuel pins and rods, the batch name should be the identification numbers of the fuel pin or rod. When two or more lines of measurement data refer to a single batch, repeat the unique batch name for each line of the batch data. For example, repeat the batch name when different material types of multienrichment fuel rods are entered on separate lines or when UF_6 product material and UF_6 heel material in a cylinder are reported on separate lines. The batch name must exclude special characters (e.g., #, :, /) and must not exceed 16 characters.

If the licensee is reporting an import or receipt of material in accordance with 10 CFR Part 75, the licensee shall report the receipt using the shipper's batch name to facilitate transit matching.

26e. NUMBER OF ITEMS—Enter the number of similar items of which the line entry consists (e.g., cylinders, packs, drums, bird cages, bottles, tank vessels). When reporting fuel pins, rods, or plates, report the number of separate fuel pins, rods, or plates involved. When reporting fuel assemblies, report the number of complete assemblies represented on the line entry. In the case of transfer of bulk material, enter the number 1. Leave blank if an M action code is used.

26f. PROJECT NUMBER—If reporting DOE-owned material and there is a project number, provide the project number in this block (26f). Otherwise, leave blank.

26g. MATERIAL TYPE—Enter the appropriate material type code from the list below:

U.S. Code (Domestic transfers)	IAEA Code (Imports/Exports)	Description	Reporting Unit
10	D	Depleted uranium	Kilogram
20	EG	Enriched uranium	Gram
50	P	Plutonium	Gram
70	EK	U-233	Gram
81	N	Normal uranium	Kilogram
83[4]	Pu	Pu-238	1/10 Gram
88	T	Thorium	Kilogram
89	No code	Uranium in cascade	Gram

Note that for facilities reporting in accordance with 10 CFR Part 75, their facility attachment (FA) or transitional facility attachment (TFA) may require different reporting units for isotope weight. As such, the facility should report to NMMSS as required by its FA or TFA and its NRC license. Contact the NMMSS staff with any questions.

26h. COMPOSITION/FACILITY CODE—Enter the appropriate code describing the physical form (e.g., unencapsulated, encapsulated) and the chemical form of the material. See Appendix A to this NUREG. Facilities reporting receipts of material from a foreign shipper that did not provide a composition code description should report the composition code as determined by their facility to describe the physical and chemical form of the imported material.

If the reporting facility has been notified by letter from the NRC, as provided in 10 CFR 75.10, “Facilities,” that it has been identified under the U.S./IAEA Safeguards Agreement, enter the appropriate code from the list developed during the formulation and negotiation of the FA or TFA provided in accordance with 10 CFR 75.15, “Facility Attachments.”

[4] The element plutonium (Pu)-238 was 1 of the 12 material types that were originally reported in the electronic Nuclear Material Information System (NMIS), which predated the NMMSS database. Pu-238 was primarily possessed by nuclear power and research reactors that were government owned and followed the convention for reporting at the 0.1-gram unit. When the NRC formed in 1974, the NRC licensees possessing DOE-owned Pu-238 continued reporting to the 0.1-gram level in accordance with DOE guidance. This reporting trend continued in practice even as nuclear material became privately owned. DOE guidance continues to require sites to report transfers and holding of Pu-238 to the 0.1-gram level, if it is 10 percent or more Pu-238 (material type 83). NRC regulations do not distinguish between plutonium isotopes. Licensees are required to report transactions and holdings of plutonium (material type 50) to the nearest gram. The NRC accepts Pu-238 reported as material type 83, to the nearest 0.1 gram, if the contained Pu-238 is greater than 10 percent of total plutonium by weight; otherwise, licensees should report it as plutonium (material type 50).

Note: In accordance with 10 CFR 75.10, licensees should communicate to the NRC in writing any change in facility operations or processes that would result in any changes in, additions to, or deletions from the list, to the extent provided in the license conditions, at least 70 days in advance of the changes so that new composition codes can be assigned.

26i. OWNER CODE—This code identifies the ownership of the material at the time it was in the shipper's possession. Enter the appropriate code from the following:

G DOE-owned
J Not DOE-owned

Refer to the glossary in Appendix D to this NUREG for a description of DOE-owned material.

26j. KEY MEASUREMENT POINT—This data element applies only to licensees reporting in accordance with the requirements of 10 CFR Part 75. All other licensees must leave this block blank. This block is for reporting on a facility where nuclear material is in a form that may be measured to determine material flow or inventory. Codes for KMPs are identified in the FAs or TFAs developed for those facilities described in the instructions for block 26h.

26k. MEASUREMENT IDENTIFICATION (see block 26j)—This block applies only to licensees reporting in accordance with 10 CFR Part 75 and to those facilities identified in the instructions for 26h. All other licensees must leave this block blank. This block indicates where and when the material was measured. It consists of the three parts described below.

26k1. BASIS—This data element applies only to licensees that report, in accordance with 10 CFR Part 75, material to the IAEA as required by their FA or TFA, which defines material balance areas (MBAs) for the licensee. For the purpose of this section, MBAs are synonymous with RIS codes. Enter the pertinent code from the following:

N Enter N if the batch data are based on measurements made by another RIS code.[5] Shipments made by a foreign facility shall be considered as having been measured by the foreign facility. As such, the receiving RIS code shall report the measurement basis for the shipper as "N."

L Enter L if the batch data are based on measurements made by another RIS code and have been previously reported by the current RIS code in a preceding DOE/NRC Form 741 or a DOE/NRC Form 742C.[6]

M Enter M if the batch data are based on new measurements made at the present RIS code.

---

[5] Use the M or N code to report receipt of material by the RIS code for the first time when measurement is taken by the RIS code.

[6] Only the shipper should use the L or T code, reporting shipment of material from the RIS code, since measurement has already occurred within that RIS code.

T Enter T if the batch data are based on measurements made at the present RIS code and have been previously reported for the present RIS code in a preceding DOE/NRC Form 741 or a DOE/NRC Form 742C.

26k2. OTHER MEASUREMENT POINT (OMP)—For batch data designated code M in block 26k1, enter the code of the KMP where measurements were made if it is different from the KMP indicated in block 26j. If it is the same, leave the block blank.

26k3. MEASUREMENT METHOD—If two or more measurement methods employed at the same KMP have a different measurement uncertainty, enter the code for the measurement method used, as identified in the FA.

26l. GROSS WEIGHT—Enter the gross weight of the line entry in kilograms of material shipped plus tare weight (packaging and shipping container). Note: The gross weight equals the weight for all items reported in the line and not the gross weight for one item.

26m. NET WEIGHT—Enter the weight of the material shipped, excluding tare weight, in grams for SNM and kilograms for source material.

26n. ELEMENT WEIGHT—Enter the weight of the contained SNM or source material rounded to the quantities reported below:

Material	Reporting Units
Plutonium (material type 50) or uranium enriched in U-235 or U-233	nearest whole gram
Pu-238 when reported as material type 83[7]	nearest 1/10 gram
Source material	nearest kilogram

If the quantity to be entered is equal to or greater than 0.5 of the reporting unit, the quantity should be rounded up to the next whole reporting unit. If the quantity to be entered is less than 0.5 of the reporting unit, the quantity should be rounded down to the next whole reporting unit.

26o. ELEMENT LIMIT OF ERROR—Limits of error need be reported only by licensees that are authorized to possess at any time and location SNM in a quantity exceeding 1 effective kilogram and authorized to use SNM for activities other than those involved in the operation of a nuclear reactor licensed pursuant to 10 CFR Part 50, “Domestic Licensing of Production and Utilization Facilities”; that are involved in a waste disposal operation; or that are authorized to possess sealed sources.

Complete this block (26o) when the total shipment contains more than 50 grams of U-235, U-233, or plutonium, or any combination of these. Enter the limit of error for each element entry using the same weight units as in block 26n, except where the line entry

[7] The isotope Pu-238 should be reported as material type 83 when the contained Pu-238 is greater than 10 percent of total plutonium by weight. Otherwise, it should be reported as plutonium (material type 50).

represents (1) a sealed plutonium-beryllium source, (2) samples that have all been determined by other means to contain less than 10 grams of U-235, U-233, or plutonium, and (3) reactor-irradiated fuels involved in research, development, and evaluation programs in facilities other than irradiated-fuel reprocessing plants.

Limits of error are to be at the 95-percent confidence level, propagated by the uncertainties of the weight measurement, the chemical analysis, and the sampling method. Limits of error do not apply to source material. Licensees making onsite transfers between two different RISs or within the same RIS are exempt from supplying limits of error data for the transfers. Transfers between a license-exempt operation and a licensed operation at the same location are not considered onsite transfers, and limits of error are required.

26p. WEIGHT % ISOTOPE—Enter the weight percent of the isotope U-235 if the uranium is enriched or depleted in U-235. If plutonium, enter the weight percent of the isotope Pu-240. If Pu-238 (material type 83), enter the weight percent of the isotope Pu-238. Report weight percent to at least two, but not more than four, decimal places, depending on the accuracy of the measurement method used (for example, XX.XXXX%). For U-233, enter the parts per million of U-232. This block does not apply to natural uranium and thorium. Use separate lines to report material of different enrichments. The licensee must determine and report the plutonium and U-235 content of irradiated fuel upon removal of the spent fuel from the reactor core. Reactor operators may report the total nonfissile isotope instead of Pu-240 in this block for spent fuel if the computer codes the operator uses have this limitation.

Note that for facilities reporting in accordance with 10 CFR Part 75, their FA or TFA may require different reporting units for element and isotope weight (i.e., element weight in kilograms and isotope weight in grams). In such cases, the facility may leave this field blank.

26q. ISOTOPE WEIGHT—Enter the isotope weight. If enriched uranium or U-233, enter weight to the nearest gram of U-235 or U-233, as appropriate. If plutonium, enter the sum of Pu-239 and Pu-241 to the nearest gram. If Pu-238 (material type 83), enter the weight of the isotope Pu-238 to the nearest 0.1 gram. For depleted uranium, enter the isotope weight to the nearest kilogram. Make no entry for other source material.

Note that for facilities reporting in accordance with 10 CFR Part 75, their FA or TFA may require different reporting units for isotope weight. In such cases, the facility should report to NMMSS as required in its FA or TFA, and contact the NMMSS staff with any questions.

If the quantity to be entered is equal to or greater than 0.5 of the reporting unit, the quantity should be rounded up to the next whole reporting unit. If the quantity to be entered is less than 0.5 of the reporting unit, the quantity should be rounded down to the next whole reporting unit.

26r. ISOTOPE LIMIT OF ERROR—Limits of error need be reported only by licensees that are authorized to possess at any one time and location SNM in a quantity exceeding 1 effective kilogram and authorized to use such SNM for activities other than those involved in the operation of a nuclear reactor licensed pursuant to 10 CFR Part 50, that

are involved in a waste disposal operation, or that are authorized to possess sealed sources.

Complete when the total shipment contains more than 50 grams of U-235, U-233, or plutonium, or any combination of these. Enter the limit of error for each isotope entry using the same weight units as in block 26n, except where the line entry represents (1) a sealed plutonium-beryllium source, (2) samples that have all been determined by other means to contain less than 10 grams of U-235, U-233, or plutonium, and (3) reactor-irradiated fuels involved in research, development, and evaluation programs in facilities other than irradiated-fuel reprocessing plants.

Limits of error are to be at the 95-percent confidence level, propagated by the uncertainties of the weight measurement, the chemical analysis, and the sampling method. Limits of error do not apply to source material. Licensees making onsite transfers between two different RISs or within the same RIS are exempt from supplying limits of error data for the transfers. Transfers between a license-exempt operation and a licensed operation at the same location are not considered onsite transfers, and limits of error are required.

26s. SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED—If submitted on paper, an authorized representative of the licensee must sign and date the report. Otherwise, no entry is required. Each licensee must establish internal procedures to ensure that the information provided in the report is accurate and that only authorized licensee personnel have prepared and issued the report.

Proprietary information must be included when necessary to provide an adequate response. An application to withhold such information from public disclosure may be made and will be dispositioned in accordance with the provisions of 10 CFR 2.390. If any of this information is of particular sensitivity, the licensee may request that such information not be transmitted to the IAEA. Such a request must refer to and conform with 10 CFR 75.13, “Communication of Information to the International Atomic Energy Agency (IAEA).”

2.1.2 Reporting Receiver’s Data

Each receiver of reportable quantities of SNM or source material must acknowledge receipt of shipments in accordance with the following instructions:

- If the receiver plans to accept the shipper’s measurement data without making independent measurements (B action code), the receiver must, within 10 days of receipt of the material, submit DOE/NRC Form 741. There are two options for filling out the form:

  (1) Complete blocks 1 through 25 and enter a zero in block 10.

  (2) Complete blocks 1 through 25, enter the shipper’s values in block 26, and repeat the shipper’s values in block 27.

  Facilities reporting pursuant to 10 CFR Part 75 must use the second option if they accept the shipper’s measurement data. Similarly, facilities reporting an import must

also use the second option. Facilities should dispatch the form in accordance with the instructions in Section 2.3.2.

- If the receiver makes independent measurements (E action code), the receiver must do the following within 10 days of receipt of the material:

  (1) Complete blocks 1 through 25, enter the shipper's values in block 26, and complete blocks 27a through 27s of DOE/NRC Form 741.

  The receiver should dispatch the form in accordance with the instructions in Section 2.3.2.

- If the receiver intends to make independent measurements within 60 days for source material or LEU, or 45 days for HEU (N action code), the receiver shall do the following within 10 days of receipt of the material (unless the NRC authorizes an exemption):

  (1) Complete blocks 1 through 23.

  (2) Dispatch the form in accordance with the instructions in Section 2.3.2.

  (3) After independent measurements are made, follow the instructions for reporting a B or E action code. If measurements are delayed, complete them and report them on DOE/NRC Form 741 within 60 days for source material and LEU and within 45 days for HEU after the receipt of each shipment, except in the case of receipts of scrap and irradiated material.

  In the case of a scrap processor receiving several shipments of scrap that are accumulated and processed together, the recovered quantity of material must be prorated to the specific transmittal documents and line entries to maintain the one-to-one correspondence between shipper's and receiver's data.

27. RECEIVER'S DATA—Fill in the receiver's data blocks as follows:

Enter shipper and receiver measurement data on DOE/NRC Form 741 for each batch of material. All transactions shall include a batch identification number that identifies a unique portion of nuclear material that is handled as a unit for accounting purposes at a KMP and whose composition and quantity are defined by a single set of specifications or measurements. The batch may be in bulk form or contained in a number of separate items. If the shipment is an export or is being reported in accordance with 10 CFR Part 75, list fuel assemblies, loose rods, or fuel pins separately with the identifying label serving as a unique batch name. Report fuel assemblies as "average" enrichment as long as the appropriate accounts (e.g., material types 10, 20, 81) are properly adjusted. Material being transferred may be listed on one line of DOE/NRC Form 741 if the material is all of the same material type, composition, ownership, and weight percent of isotope (except as noted in the next paragraph). List material differing in any of these data elements on separate lines.

Two or more lines may be necessary to describe a single batch (e.g., spent fuel assemblies, mixed-oxide fuel). If a batch consists of several nuclear material types, use several consecutive lines to describe the batch. Repeat the batch name on all lines

used to describe a single batch. In block 27e, repeat the number of items on all lines with the same batch name.

The above general rules for grouping material for reporting purposes apply to all licensees reporting material transactions. Batch reporting plays an integral role in "transit matching" at the domestic and international level. At the international level, the IAEA relies on NMMSS-provided data to match U.S.-reported transactions with those reported by other member states. To facilitate efficient transit matching, facilities reporting imports or receipts of material in accordance with 10 CFR Part 75 shall report the shipper's batch name on DOE/NRC Form 741.

27a. BACK-REFERENCE NUMBER—Must match the shipper's value. See block 26a.

27b. LINE NUMBER—Must match the shipper's value. See block 26b.

27c. TYPE OF INVENTORY CHANGE—Must match the shipper's value. See block 26c.

27d. IDENTIFICATION (ITEM/BATCH NAME)—See block 26d.

27e. NO. OF ITEMS—See block 26e.

27f. PROJECT NUMBER—See block 26f.

27g. MATERIAL TYPE—Must match the shipper's value. See block 26g.

27h. COMPOSITION/FACILITY CODE—See block 26h.

27i. OWNER CODE—Describes the material ownership at the time it comes into the receiver's possession. See block 26i.

27j. KEY MEASUREMENT POINT—See block 26j.

27k. MEASUREMENT IDENTIFICATION—See block 26k.

27l. GROSS WEIGHT—See block 26l.

27m. NET WEIGHT—See block 26m.

27n. ELEMENT WEIGHT—See block 26n.

27o. ELEMENT LIMIT OF ERROR—See block 26o.

27p. WEIGHT % ISOTOPE—See block 26p.

27q. ISOTOPE WEIGHT—See block 26q.

27r. ISOTOPE LIMIT OF ERROR—See block 26r.

27s. SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED—See block 26s.

2.2 Preparation of DOE/NRC Form 741 in Computer-Readable Format

NMMSS Report D-24 provides instructions for preparing DOE/NRC Form 741 in computer-readable format as required for submittals.

2.3 Distribution of DOE/NRC Form 741

2.3.1 Shipper

Each shipper of reportable quantities of SNM or source material must dispatch a DOE/NRC Form 741, as described below, no later than the close of business the next working day after the shipment. In the case of spent fuel shipments, in accordance with 10 CFR 73.37, the date of shipment is considered safeguards information until 10 days after the shipment or the last shipment in a series of shipments is received. Therefore, the shipper should identify DOE/NRC Form 741 as safeguards information and handle such in accordance with 10 CFR 73.21. When submitting safeguards information, the shipper must submit a Concise Note (DOE/NRC Form 740M), stating that the submission is safeguards information and should be handled in accordance with 10 CFR 73.21.

Burials are reported when shipped. The burial site operator must prepare and transmit a DOE/NRC Form 741 to NMMSS to document receipt and disposal.

The shipper should distribute the completed DOE/NRC Form 741 as follows:

- Provide a copy, in a mutually agreeable format, to the other party in the transaction.
- Submit one copy in a computer-readable format to NMMSS. See Section 1.5 for documentation and distribution of classified and unclassified reports.
- Retain one copy for the file.

2.3.2 Receiver

The receiver should distribute the completed DOE/NRC Form 741 as follows:

- Submit one copy in a computer-readable format to NMMSS. See Section 1.5 for documentation and distribution of classified and unclassified reports.
- Return one copy, in a mutually agreeable format, to the shipper.

  Retain one copy for the file.

3 INSTRUCTIONS FOR ONSITE GAINS AND LOSSES (M ACTION CODE)

3.1 Instructions for Completing DOE/NRC Form 741

When using action code M, the licensee should complete DOE/NRC Form 741 in accordance with the following instructions:

1. SHIPPER'S RIS—Enter the RIS.

2. RECEIVER'S RIS—Same as in block 1.

3. TRANSACTION NUMBER—See the instructions for block 3 in Section 2.1.1 or contact the NMMSS staff for other options.

4. CORRECTION NUMBER—See the instructions for block 4 in Section 2.1.1.

5. PROCESSING CODE—See the instructions for block 5 in Section 2.1.1.

6. ACTION CODE—Enter M in 6a or 6b or both.

7. DOCUMENTATION—Enter the number of pages if the submission is classified. This block is for paper-copy submissions only.

8. NAME AND ADDRESS OF SHIPPER—Leave blank.

9. NAME AND ADDRESS OF RECEIVER—Leave blank.

10. NUMBER OF DATA LINES—Enter the total number of detail line entries on the form.

11. NATURE OF TRANSACTION—Leave blank.

12. SHIPPED FOR ACCOUNT OF—Leave blank.

13. SHIPPED TO ACCOUNT OF—Leave blank.

14. TRANSFER AUTHORITY—Leave blank.

15. EXPORT OR IMPORT TRANSFERS—Leave blank.

16. MATERIAL TYPE AND DESCRIPTION—Leave blank.

17. LINE NUMBER—See the instructions for block 17 in Section 2.1.1.

18. COUNTRY OF OBLIGATION—See the instructions for block 18 in Section 2.1.1.

19. MATERIAL TYPE—See the instructions for block 19 in Section 2.1.1.

20. OBLIGATED ELEMENT WEIGHT—See the instructions for block 20 in Section 2.1.1.

21. OBLIGATED ISOTOPE WEIGHT—FOR ENRICHED URANIUM ONLY—See the instructions for block 21 in Section 2.1.1.

22. ACTION DATE—Enter the date of the activity in at least one of blocks 22a through 22e. If more than one block is completed, all dates must be the same.

23. MISCELLANEOUS—Leave blank.

24. TOTAL GROSS WEIGHT—Leave blank.

25. TOTAL VOLUME—Leave blank.

26. SHIPPER'S DATA—Follow instructions for blocks 26a through 26s.

26a. BACK-REFERENCE NUMBER—See the instructions for block 26a in Section 2.1.1.

26b. LINE NO.—See the instructions for block 26b in Section 2.1.1.

26c. TYPE OF INVENTORY CHANGE—See Section 2.1.1.

26d. IDENTIFICATION (ITEM/BATCH NAME)—See Section 2.1.1.

26e. NO. OF ITEMS—See Section 2.1.1.

26f. PROJECT NUMBER—Leave blank.

26g. MATERIAL TYPE—See Section 2.1.1.

26h. COMPOSITION/FACILITY CODE—See Section 2.1.1.

26i. OWNER CODE—See Section 2.1.1.

26j. KEY MEASUREMENT POINT—See Section 2.1.1.

26k. MEASUREMENT IDENTIFICATION—See Section 2.1.1.

26l. GROSS WEIGHT—Leave blank.

26m. NET WEIGHT—Leave blank.

26n. ELEMENT WEIGHT—See Section 2.1.1.

26o. ELEMENT LIMIT OF ERROR—See Section 2.1.1.

26p. WEIGHT % ISOTOPE—Leave blank for ICT codes MF and EQ unless the material is enriched uranium. For ICT codes LN and TN, report the same weight percent of isotope as for the beginning of the inventory period. See the instructions for block 26p in Section 2.1.1.

26q. ISOTOPE WEIGHT—See Section 2.1.1.

26r. ISOTOPE LIMIT OF ERROR—Leave blank.

26s. SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED—See Section 2.1.1.

27. RECEIVER'S DATA—See the instructions for block 27 in Section 2.1.2.

3.2 Preparation of DOE/NRC Form 741 in Computer-Readable Format

NMMSS Report D-24 provides instructions for preparing DOE/NRC Form 741 in computer-readable format as required for submittals.

3.3 Distribution of DOE/NRC Form 741

Distribution of the completed DOE/NRC Form 741 should be as follows:

- Submit one copy in a computer-readable format to NMMSS. (See Section 1.5 for documentation and distribution of classified and unclassified reports.)

- Retain one copy for the file.

4 INSTRUCTIONS FOR CORRECTING A DOE/NRC FORM 741 (C, D, AND M ACTION CODES)

Adjustments are independent actions. Either the shipper or the receiver may initiate an adjustment to a DOE/NRC Form 741, reporting the original shipment or receipt of material or an adjustment to any previous adjustment to the original. The other party should acknowledge that an adjustment was made but is not required to make the same adjustment to its records.

4.1 Originator

The originator of the "corrected copy" must do the following:

- Complete blocks 1 through 25, as appropriate, referring to the copy of DOE/NRC Form 741 being corrected.

- Insert in block 26a or 27a of the "did-read" (Was) line, as appropriate, a back-reference code. If the line of data has not been previously corrected, use a zero. If previously corrected, the first digit is the correction number (block 4) from the DOE/NRC Form 741 being corrected. If the line of data has been corrected several times, use the most recent correction number. The next two digits are the line number (block 26b or 27b) on the DOE/NRC Form 741 being corrected. The "did-read" line can only reference a line on the original document or a "should-read" line. No two or more "did-read" lines can back-reference the same line.

- Complete the "did-read" line, blocks 26b through j and 26n through r or 27b through j and 27n through r, as appropriate, by duplicating the entire line being corrected from the DOE/NRC Form 741 being corrected and indicating the opposite sign (positive or negative) from the original one used in reporting the number of items (block e), element weight (block n), element limit of error (block o), isotope weight (block q), and isotope limit of error (block r).

- Insert in block 26a or 27a of the "should-read" (Should-Be) line, as appropriate, a back-reference code that references the corresponding "did-read" line. The first digit is the correction number of the document being completed. The next two digits are the line number of the corresponding "did-read" line. The "should-read" line can only reference a "did-read" line. No two or more "should-read" lines can back-reference the same line.

Repeat this procedure until all lines requiring adjustment have been backed out and the correct information entered.

Pair the "did-read" and "should-read" for each line being adjusted (i.e., consecutive).

One or more changes can be made to each line. Only include incorrect lines in a correction report.

If adding a line to the original document, the back-reference should be (000) (block 26a or 27a), and pairing is not done.

If a line previously reported is split into two or more lines, one of the "should-be" lines should back-reference the "did-read" line, and all others should be considered new additions (000).

If a line is to be voided, use only a “did-read” line (no pairing). Appendix C to this NUREG provides examples of an initial report and subsequent correction reports.

4.2 Receiver

Within 10 days of receipt, the facility receiving the corrected DOE/NRC Form 741 must do one of the following:

- Submit a DOE/NRC Form 741, acknowledging the adjustment (which will close a transaction but will not affect the acknowledging party’s values).

- Submit a DOE/NRC Form 741, accepting the adjustment or reporting the facility’s own adjustment. This closes a transaction and applies the accepted or reported adjustment to the acknowledging party’s values.

There is no requirement for both parties to make the same quantity adjustments. However, if both parties choose to adjust on the same corrected DOE/NRC Form 741, they must both report the same number of entries, and the material types must agree line for line.

4.3 Distribution of Corrections to DOE/NRC Form 741

The originator should do the following:

- Submit one copy, in a mutually agreeable format, to the other party in the transaction.

- Submit one copy in a computer-readable format to NMMSS. (See Section 1.5 for documentation and distribution of classified and unclassified reports.)

- Retain one copy for the originating facility’s file.

Upon receipt of a correction, a licensee should distribute a completed DOE/NRC Form 741, reporting an acknowledgment, acceptance, or correction as follows:

- Submit one copy to NMMSS. (See Section 1.5 for documentation and distribution of classified and unclassified reports.)

- Return one copy to the originator.

- Retain one copy for the facility’s file

5 INSTRUCTIONS FOR COMPLETING DOE/NRC FORM 740M

These instructions apply to all licensees that the NRC has notified by letter, as provided in 10 CFR 75.11, "Locations," that their facility has been identified under the U.S./IAEA Safeguards Agreement. The FAs or TFAs for such facilities may specify circumstances under which Concise Notes must be submitted to the IAEA as attachments to other reports. These facilities should use DOE/NRC Form 740M to explain to the foreign state where the IAEA-required data items appear.

Licensees who are reporting safeguards information must submit a Concise Note, as discussed in Section 1.5.

These instructions also apply to importers that, for any reason, cannot use the same batch name as the shipper. If the shipper fails to supply a batch name, the importer should supply a batch name and attach a Concise Note to that effect.

In some cases, it may be desirable to provide additional explanatory information with reports. DOE/NRC Form 740M is used to submit this information. A DOE/NRC Form 740M may be attached to DOE/NRC Form 741, to DOE/NRC Form 742, to DOE/NRC Form 742C, or to a standalone Concise Note for facilities reporting under 10 CFR Part 75.

The numbered blocks of DOE/NRC Form 740M should be completed as follows:

1. NAME AND ADDRESS—Leave blank.

2. ATTACHMENT TO—Place an X in the appropriate box to indicate that this explanatory information will be attached to DOE/NRC Form 741.

   When attaching the Concise Note to DOE/NRC Form 742 or 742C, enter the number 1 for the first Concise Note attached to the particular DOE/NRC Form 742 or 742C. When issuing an additional Concise Note for a particular DOE/NRC Form 742 or 742C, enter the next sequential number (2–9) of the Concise Note.

3. RIS—Enter the RIS to which the explanatory information in this report applies.

4. REPORTING PERIOD—Complete this block only when the Concise Note is attached to a DOE/NRC Form 742 or a DOE/NRC Form 742C. Enter the beginning and ending dates of the reporting period as shown on DOE/NRC Form 742.

5. TRANSACTION DATA—Complete this block only when attaching the Concise Note to a DOE/NRC Form 741 or if submitting a standalone Concise Note. Copy the requested data from DOE/NRC Form 741. All entries in this block must be identical to those on DOE/NRC Form 741. Fill in the blocks as follows.

5A. SHIPPER'S RIS—Enter the RIS of the shipper.

5B. RECEIVER'S RIS—Enter the RIS of the receiver.

5C. TRANSACTION NUMBER—Enter the unique transaction number.

5D. CORRECTION NUMBER—If the DOE/NRC Form 741 is a correction to a previous report, enter the correction number.

5E. PROCESSING CODE—Insert the same code as used in DOE/NRC Form 741.

5F. ACTION CODE—If using a DOE/NRC Form 740M with a DOE/NRC Form 741, enter the same action code as on the DOE/NRC Form 741, block 7; otherwise, enter action code M.

6. REPORTING DATE—Complete this block if the Concise Note is attached to a DOE/NRC Form 741 or DOE/NRC Form 742C. Copy the date shown on DOE/NRC Form 741 or DOE/NRC Form 742C.

7. This block contains the actual explanatory data and other data necessary to link the explanatory data to the part or parts of the report to which the data apply. Complete this block as follows.

7A. LINE NO.—Enter consecutive numbers beginning with 1 for each explanatory reference.

7B. ENTRY REFERENCE—If the explanatory information entered on this line of the DOE/NRC Form 740M applies to the entire DOE/NRC Form 741, 742, or 742C, enter WHOLE REPORT. If the explanation applies to the data on a specific batch on a DOE/NRC Form 741 or DOE/NRC Form 742C, copy the batch name exactly as it appears on the DOE/NRC Form 741 or DOE/NRC Form 742C. If the explanation applies to a specific material balance category on a DOE/NRC Form 742, enter the two-digit number of the material balance category. Additionally, if the explanation applies to material balance categories 11, 30, 42, 43, or 51, enter the RIS shown on the relevant line of DOE/NRC Form 742. If the explanation applies to categories 22 or 71, enter the two-character ICT as shown on the relevant line of DOE/NRC Form 742. If the DOE/NRC Form 740M action code is M, enter GENERAL.

7C. TEXT OF CONCISE NOTE—Enter up to 60 letters, numbers, or special characters per line. Up to 99 lines of text may be used for any one explanation.

8. SIGNATURE—An authorized representative of the licensee must sign DOE/NRC Form 740M. See the instructions for block 26s in Section 2.1.1.

9. TITLE—Enter the title of the person signing the form.

10. DATE—Enter the date the form is signed.

DOE/NRC Form 740M should be put into computer-readable format following the additional guidance in NMMSS Report D-24.

Copies of DOE/NRC Form 740M must be attached to, and distributed with, the DOE/NRC Form 741, 742, or 742C to which the DOE/NRC Form 740M applies.

6 DOE REPORTING REQUIREMENTS FOR PROPRIETARY INTERESTS OF THE GOVERNMENT

NRC licensees are responsible for routinely reporting to NMMSS all DOE-owned, -loaned, or -leased material in their possession as prescribed in DOE Orders 470.4B and 474.2.

7 NMMSS REFERENCES

This report and its appendices reference the NMMSS documents listed below. To request these documents, telephone the NMMSS staff.

NMMSS Report D-2, “The DOE Directory of Reporting Identification Symbols.”

NMMSS Report D-3, “The NRC Directory of Reporting Identification Symbols.”

NMMSS Report D-15, “International Nuclear Facilities Codes Manual.”

NMMSS Report D-24, “Personal Computer Data Input for NRC Licensees.”

NMMSS Report D-25, “Transaction Composition Code Reference List.”

APPENDIX A

COMPOSITION CODES

COMPOSITION CODES

The codes listed below are for use in completing blocks 26h or 27h on U.S. Department of Energy/U.S. Nuclear Regulatory Commission (DOE/NRC) Form 741, "Nuclear Material Transaction Report." If the NRC has notified a licensee by letter, as provided in Title 10 of the *Code of Federal Regulations* (10 CFR) 75.11, "Locations," that the facility has been identified under the U.S./International Atomic Energy Agency Safeguards Agreement, the licensee should enter the appropriate code from the list developed during the formulation and negotiation of the facility attachment or transitional facility attachment.

In accordance with 10 CFR 75.10, "Facilities," the licensee should communicate to the NRC in writing any change in facility operations or processes that would result in any changes to, additions to, or deletions from the list, to the extent provided in the facility's license conditions, at least 70 days in advance of the changes so that new composition codes can be assigned.

For additional composition codes, see Nuclear Materials Management and Safeguards System (NMMSS) Report D-25, "Transaction Composition Code Reference List."

UNENCAPSULATED (except scrap)

Code	
032	U_3O_8 (oxide product)
048	UO_3 (trioxide product)
770	Carbides
455	Other Oxides Product (for all oxides not otherwise identified)
064	Tetrafluorides (tetrafluoride product)
083	UF_6 (hexafluoride product)
095	Enriching Process
102	Hexafluorides—in Enriching Process
103	Hexafluoride Product
107	Uranium in Cascades—Holdup
120	UF_6 Feed
773	UF_6 Heels
363	In Reactor Product
409	Nitrate Solutions Product

786 Acetate Solutions Product

701 Unalloyed Metal Product

702 Alloyed Metal Product

771 Samples and Standards

637 Sintered Products

UNENCAPSULATED SCRAP (for recovery)[1]

375 Irradiated Recyclable Fuel

WASTE (for disposal)

Describe waste material by an appropriate scrap category.

ENCAPSULATED

291 Fabricated Fuel Elements (pins, rods, plates)

309 Fuel Assemblies (assembled items product)

481 Sealed Sources (fabricated sources product)

OTHER

776 Other Products

E04 Miscellaneous Noncombustibles (uranium)

Note: Report uranium/thorium and plutonium/uranium mixed-oxide fuels either as fuel elements (code 291) or as fuel assemblies (code 309), as applicable.

Report the different material types in the mixed-oxide fuels on separate lines.

[1] When dissimilar items of scrap are put into the same container, use the composition code for the predominant scrap category.

APPENDIX B

INVENTORY CHANGE TYPE CODES FOR COMPLETING BLOCKS 26C AND 27C OF DOE/NRC FORM 741

INVENTORY CHANGE TYPE CODES FOR COMPLETING BLOCKS 26C AND 27C OF DOE/NRC FORM 741

All inventory change type codes on transaction reports consist of two alphabetic or numeric characters. The accounting entry type codes used on material balance reports (MBRs) consist of two digits. In the following pages, the numbers in parentheses following the alphabetic code represent the MBR line to which the transaction entries correspond. The standard inventory changes and other entry types are listed below. In transaction reports, all transactions and operations are understood to be related to individual batches. In MBRs, corresponding the same codes denotes consolidated entries (i.e., the sums of all individual operations with the same code over the material balance period). In addition, MBRs include entries related to inventory data and adjustments not reported on transaction reports.

Gains or losses of material that occur based on the total inventory, or in which individual effects to inventories by country of obligation code cannot be determined, should be reported as a loss to all country obligation balances by applying a one-to-one ratio by percent of the country of obligation to the amount of inventory affected to the amount of inventory change. For example, if decay is reported for plutonium within a reactor and the plutonium balance represents several different country of obligation balances, the following calculations would determine the amount of decay to apply to each country of obligation code balance:

	Element	Isotope
Amount of inventory for which decay applies	1,202,239	950,947
Calculated decay for the period	998	998

Balance by country obligation code

OBLIGATION CODE	ELEMENT	ISOTOPE	% Ratio to Total Inventory
33	200,000	158,196	200,000/1,202,239 = 0.166 x 100 = 17%
34	509,321	402,863	509,321/1,202,239 = 0.424 x 100 = 42%
32	492,918	389,888	492,918/1,202,239 = 0.410 x 100 = 41%
Total Pu Balance	1,202,239	950,947	100%

Amount of decay to apply to each country of obligation code balance

33 998 x 17% = 169.66 rounded to the nearest gram = 170

34 998 x 42% = 419.16 rounded to the nearest gram = 419

32 998 x 41% = 409.18 rounded to the nearest gram = 409

998

The following should also be used for the isotope balances:

TRANS. MBR CODE LINE	EXPLANATION	REQUIREMENT FOR BLOCKS 26c AND 27c
RF **(11, 13, 30, 38, 39)**	Nuclear material imported into the United States (receipt foreign).	Make no entry.[1]
RD **(11, 13, 30, 38, 39)**	A domestic facility subject to 10 CFR Part 75 received nuclear material from another domestic facility that is subject to 10 CFR Part 75.	Make no entry.[1]
RN **(11, 13, 30, 38, 39)**	A domestic facility subject to 10 CFR Part 75 received nuclear material from another domestic facility that is not subject to 10 CFR Part 75.	Make no entry.[1]
NP **(21)**	Production of fissionable material in a reactor (plutonium (Pu), uranium (U)-233).	Entry required by licensee.
DU **(76)**	Reapplication of safeguards in nuclear material previously exempted therefrom in accordance with Article 38 of the U.S./International Atomic Energy Agency (IAEA) Safeguards Agreement after being exempted based on use (licensees subject to 10 CFR Part 75 only).	Entry required only after NRC notification.
DQ **(76)**	Reapplication of safeguards in nuclear material previously exempted therefrom in accordance with Article 38 of the U.S./IAEA Safeguards Agreement after being exempted based on quantity (licensees subject to 10 CFR Part 75 only).	Entry required only after NRC notification.
SF **(42, 43, 51, 58, 59)**	Export of nuclear material out of the United States.	Make no entry.[1]
SD **(42, 43, 51, 58, 59)**	A domestic facility subject to 10 CFR Part 75 shipped nuclear material to another domestic facility that is subject to 10 CFR Part 75.	Make no entry.[1]

[1] This data point is not required to be reported by licensees. NMMSS generates these codes for IAEA reporting.

TRANS. MBR CODE LINE	EXPLANATION	REQUIREMENT FOR BLOCKS 26c AND 27c
SN **(42, 43, 51, 58, 59)**	A domestic facility subject to 10 CFR Part 75 shipped nuclear material to a waste management facility that is not subject to 10 CFR Part 75.	Make no entry.[1]
LN* **(73)**	Consumption of nuclear material because of its transformation into other elements or isotopes as a result of nuclear reactions (burnup). *Note: When calculating weight percent isotope in the case of burnup, report the same weight percent isotope for burnup as the weight percent of the beginning inventory period.	Entry required by licensee.
TN* **(72)**	Consumption of nuclear material because of transformation into other elements or isotopes as a result of nuclear reactions (decay). *Note: When calculating weight percent isotope in the case of decay, report the same weight percent isotope for decay as the weight percent of the beginning inventory period.	Entry required by licensee.
LD **(74)**	Normal operational loss/measured discard; that is, loss of a measured or estimated (on the basis of measurement) quantity of nuclear material from processing that has been disposed of in such a way that it is not suitable for further nuclear use.	Entry required by licensee.
TW **(74)**	Transfer to the retained waste category of measured nuclear material, deemed to be irrecoverable, to be stored at the material balance area (MBA) and to be deleted from the inventory of the MBA.	Entry required by licensee.
FW **(51)**	Retransfer of material that has been stored at the MBA as retained waste to the nuclear material inventory. This applies whenever material in the retained waste category is removed from storage either for processing at the MBA or for retransfer from the MBA.	Entry required by licensee.
EU **(76)**	Exemption of nuclear material from safeguards in accordance with Article 36 of the U.S./IAEA Safeguards Agreement (licensees subject to 10 CFR Part 75 only).	Entry required only after NRC notification.

TRANS. MBR CODE LINE	EXPLANATION	REQUIREMENT FOR BLOCKS 26c AND 27c
EQ **(76)**	Exemption of nuclear material from safeguards in accordance with Article 37 of the U.S./IAEA Safeguards Agreement (licensees subject to 10 CFR Part 75 only).	Entry required only after NRC notification.
TU **(76)**	Termination of safeguards on nuclear material in accordance with Articles 13 and 35 of the U.S./IAEA Safeguards Agreement (licensees subject to 10 CFR Part 75 only).	Entry required only after NRC notification.
LA **(75)**	Irretrievable and inadvertent loss of a known quantity of nuclear material as the result of an operational accident.	Entry required by licensee.
GA **(75)**	Nuclear material unexpectedly found to be present in the MBA, except when detected in the course of a physical inventory taking. Report gains as a negative value.	Entry required by licensee.
DI **(N/A)**	The difference between the batch quantity reported as received (always on shipper's data) and the quantity of the same batch as measured by the operator of the receiving MBA.	Make no entry.
RM **(N/A)**	The quantity by which the batch mentioned in the entry is diminished in cases of rebatching (licensees subject to 10 CFR Part 75 only).	Licensee entry required, if applicable.
RP **(N/A)**	The quantity of material added from another batch to the batch mentioned in the entry (licensees subject to 10 CFR Part 75 only).	Licensee entry required, if applicable.

TRANS. MBR CODE LINE	EXPLANATION	REQUIREMENT FOR BLOCKS 26c AND 27c
EN ED NE ND DE DN EE **(22, 71)**	Category Change—The quantity of uranium that has changed category as a result of blending, enrichment, depletion, or burnup. The first letter denotes the original, the second letter the resulting category (E=enriched, N=natural (or normal), D=depleted uranium, EE=change of enrichment). The material type codes should be those for both the original and the resulting material. Provide the weight data for both the originating and the resulting category. Consolidate these entries into the material balances for both categories. For any of these changes, line pairing is required; one line denotes the original material; the other denotes the resulting material. Enrichment facilities may use the 22, 71 combination to report changes in material type associated with enrichment activities for material types 10, 20, 81, and 89 or proceed in accordance with U.S. Nuclear Regulatory Commission direction.	Entry required by licensee.
MF **(77)**	Inventory Difference (ID)—Calculate as the difference between the book inventory and the ending physical inventory. Reactors must not use this code.	Entry required by licensee. Note: A negative value adds to the site inventory.
PB **(N/A)**	Beginning Physical Inventory—This should be equal to the ending physical inventory of the previous MBR relating to the same material.	Entry required by licensee.
BA **(83)**	The algebraic sum of the beginning physical inventory and of the inventory changes over the period, adjusted to take account of the shipper-receiver differences.	Entry required by licensee.
PE **(N/A)**	The sum of all measured and derived batch quantities of nuclear material on hand on the date of the physical inventory taking. Consolidate these entries.	Entry required by licensee.

TRANS. MBR CODE LINE	EXPLANATION	REQUIREMENT FOR BLOCKS 26c AND 27c
RAXX **(N/A)**	Applicable to licensees subject to 10 CFR Part 75 only. The quantity that must be added to the rounded sum to make it equal to the sum of the rounded terms. A rounding adjustment (RA) is made to an entry in the MBR of which the IAEA has been informed differently through inventory change reports (ICRs) and physical inventory lists, to bring the MBR entry into agreement with the corresponding figures established on the basis of ICRs and physical inventory lists. In the case of the book inventory and the ID or material unaccounted for (MF), use the following formulas, respectively: $RABA = PB + ICR_{MBR} - DI - BA$, $RAMF = BA - PE - MF$ where ICR_{MBR} is the sum of the consolidated inventory changes as reported in the MBR, taken with the appropriate sign if they represent decreases. All other notations are as defined for this data element. No RA is needed for the beginning physical inventory. Code the RA as RAXX, where XX stands for the code of the entry to which the RA pertains (e.g., RALN means an RA to the consolidated entry on the nuclear loss).	Entry by licensee required, if applicable.
34 **(30)**	Receipts—Miscellaneous. Enter quantities of material received in two-party transactions where only receiver data or receipts of quantities of material falling below the reporting level are reported and now cumulatively total 1 gram or more of special nuclear material (SNM) or 1 kilogram or more of source material. Examples include receipts of material (not reported elsewhere) from facilities that have not been assigned a reporting identification symbol and receipts from licensees who are not required to document or report transactions.	Entry by licensee required.

TRANS. MBR CODE LINE	EXPLANATION	REQUIREMENT FOR BLOCKS 26c AND 27c
37	Procurement by Others. Enter quantities of material the facility purchased for its own account from in situ material that it had been holding or material that the facility is processing for another licensee.	
54 **(51)**	Shipments—Miscellaneous. Enter quantities of material shipped in two-party transactions for which only shipper's data are reported or shipments of quantities of material falling below the reporting level are reported and now cumulatively total 1 gram or more of SNM or 1 kilogram or more of source material. Examples are shipments of material (not reported elsewhere) from facilities that have not been assigned a reporting identification symbol and shipments from licensees that are not required to document or report transactions.	Entry by licensee required.
65	Rounding Adjustment	Entry required by licensee. Note: A negative value adds to the site inventory.

APPENDIX C

EXAMPLE DOCUMENTATION OF SHIPPER AND RECEIVER DATA

(BLOCKS 26 AND 27)

EXAMPLE DOCUMENTATION OF SHIPPER AND RECEIVER DATA (BLOCKS 26 AND 27)

EXAMPLE 1-a—INITIAL REPORT

On March 31, 2008, shipper YYY transferred to receiver XXX four fabricated fuel elements containing the following:

Line		Element	Isotope
1	FAB FUEL ELE-1	377,609 grams (g)	18,111 g
2	FAB FUEL ELE-2	42,114 g	1,344 g
3	FAB FUEL ELE-3	377,855 g	18,122 g
4	FAB FUEL ELE-4	41,992 g	1,340 g

EXAMPLE 1-b—RECEIVER'S REPORT

On April 1, 2008, receiver XXX acknowledged receipt of the shipment and accepted the shipper's weights without further measurement.

EXAMPLE 1-c—CORRECTION 1

On April 16, 2008, the shipper corrected the element weights for lines 1 and 4 to reflect the adjusted element and isotope weights, as well as foreign obligated enriched uranium.

EXAMPLE 1-d—RECEIVER'S CORRECTION 1

On April 23, 2008, the receiver acknowledged receipt of the correction and reported the corrections to the Nuclear Materials Management and Safeguards System.

EXAMPLE 2-m (ACTION CODE M)

On March 31, 2008, facility XXX reported onsite inventory adjustments of fission, decay, and production that changed its inventory of enriched uranium and plutonium.

Example 2-m-a Correction (ACTION CODE M)

On March 31, 2007, facility XXX reported a correction to its onsite production of plutonium. This change also changes the quantity of foreign obligated plutonium at the facility.

EXAMPLE 3-a—EXPORT OF A FUEL ASSEMBLY

On March 31, 2008, facility YYY reported the export of one fuel as

EXAMPLE 4-a—INITIAL REPORT OF AN IMPORT

On March 31, 2008, facility XXX submitted a report documenting the shipment of three fuel assemblies from foreign facility YYY.

EXAMPLE 4-b—RECEIVER'S REPORT OF AN IMPORT

On March 31, 2008, facility XXX submitted a report documenting the receipt of three fuel assemblies from foreign facility YYY.

EXAMPLE 5-a—INITIAL REPORT OF SHIPMENT TO BURIAL SITE

On March 31, 2008, facility XXX submitted a report documenting the shipment of uranium waste to a burial site.

EXAMPLE 5-b—RECEIVER'S REPORT OF A SHIPMENT TO BURIAL SITE

On April 5, 2008, facility VVV submitted a report documenting the receipt of uranium waste to the burial site.

List of Examples:

Example 1-a:	DOE/NRC Form 741—Initial report
Example 1-b:	DOE/NRC Form 741—Receiver's report
Example 1-c:	DOE/NRC Form 741—Correction 1 (shipper adjusting lines 1 and 4 of the initial transaction)
Example 1-d:	DOE/NRC Form 741—Correction 1 (receiver adjusting lines 1 and 4 of the initial transaction)
Example 2-m:	DOE/NRC Form 741—Initial report (action code M)
Example 2-m-a:	DOE/NRC Form 741—Correction 1 (action code M)
Example 3-a:	DOE/NRC Form 741—Initial report (export from the United States)
Example 4-a:	DOE/NRC Form 741—Initial report (shipment to the United States)
Example 4-b:	DOE/NRC Form 741—Receiver's report (shipment to the United States)
Example 5-a:	DOE/NRC Form 741—Initial report (shipment to a burial site)
Example 5-b:	DOE/NRC Form 741—Receiver's report (shipment to a burial site)

Example 1-a

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)			
YYY	XXX	000001		a. SHIPPER A	b. RECEIVER	a. SHIPPER A	b. RECEIVER	PAGE 1 OF 1 PAGES	COPY 1 OF 1 COPIES	SERIES	

8.a. NAME AND ADDRESS OF SHIPPER	b. LICENSE NO.	9.a. NAME AND ADDRESS OF RECEIVER	b. LICENSE NO.	10. NO OF DATA LINES 4	11. NATURE OF TRANSACTION
COMPANY NAME COMPANY ADDRESS CITY, STATE ZIP CODE c. ATTENTION: CONTACT d. TELEPHONE:		COMPANY NAME COMPANY ADDRESS CITY, STATE ZIP CODE c. ATTENTION: CONTACT d. TELEPHONE:		12.a. SHIPPED FOR ACCOUNT OF / b. RIS	13.a. SHIPPED TO ACCOUNT OF / b. RIS

NO.	DISTRIBUTION OF COPIES
1	YYY
2	XXX
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only
1	31	20	50397.00	2335.00

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT	03	31	2008
b. SHIPPER'S CORRECTION			
c. RECEIPT			
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS

b. CONCISE NOTE ATTACHED ☐

c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT 20358

25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS. POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.
	1		FAB FUEL ELE -1	1		20	309	J	2	M					377609.00		4.7962	18111.00	
	2		FAB FUEL ELE -2	1		20	309	J	2	M					42114.00	107	3.1913	1344.00	30
	3		FAB FUEL ELE -3	1		20	309	J	2	M					377855.00		4.7960	18122.00	
	4		FAB FUEL ELE -4	1		20	309	J	2	M					41992.00	107	3.1911	1340.00	30

↑↑↑ **26s. SHIPPER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

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.

Example 1-b

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)				
YYY	XXX	000001		a. SHIPPER	b. RECEIVER A	a. SHIPPER	b. RECEIVER B	PAGE 1	OF 1	PAGES	COPY 1 OF 1	COPIES SERIES

8.a. NAME AND ADDRESS OF SHIPPER	b. LICENSE NO.	9.a. NAME AND ADDRESS OF RECEIVER	b. LICENSE NO.
COMPANY NAME COMPANY ADDRESS CITY, STATE ZIP CODE c. ATTENTION: CONTACT d. TELEPHONE:		COMPANY NAME COMPANY ADDRESS CITY, STATE ZIP CODE c. ATTENTION: CONTACT d. TELEPHONE:	

10. NO OF DATA LINES 0

12.a. SHIPPED FOR ACCOUNT OF — b. RIS

11. NATURE OF TRANSACTION

13.a. SHIPPED TO ACCOUNT OF — b. RIS

NO.	DISTRIBUTION OF COPIES
1	YYY
2	XXX
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT			
b. SHIPPER'S CORRECTION			
c. RECEIPT	04	01	2008
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS

b. CONCISE NOTE ATTACHED ☐

c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT

25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS. POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.

↑↑↑ **26s. SHIPPER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

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 741 (4-2005) PRINTED ON RECYCLED PAPER

Example 1-c

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)				
YYY	XXX	000001	1	a. SHIPPER	b. RECEIVER A	a. SHIPPER	b. RECEIVER C	PAGE 1 OF 1	PAGES	COPY 1 OF 1	COPIES	SERIES

8.a. NAME AND ADDRESS OF SHIPPER — b. LICENSE NO.

COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

9.a. NAME AND ADDRESS OF RECEIVER — b. LICENSE NO.

COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

10. NO OF DATA LINES 4

12.a. SHIPPED FOR ACCOUNT OF — b. RIS

11. NATURE OF TRANSACTION

13.a. SHIPPED TO ACCOUNT OF — b. RIS

NO.	DISTRIBUTION OF COPIES
1	YYY
2	XXX
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only
1	31	20	-50397.00	-2335.00
2	31	20	50300.00	2330.00

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT			
b. SHIPPER'S CORRECTION	04	16	2008
c. RECEIPT			
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS

b. CONCISE NOTE ATTACHED ☐

c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT

25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS. POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.
002	1		FAB FUEL ELE -1	-1		20	309	J							-377609.00		4.7962	-18111.00	
101	2		FAB FUEL ELE -1	1		20	309	J							377509.00		4.7962	18000.00	
004	3		FAB FUEL ELE -4	-1		20	309	J							-41992.00	-107	3.1911	-1340.00	-30
103	4		FAB FUEL ELE -4	1		20	309	J							42002.00	107	3.1911	1450.00	30

↑↑↑ **26s. SHIPPER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

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.

Example 1-d

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)				
YYY	XXX	000001	1	a. SHIPPER	b. RECEIVER A	a. SHIPPER	b. RECEIVER D	PAGE 1 OF 1 PAGES	COPY 1 OF 1 COPIES	SERIES		

8.a. NAME AND ADDRESS OF SHIPPER: COMPANY NAME, COMPANY ADDRESS, CITY, STATE ZIP CODE
b. LICENSE NO.
c. ATTENTION: CONTACT
d. TELEPHONE:

9.a. NAME AND ADDRESS OF RECEIVER: COMPANY NAME, COMPANY ADDRESS, CITY, STATE ZIP CODE
b. LICENSE NO.
c. ATTENTION: CONTACT
d. TELEPHONE:

10. NO OF DATA LINES 4
12.a. SHIPPED FOR ACCOUNT OF
b. RIS
11. NATURE OF TRANSACTION
13.a. SHIPPED TO ACCOUNT OF
b. RIS

NO.	DISTRIBUTION OF COPIES
1	YYY
2	XXX
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only
1	31	20	-50397.00	-2335.00
2	31	20	50300.00	2330.00

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT			
b. SHIPPER'S CORRECTION			
c. RECEIPT			
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION	04	23	2008

23a. MISCELLANEOUS
b. CONCISE NOTE ATTACHED ☐
c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT
25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.

↑↑↑ **26s. SHIPPER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

002	1		FAB FUEL ELE -1	-1		20	309	J							-377609.00		4.7962	-18111.00	
101	2		FAB FUEL ELE -1	1		20	309	J							377509.00		4.7962	18000.00	
004	3		FAB FUEL ELE -4	-1		20	309	J							-41992.00		3.1911	-1340.00	
103	4		FAB FUEL ELE -4	1		20	309	J							42002.00		3.1911	1450.00	

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 741 (4-2005) PRINTED ON RECYCLED PAPER

Example 2-m

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)			
XXX	XXX	000031		a. SHIPPER A	b. RECEIVER	a. SHIPPER M	b. RECEIVER	PAGE 1 OF 1 PAGES	COPY 1 OF 1 COPIES	SERIES	

8a. NAME AND ADDRESS OF SHIPPER — b. LICENSE NO.

COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

9a. NAME AND ADDRESS OF RECEIVER — b. LICENSE NO.

COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

10. NO OF DATA LINES 4

12a. SHIPPED FOR ACCOUNT OF — b. RIS

11. NATURE OF TRANSACTION

13a. SHIPPED TO ACCOUNT OF — b. RIS

NO.	DISTRIBUTION OF COPIES
1	
2	
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only
1	31	20	-1405.00	-93.00
2	32	50	1042.00	

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT	03	31	2008
b. SHIPPER'S CORRECTION			
c. RECEIPT			
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS

b. CONCISE NOTE ATTACHED ☐

c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT

25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.
	1	LN	FISSION			20	309	J							431541.00		3.2416	293390.00	
	2	LN	FISSION			20	309	J							24403.00		0.9937	8817.00	
	3	TN	DECAY			50	309	J							6727.00		26.2066	6727.00	
	4	NP	PRODUCTION			50	309	J							105736.00		13.2962	88991.00	

↑↑↑ **26s. SHIPPER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

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 741 (4-2005) PRINTED ON RECYCLED PAPER

Example 2-m-a

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE a. SHIPPER	b. RECEIVER	6. ACTION CODE a. SHIPPER	b. RECEIVER	7. DOCUMENTATION (Only if document is classified SECRET) PAGE	OF	PAGES	COPY	OF	COPIES	SERIES
XXX	XXX	000031	A	A		M		1	1		1	1		

8.a. NAME AND ADDRESS OF SHIPPER — b. LICENSE NO.

COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

9.a. NAME AND ADDRESS OF RECEIVER — b. LICENSE NO.

COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

10. NO OF DATA LINES: 2

12.a. SHIPPED FOR ACCOUNT OF — b. RIS

11. NATURE OF TRANSACTION

13.a. SHIPPED TO ACCOUNT OF — b. RIS

NO.	DISTRIBUTION OF COPIES
1	
2	
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only
1	32	50	-1042.00	
2	32	50	1002.00	

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT	03	31	2008
b. SHIPPER'S CORRECTION			
c. RECEIPT			
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS

b. CONCISE NOTE ATTACHED ☐

c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT

25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS. POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.
004	1	NP	PRODUCTION			50	309	J							-105736.00		13.2962	-88991.00	
A01	2	NP	PRODUCTION			50	309	J							105736.00		13.2962	88905.00	

↑↑↑ **26s. SHIPPER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

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.

Example 3-a

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)			
YYY	RRRR	000001		a. SHIPPER A	b. RECEIVER	a. SHIPPER A	b. RECEIVER	PAGE 1 OF 1 PAGES	COPY 1 OF 1 COPIES	SERIES	

8.a. NAME AND ADDRESS OF SHIPPER — b. LICENSE NO.

COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

9.a. NAME AND ADDRESS OF RECEIVER — b. LICENSE NO.

FOREIGN COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

10. NO OF DATA LINES 2

12.a. SHIPPED FOR ACCOUNT OF — b. RIS

11. NATURE OF TRANSACTION

13.a. SHIPPED TO ACCOUNT OF — b. RIS

NO.	DISTRIBUTION OF COPIES
1	YYY
2	RRRR
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT	03	31	2008
b. SHIPPER'S CORRECTION			
c. RECEIPT			
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS

b. CONCISE NOTE ATTACHED ☐

c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT 4633

25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS. POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.
	1		AH31	1		EG	309	J							306627.00		4.1027	12580.00	
	2		AH31	1		EG	309	J							61778.00		3.3426	2065.00	

↑↑↑ **26s. SHIPPER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

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.

Example 4-a

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE a. SHIPPER	b. RECEIVER	6. ACTION CODE a. SHIPPER	b. RECEIVER	7. DOCUMENTATION (Only if document is classified SECRET) PAGE	OF	PAGES	COPY	OF	COPIES	SERIES
RRRR	XXX	000001		A		A		1	1		1			

8.a. NAME AND ADDRESS OF SHIPPER — b. LICENSE NO.
FOREIGN COMPANY NAME
COMPANY ADDRESS
CITY, COUNTRY
c. ATTENTION: CONTACT
d. TELEPHONE:

9.a. NAME AND ADDRESS OF RECEIVER — b. LICENSE NO.
COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE
c. ATTENTION: CONTACT
d. TELEPHONE:

10. NO OF DATA LINES: 3

12.a. SHIPPED FOR ACCOUNT OF — b. RIS

11. NATURE OF TRANSACTION

13.a. SHIPPED TO ACCOUNT OF — b. RIS

NO.	DISTRIBUTION OF COPIES
1	RRRR
2	XXX
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only
1	33	20	210.00	68.00

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT	03	31	2008
b. SHIPPER'S CORRECTION			
c. RECEIPT			
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS
b. CONCISE NOTE ATTACHED ☐
c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT: 3061

25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS. POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.
	1		FOREIGN-1	1		EG	309	J							177999.00		3.2800	5838.00	
	2		FOREIGN-2	1		EG	309	J							177834.00		3.2900	5851.00	
	3		FOREIGN-3	1		EG	309	J							177910.00		3.2880	5850.00	

↑↑↑ **26s. SHIPPER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

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 741 (4-2005) PRINTED ON RECYCLED PAPER

Example 4-b

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE a. SHIPPER	b. RECEIVER	6. ACTION CODE a. SHIPPER	b. RECEIVER	7. DOCUMENTATION (Only if document is classified SECRET) PAGE	OF	PAGES	COPY	OF	COPIES	SERIES
RRRR	XXX	000001			A		B	1	1		1	1		

8.a. NAME AND ADDRESS OF SHIPPER: FOREIGN COMPANY NAME
COMPANY ADDRESS
CITY, COUNTRY
b. LICENSE NO.
c. ATTENTION: CONTACT
d. TELEPHONE:

9.a. NAME AND ADDRESS OF RECEIVER: COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE
b. LICENSE NO.
c. ATTENTION: CONTACT
d. TELEPHONE:

10. NO OF DATA LINES 3
11. NATURE OF TRANSACTION
12.a. SHIPPED FOR ACCOUNT OF b. RIS
13.a. SHIPPED TO ACCOUNT OF b. RIS

NO.	DISTRIBUTION OF COPIES
1	RRRR
2	XXX
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER
15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.
16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only
1	33	20	210.00	68.00

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT			
b. SHIPPER'S CORRECTION			
c. RECEIPT	04	05	2008
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS
b. CONCISE NOTE ATTACHED ☐
c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT
25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS. POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.

↑↑↑ 26s. SHIPPER'S DATA — SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ 27s. RECEIVER'S DATA — SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS. POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.
	1		FOREIGN-1	1		EG	309	J							177999.00		3.2800	5838.00	
	2		FOREIGN-2	1		EG	309	J							177834.00		3.2900	5851.00	
	3		FOREIGN-3	1		EG	309	J							177910.00		3.2880	5850.00	

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 741 (4-2005) PRINTED ON RECYCLED PAPER

Example 5-a

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)				
XXX	VVV	000001		a. SHIPPER A	b. RECEIVER	a. SHIPPER A	b. RECEIVER	PAGE 1	OF 1	PAGES	COPY 1	OF 1	COPIES	SERIES

8.a. NAME AND ADDRESS OF SHIPPER — b. LICENSE NO.

COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

9.a. NAME AND ADDRESS OF RECEIVER — b. LICENSE NO.

WASTE COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

10. NO OF DATA LINES 1

12.a. SHIPPED FOR ACCOUNT OF — b. RIS

11. NATURE OF TRANSACTION

13.a. SHIPPED TO ACCOUNT OF — b. RIS

NO.	DISTRIBUTION OF COPIES
1	VVV
2	XXX
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT	03	31	2008
b. SHIPPER'S CORRECTION			
c. RECEIPT			
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS

b. CONCISE NOTE ATTACHED ☐

c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT 2041

25. TOTAL VOLUME *(Waste Transfers Only)* 227

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS. POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.
	1	LD	WASTE	1		20	776	J							8.00		93.000	7.00	

↑↑↑ **26s. SHIPPER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

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 741 (4-2005) PRINTED ON RECYCLED PAPER

Example 5-b

DOE/NRC FORM 741
(4-2005) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2008**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Records and FOIA Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)			
XXX	VVV	000001		a. SHIPPER A	b. RECEIVER	a. SHIPPER B	b. RECEIVER	PAGE 1 OF 1 PAGES	COPY 1 OF 1 COPIES	SERIES	

8.a. NAME AND ADDRESS OF SHIPPER — b. LICENSE NO.

COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

9.a. NAME AND ADDRESS OF RECEIVER — b. LICENSE NO.

WASTE COMPANY NAME
COMPANY ADDRESS
CITY, STATE ZIP CODE

c. ATTENTION: CONTACT
d. TELEPHONE:

10. NO OF DATA LINES 1

12.a. SHIPPED FOR ACCOUNT OF — b. RIS

11. NATURE OF TRANSACTION

13.a. SHIPPED TO ACCOUNT OF — b. RIS

NO.	DISTRIBUTION OF COPIES
1	VVV
2	XXX
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT			
b. SHIPPER'S CORRECTION			
c. RECEIPT	04	05	2008
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS

b. CONCISE NOTE ATTACHED ☐

c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT

25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV. CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS. POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.
	1	LD	WASTE	1		20	776	J							8.00		93.000	7.00	

↑↑↑ **26s. SHIPPER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓↓↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

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 741 (4-2005) PRINTED ON RECYCLED PAPER

APPENDIX D

GLOSSARY

GLOSSARY

Accountability—The determination and current record maintenance of special nuclear material and source material quantities associated with transfers, measured discards, inventories, and inventory differences that might result from theft, diversion, or other unidentified loss mechanisms.

Agreement State—A State that has signed an agreement with the U.S. Nuclear Regulatory Commission (NRC) under which the State regulates the use of byproduct, source, and small quantities of special nuclear material in that State.

Book inventory—The algebraic sum of the most recent physical inventory of the material balance area and of all inventory changes that have occurred since the physical inventory was taken.

Concise note—The U.S. Department of Energy (DOE)/NRC Form 740M is used to provide additional information on nuclear material transaction, material balance, or inventory data supplied by facilities engaged in the import or export of nuclear materials, by facilities selected under the provisions of the agreement between the United States and the International Atomic Energy Agency for the application of safeguards in the United States, or by any facility that would like to transmit any additional information on explanatory nuclear material.

DOE-owned—Nuclear material that, while used by a licensee as part of its activities, is actually a DOE-owned asset. These materials may be bulk materials, discrete radiation sources, or finished products. Such materials may represent a lease or loan arrangement with the DOE. Typically, the owner code G on shipping information (i.e., DOE/NRC Form 741) and inventory documentation (i.e., DOE/NRC Forms 742 and 742C) identifies DOE-owned materials. One way a licensee can determine whether nuclear material in its possession is DOE-owned is to review the licensee's DOE/NRC Form 741 documentation listing the original receipt of the material. If such material is DOE-owned, the owner code G will appear on the licensee's portion of the form.

EURATOM (European Atomic Energy Commission)—As of January 2019, an organization consisting of the member countries Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom.

Foreign obligated nuclear material—Source material or special nuclear material that is subject to the terms and conditions of a peaceful use agreement, in accordance with Section 123 of the Atomic Energy Act of 1954, into which the U.S. Government has entered with another government or group of governments.

Highly enriched uranium—Uranium enriched to 20 percent or greater in the isotope uranium-235.

Holding account—Typically identified by four-character reporting identification symbols (RISs) ending in the letter H assigned by the NRC. These accounts usually acquired inventory from the shipment of licensed material from the primary RIS in use by the licensee. Typically, a small

number of licensees have used these accounts for nuclear materials not expected to be immediately processed, reprocessed, or disposed. However, the licensed nuclear materials in holding accounts are still in the licensee's possession and must be included in inventories reported to the Nuclear Materials Management and Safeguards System.

Inventory difference (ID)—The arithmetic difference between a book inventory and the corresponding physical inventory that closes the material balance period. It is calculated by subtracting the ending inventory (EI) and removals from inventory (R) from the beginning inventory (BI) and additions to inventory (A) during the period between physical inventories. Mathematically, ID can be expressed in the following way:

$$ID = (BI + A - R) - EI$$

where (BI + A - R) is the book inventory.

Inventory reconciliation—The adjustment of the book record quantity of elements and fissile isotope weights to reflect the results of a physical inventory taking. In a broad sense, inventory reconciliation involves the activities of calculating (1) the inventory difference (ID) for the material balance period in question, (2) the uncertainty value associated with the ID, (3) the active inventory for the period, and (4) any bias adjustment or prior period adjustment, or both, associated with the ID value.

Low-enriched uranium—Uranium enriched below 20 percent in the isotope uranium-235.

Material balance period—The timespan to which a material or physical inventory pertains.

Nuclear Materials Management and Safeguards System—The national database and information system for select nuclear materials controlled by the U.S. Government. This system was created to support national safeguards and management objectives in domestic and international programs. The system stores data on nuclear material transactions and inventories and produces a wide range of printed reports for use by the DOE and the NRC and their licensees. The system is used to satisfy the nuclear materials information requirements of agreements between the United States and foreign entities. In addition, the system provides the reporting interface between facilities selected under the provisions of the U.S./International Atomic Energy Agency Safeguards Agreement.

Nuclear material outside facilities—The nuclear material that is not in a facility and that is customarily used in amounts of 1 effective kilogram or less.

Physical inventory—A physical determination of the quantity of nuclear material on hand at a given time. The methods of physical inventory and the associated measurements vary, depending on the material to be inventoried and the process involved. A book inventory between physical inventory takings can be calculated based on the physical inventory quantity from the prior period together with all subsequent inventory changes associated with the determination of that book inventory. The primary purpose of a physical inventory is to confirm the absence of (or to detect) a loss, theft, or diversion of special nuclear material.

Reporting period—A period inclusive of defined dates (e.g., October 1, 2005, through September 30, 2006). Each reporting period must begin the day after the previous reporting period ended.

Reporting identification symbol (RIS)—A unique combination of three or four characters that the DOE or the NRC assigns to each reporting organization for the purpose of identification in the Nuclear Materials Management and Safeguards System database.

Shipper-receiver difference (SRD)—The weight difference for a shipment between the shipper and receiver values, based on measurements.

Source material—Uranium or thorium, or any combination thereof, in any physical or chemical form, or ores that contain by weight 0.05 percent or more of uranium, thorium, or any combination thereof. Source material does not include special nuclear material.

Special nuclear material (SNM)—Plutonium, uranium-233, and uranium enriched in the isotope 233 or 235.

APPENDIX E

U.S. DEPARTMENT OF ENERGY/U.S. NUCLEAR REGULATORY COMMISSION FORM 741, “NUCLEAR MATERIAL TRANSACTION REPORT” (BLANK)
AND
U.S. DEPARTMENT OF ENERGY/U.S. NUCLEAR REGULATORY COMMISSION FORM 740M, “CONCISE NOTE” (BLANK),

DOE/NRC FORM 741
(04-2018) Previous editions are obsolete
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

NUCLEAR MATERIAL TRANSACTION REPORT

APPROVED BY OMB: NO. 3150-0003 **EXPIRES: 04/30/2021**

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. 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, (3150-0003), 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.

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE		6. ACTION CODE		7. DOCUMENTATION (Only if document is classified SECRET)		
				a. SHIPPER	b. RECEIVER	a. SHIPPER	b. RECEIVER	PAGE OF PAGES	COPY OF COPIES	SERIES

8.a. NAME AND ADDRESS OF SHIPPER	b. LICENSE NO.	9.a. NAME AND ADDRESS OF RECEIVER	b. LICENSE NO.	10. NO OF DATA LINES	11. NATURE OF TRANSACTION
c. ATTENTION:		c. ATTENTION:		12.a. SHIPPED FOR ACCOUNT OF	b. RIS
d. TELEPHONE:		d. TELEPHONE:		13.a. SHIPPED TO ACCOUNT OF	b. RIS

NO.	DISTRIBUTION OF COPIES
1	
2	
3	
4	
5	
6	
7	
8	
9	

14. TRANSFER AUTHORITY - CONTRACT, NM DRAFT, OR ORDER NUMBER

15. EXPORT OR IMPORT TRANSFERS: LICENSE NO.

16. MATERIAL TYPE AND DESCRIPTION

17. LINE NUMBER	18. COUNTRY OF OBLIGATION	19. MATERIAL TYPE	20. OBLIGATED ELEMENT WEIGHT	21. OBLIGATED ISOTOPE WEIGHT For Enriched Uranium Only

22. ACTION DATE	MONTH (MM)	DAY (DD)	YEAR (YYYY)
a. SHIPMENT			
b. SHIPPER'S CORRECTION			
c. RECEIPT			
d. RECEIVER'S MEASUREMENT			
e. RECEIVER'S CORRECTION			

23a. MISCELLANEOUS

b. CONCISE NOTE ATTACHED ☐

c. UK REPORTABLE? ☐ YES ☐ NO

24. TOTAL GROSS WEIGHT

25. TOTAL VOLUME *(Waste Transfers Only)*

26. SHIPPER'S DATA

BACK REFERENCE NUMBER a.	LINE NO. b.	TYPE OF INV CHANGE c.	IDENTIFICATION (ITEM/BATCH NAME) d.	NO. OF ITEMS e.	PROJECT NUMBER f.	MATERIAL TYPE g.	COMP/ FACILITY CODE h.	OWNER CODE i.	KEY MEAS POINT j.	MEAS. IDENT. k. 1 BASIS	2 OMP	3 METHOD	GROSS WEIGHT l.	NET WEIGHT m.	ELEMENT WEIGHT n.	ELEMENT LIMIT OF ERROR o.	WEIGHT % ISOTOPE p.	ISOTOPE WEIGHT q.	ISOTOPE LIMIT OF ERROR r.

26s. SHIPPER'S DATA SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

↓ ↓ ↓ **27s. RECEIVER'S DATA** SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

27. RECEIVER'S DATA

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 741 (04-2018)

DOE/NRC FORM 740M
(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

CONCISE NOTE

APPROVED BY OMB: NO. 3150-0057 **EXPIRES: 04/30/2021**

Estimated burden per response to comply with this mandatory collection request: 45 minutes. This information is required to satisfy the provisions of the US/IAEA Safeguards Agreement. 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, (3150-0057), 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.

1. Name	2. Attachment To: ☐ A. DOE/NRC 741 ☐ B. DOE/NRC 742 ☐ C. DOE/NRC 742C	3. RIS	4. Reporting Period (MM/DD/YYYY) From Date	To Date
Street Address	5. Transaction Data		6. Reporting Date	
City / State / Zip Code	A. Shipper's RIS / B. Receiver's RIS / C. Transaction Num. / D. Correction Num. / E. PC / F. AC			

7A. Line No.	7B. Entry Reference	7C. Text of Concise Note

To the best of my knowledge and belief, the information given above and in any attached schedules is true, complete, and correct.

8. Signature (See instructions [NUREG/BR-0006] for provisions regarding confidentiality).	9. Title	10. Date

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.

APPENDIX F

SUPPLEMENTAL INSTRUCTIONS FOR COMPLETING BLOCKS 17, 18, 19, 20, AND 21 ON U.S. DEPARTMENT OF ENERGY/U.S. NUCLEAR REGULATORY C OMMISSION FORM 741

SUPPLEMENTAL INSTRUCTIONS FOR COMPLETING BLOCKS 17, 18, 19, 20, AND 21 ON U.S. DEPARTMENT OF ENERGY/U.S. NUCLEAR REGULATORY COMMISSION FORM 741

F.1 Introduction

Licensees must follow special procedures to implement some of the reporting requirements of the U.S. Bilateral Agreements for Peaceful Nuclear Cooperation. These Agreements for Cooperation are one means to satisfy Section 123 of the Atomic Energy Act of 1954, as amended, and allow the U.S. nuclear industry to trade with foreign countries and entities. The agreements require that the United States track and report foreign obligated nuclear materials and nuclear material produced from foreign obligated material from these countries and entities. A foreign obligation is a commitment by one government to another to treat nuclear materials, nonnuclear materials, and equipment and components in a manner consistent with the agreement signed by the two governments.

In addition to these Agreements for Cooperation, other international agreements require that the United States track and report foreign obligated nuclear materials and nuclear material produced from foreign obligated material from foreign suppliers. In accordance with the U.S./Russian agreement concerning the disposition of highly enriched uranium extracted from nuclear weapons, the United States must track and report to Russia the imports, exports, and use of former Soviet Union downblended highly enriched uranium. Under the Washington Agreement, the United States must track and report nuclear material produced by URENCO enrichment technology. The technology and material produced are to be used for peaceful purposes.

The exchange of foreign obligations between facilities can occur only between like materials (i.e., material type (MT) 10, 50, 70, 81, E-1, E-2, E-3, or E-4) within the following constraints:

- Foreign obligations on like-for-like and fungible material reported in inventory for a reporting identification symbol (RIS) code may be exchanged on site or with other domestic RIS codes consistent with the operator's commercial practices. No exchange of material from one MT to another is allowed unless the U.S. Government provides written prior approval. For example, downblending of E-3 enriched uranium that results in a lower category (i.e., E-3 of foreign obligated material to become E-1 material) requires written approval from the U.S. Government. For this reason, facilities should notify the Nuclear Materials Management and Safeguards System (NMMSS) whenever they are reporting a foreign obligation exchange in which the material type code of the exchange does not match the calculated material type code (i.e., E-1 foreign obligated material becomes E-2 foreign obligated material) because of rounding adjustments made for NMMSS reporting (i.e., the calculated enrichment changes from less than 5 percent to greater than 5 percent because of rounding).

- The foreign obligated material must be exchanged for similar material unless the U.S. Government provides written prior approval. For example, irradiated material is not eligible for foreign obligation exchanges or swaps since it is not subject to fungibility, or like-for-like, principles.

- Foreign obligation exchanges involving a U.S. Nuclear Regulatory Commission (NRC) licensee and a U.S. Department of Energy (DOE) entity require written approval from both agencies before the exchange.

- Foreign obligation exchanges between two parties must be for the same material quantities. Additionally, the obligations exchanged must match (i.e., the obligation "shipped or removed" by one participant is "received or added" by the second party to the transaction).

Commercial practices allow a facility to conduct a foreign obligations exchange to meet a contractual requirement. Foreign obligation exchanges are not meant to circumvent the United States' international agreements for peaceful use and nuclear cooperation with trading partners. Foreign obligation swapping should not be conducted for the purposes of removing foreign obligations from natural progression in the fuel cycle (e.g., swapping obligations to waste to create unobligated nonwaste material). Foreign obligations assigned to process-generated waste should follow the proportionality principle.

Facilities should also use special care to avoid a negative foreign obligations balance. In accordance with accounting principles for foreign obligations, NMMSS is not able to reconcile a negative foreign obligation balance. Reporting a negative foreign obligations balance at the end of a material balance period will result in the licensee's inability to reconcile its annual inventory with NMMSS.

The NMMSS staff can provide reports to facilities that calculate a foreign obligations balance for an RIS code based on the balance of transactions reported since the last reconciliation date. The NMMSS-generated report may indicate a negative foreign obligations balance for a facility on any given reporting date because of the time delay in reporting shipments versus receipts; however, NMMSS is not able to reconcile a facility for a material balance period until the foreign obligations at the facility are balanced.

F.2 Imports

For U.S. facilities importing nuclear material with foreign obligations, the appropriate Government agency will supply the relevant foreign obligation information. The notification will provide the information necessary to complete blocks 17–21, if applicable.

For imports, the foreign obligation information can be (1) the country or entity from which the nuclear material was shipped, (2) the country or entity attaching "third-party obligations," or (3) a combination of both. In most cases, for imports from a country that has made the entire shipment subject to the agreement, the total import quantity will be foreign obligated. If only a portion of the shipment is subject to an agreement (third-party obligation), the documentation will clearly specify that quantity.

For the completion of blocks 17–21, the Government notification will supply (1) the country or entity of foreign obligation, (2) the MT, and (3) the amount that is foreign obligated. (See Table F-1 for country and entity codes. See Table F-2 for reportable foreign obligated MTs and quantities.)

Foreign Obligation Code	Foreign Obligation Entity, as of December 1, 2018
31	Australia
32	Canada
33	European Atomic Energy Commission (EURATOM)*
34	Japan
35	People's Republic of China
36	Russia
37	Switzerland
38	Argentina
39	Brazil
40	Chile
41	India
42	Republic of Korea
43	Taiwan
44	Vietnam, Socialist Republic of
65	Japan/Russia
66	EURATOM/Russia
67	Australia/Japan/Russia
68	Canada/Japan/Russia
69	EURATOM/Japan/Russia
70	LES Centrifuge Enrichment/Japan
71	Australia/Japan/LES Centrifuge Enrichment
72	Canada/Japan/LES Centrifuge Enrichment
73	EURATOM/Japan/LES Centrifuge Enrichment
74	Australia/EURATOM/Japan/LES Centrifuge Enrichment
75	Canada/EURATOM/Japan/LES Centrifuge Enrichment
76	China/Japan/LES Centrifuge Enrichment
77	Australia/Canada/EURATOM/Japan/LES Centrifuge Enrichment
81	Australia/Japan
82	Canada/Japan
83	EURATOM/Japan
84	Australia/EURATOM/Japan
85	Canada/EURATOM/Japan
86	China/Japan
87	Australia/Canada
88	Australia/Canada/EURATOM
90	LES Centrifuge Enrichment

Foreign Obligation Code	Foreign Obligation Entity, as of December 1, 2018 (cont.)
91	Australia/EURATOM
92	Canada/EURATOM
93	LES Centrifuge Enrichment/Australia
94	LES Centrifuge Enrichment/Canada
95	LES Centrifuge Enrichment/EURATOM
96	Australia/Russia
97	Canada/Russia
98	Australian/Canadian/LES Centrifuge Enrichment
WR	Former Soviet Union Weapons Material

* EURATOM comprises 28 member states: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom.

Note: For any other foreign obligation codes, contact the NMMSS staff for further instructions.

Table F.2 Reportable MTs and Source and Special Nuclear Material

Type	Domestic Code	IAEA Code
Normal uranium	MT 81	N
Depleted uranium	MT 10	D
Thorium	MT 88	T
Plutonium	MT 50	P
Enriched uranium	MT 20	EG
Uranium-233	MT 70	EK

Licensees should complete the foreign obligation information as follows:

Block 17: (FOREIGN OBLIGATION) LINE NUMBER—The shipper will enter a sequential number beginning with the number 1 for each foreign obligated country or material. If there is more than one separate foreign obligation or more than one foreign obligated MT, enter the appropriate numbers in the subsequent lines.

Block 18: COUNTRY OF OBLIGATION—For each line, enter the foreign obligation code in Table F-1 that represents the country or entity of foreign obligation.

Block 19: MATERIAL TYPE—For each line, enter the code in Table F-2 that represents the MT for the foreign obligated nuclear material. For imports and exports of foreign obligated nuclear material, report the MT code using the appropriate International Atomic Energy Agency (IAEA) code obligated.

Block 20: OBLIGATED ELEMENT WEIGHT—For each line, enter the weight that is foreign obligated in the reportable quantity specified in Table F-2. Enter positive or negative values appropriately to account for material addition or removal, respectively.

Block 21: OBLIGATED ISOTOPE WEIGHT (FOR ENRICHED URANIUM ONLY)—For each line of enriched uranium, enter the foreign obligated isotope weight in grams. (Foreign obligated uranium-235 is restricted to uranium enriched to 5 percent or less, unless the U.S. Government authorizes or approves higher enrichment.) Enter positive or negative values to appropriately account for material addition or removal, respectively.

F.3 Domestic Transfers, Internal Transactions, and Exports

For U.S. facilities shipping or exporting material with foreign obligations, or for the reporting of onsite gains and losses, state the foreign obligations on the material as such in blocks 17–21:

- For domestic transfers, fill out blocks 17–21 as for imports (Section F-2 above). However, the foreign obligation information will not be supplied by a government notification. The U.S. shipper will assign the appropriate foreign obligations on the material, if any, and complete the line number, country/entity of foreign obligation, MT, and foreign obligated weight, if applicable. The U.S. receiver will complete the matching obligation information as assigned by the shipper.

- For internal transactions (e.g., burnup, decay, production, measured discards, accidental losses or gains, category changes, fission and transmutation, inventory differences), enter the line number, country/entity of foreign obligation, MT, and foreign obligated weights, if applicable, for the material.

The domestic facility must obtain the information necessary to complete DOE/NRC Form 741, "Nuclear Material Transaction Report," for the foreign facility for all imports of SNM and source material. In the case of exports, the shipper initiates a DOE/NRC Form 741 report, and NMMSS will generate a DOE/NRC Form 741 report using shipper information. However, if a significant shipper-receiver difference is identified between the U.S. shipper and foreign receiver (as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) 74.31, "Nuclear Material Control and Accounting for Special Nuclear Material of Low Strategic Significance," 10 CFR 74.43, "Internal Controls, Inventory, and Records," or 10 CFR 74.59, "Quality Assurance and Accounting Requirements," for SNM), or if there is an indication of loss, theft, or diversion of quantities of source material, as delineated in 10 CFR 40.64(c)(1), the shipper is required to document the foreign party's values in a DOE/NRC Form 741 report to NMMSS. Submittal for a foreign facility does not indicate a responsibility for the other facility or its shipment and receipt of materials.

Several facilities have agreed to receive and use various foreign obligated items (e.g., equipment, nonnuclear material, and technology). When the foreign obligated item is used with nuclear material, the facility is normally responsible for adding the foreign obligation that is assigned to the item to the nuclear material used in or processed through the use of the foreign obligated item. The addition of the item's foreign obligation to the nuclear material must be reported to NMMSS. The facility's timing and process for reporting an item's foreign obligations to the nuclear material used in or produced through use of the foreign obligated item are typically reflected in documented correspondence between the NRC and the facility.

Licensees with foreign obligated items should contact the NRC or DOE with questions related to foreign obligated items used at their sites.

APPENDIX G

SUPPLEMENTAL INSTRUCTIONS FOR POSSESSORS OF NUCLEAR MATERIAL OUTSIDE FACILITIES REPORTING PURSUANT TO THE MODIFIED SMALL QUANTITIES PROTOCOL

SUPPLEMENTAL INSTRUCTIONS FOR POSSESSORS OF NUCLEAR MATERIAL OUTSIDE FACILITIES REPORTING PURSUANT TO THE MODIFIED SMALL QUANTITIES PROTOCOL

G.1 Introduction

Information Circular INFCIRC/366, "Agreement of 18 February 1989 between the United States of America and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty for the Prohibition of Nuclear Weapons in Latin America" (U.S./International Atomic Energy Agency (IAEA) Caribbean Territories Safeguards Agreement), is an agreement between the U.S. Government and the IAEA for the application of safeguards in connection with the Treaty for the Prohibition of Nuclear Weapons in Latin America (Tlatelolco Treaty). Under Article 60 of INFCIRC/366, the United States is obligated to submit to the IAEA an initial inventory report on all nuclear material in its Caribbean territories. Nuclear material, by IAEA definition, includes all uranium, plutonium, and thorium holdings in the relevant territories in any chemical or physical form, or combination thereof. U.S. Caribbean territories include Puerto Rico and the U.S. Virgin Islands, as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) 75.4, "Definitions." The United States fulfills this reporting commitment via information collected in concert with the regulations in 10 CFR Part 75, "Safeguards on Nuclear Material—Implementation of Safeguards Agreements between the United States and the International Atomic Energy Agency." This appendix provides instruction for licensees reporting inventory and information under 10 CFR 75.13, "Communication of Information to the International Atomic Energy Agency (IAEA)," 10 CFR 75.32, "Initial Inventory Report," 10 CFR 75.34, "Inventory Change Reports," and 10 CFR 75.35, "Material Status Reports," under INFCIRC/366.

G.2 General Instructions

The instructions in this appendix apply only to possessors of nuclear material outside facilities (possessors), as defined in 10 CFR 75.4. Nuclear material outside facilities means nuclear material that is not in a facility and that is customarily used in amounts of 1 effective kilogram or less. Possessors are required to complete U.S. Department of Energy/U.S. Nuclear Regulatory Commission (DOE/NRC) Form 741, "Nuclear Material Transaction Report," when they ship, receive, or adjust their physical inventory of source or special nuclear material (SNM). Possessors may need to provide additional information for their inventory adjustments. The additional information is reported using DOE/NRC Form 740M, "Concise Note." Unless otherwise specified by license conditions, possessors shall dispatch such reports no later than the close of business the next working day for shipments and within 10 days after receipt of material, in accordance with the reporting requirements in 10 CFR 40.64, "Reports," 10 CFR 74.15, "Nuclear Material Transaction Reports," and 10 CFR 75.34. The reports must be filed as specified in the facility attachment for possessors of nuclear material outside facilities, which the NRC will provide to applicable licensees required to report in accordance with 10 CFR Part 75.

Possessors are required to complete both the shipper's data and receiver's data blocks of DOE/NRC Form 741 for imports received from outside the U.S. Caribbean territories.

Possessors are also required to report to the Nuclear Material Management and Safeguards System (NMMSS) all receipts, transfers, and inventory adjustments of DOE-owned, -loaned, or -leased material in their possession. Reports to NMMSS for all DOE-owned, -loaned,

or -leased material must follow the DOE reporting requirements specified in DOE Order 470.4B, "Safeguards and Security Program," and DOE Order 474.2, "Nuclear Material Control and Accountability."

Under 10 CFR 75.12, "Nuclear Material Outside Facilities," possessors shall provide their name and mailing address, physical location of the nuclear material, use of the nuclear material, and nuclear material accounting procedures, including organizational responsibilities for accountancy and control, on DOE/NRC Form 740M. Possessors will also submit this form to define transactions greater than 0.0 kilogram but less than 0.5 kilogram of source material and greater than 0.0 gram but less than 0.5 gram of SNM, which are rounded to a zero value when reported by NMMSS.

G.2.1 Instructions for Completing DOE/NRC Form 741 Reports

Licensees should complete DOE/NRC Form 741 in accordance with the following instructions:

1. SHIPPER'S RIS—Enter the shipper's RIS.

2. RECEIVER'S RIS—Enter the receiver's RIS.

3. TRANSACTION NUMBER—Enter a number for the same shipper-receiver combination. Numbers in the series must be consecutive (i.e., no skipped numbers).

4. CORRECTION NUMBER—This block is used to identify a transaction that is an adjustment to a previously submitted DOE/NRC Form 741. Leave this block blank for an original submission of a DOE/NRC Form 741. Use consecutive numbers, starting with 1, for adjustments. For corrections requiring changes only to NMMSS data (and not to the other party's data), use letters (A, B, etc.) instead of numbers. See Chapter 4 of this NUREG.

5. PROCESS CODE—Enter process code A, C, or D.

   - "A" refers to the initial entry of data.

   - "C" refers to the replacement of data. With the concurrence of the other party to the transaction, up to an entire dataset may be replaced at any time before the close of the NMMSS processing period in which the initial submittal was made.

   - "D" refers to the deletion of data. An entire dataset may be deleted at any time before the close of the NMMSS processing period in which the initial submittal was made, with the concurrence of the other party to the transaction.

6. ACTION CODE—Use this block to identify the type of transaction being reported on DOE/NRC Form 741, as specified in 6a and 6b, below.

6a. SHIPPER—Enter one of the following action codes:

   A The shipper is reporting a transaction that has taken place between the stated parties.

C The shipper is adjusting the initial DOE/NRC Form 741 for the shipment or a previous adjustment to the same initial report, acknowledging an adjustment originated by the receiver, or accepting and agreeing with the receiver's adjustment to DOE/NRC Form 741. See Chapter 4 of this NUREG.

M The shipper is reporting a one-party transaction or an adjustment to a one-party transaction (e.g., an onsite gain or loss of material as the result of burnup, production, measured discards, category changes). This is also known as an onsite adjustment. DOE/NRC Form 742, "Material Balance Report," shows such inventory changes. See Chapter 3 of this NUREG.

R The shipper is identifying a one-party transaction to delete a foreign obligated amount of material from the facility's inventory. This code is applicable only to former Soviet Union weapons material (WR) after the fresh low-enriched uranium (LEU) is irradiated in a reactor core. Use of this code implies a removal of WR from LEU; therefore, the shipper shall enter the value as a positive number.

X The shipper is reporting a transfer of foreign obligation that involves no physical movement of material. No foreign obligation transfers of WR are permitted. No shipper (block 26) or receiver (block 27) detail data need to be entered.

6b. RECEIVER—Enter one of the following action codes:

B The receiver is reporting receipt of a shipment and acceptance of the weights the shipper reported on DOE/NRC Form 741 as final receipt values.

E The receiver is reporting receipt of a shipment, that independent measurements were made, and that the values resulting from the independent measurements are being reported.

D The receiver is adjusting the initial DOE/NRC Form 741 that documented the receipt of a shipment or a previous adjustment to the same initial report, acknowledging an adjustment originated by the shipper, or accepting and agreeing with the shipper's adjustment to DOE/NRC Form 741. See Chapter 4 of this NUREG.

M The receiver is reporting a one-party transaction or an adjustment to a one-party transaction (e.g., an onsite gain or loss of material as the result of burnup, production, measured discards). This is also known as an onsite adjustment. DOE/NRC Form 742 shows such inventory changes. See Chapter 3 of this NUREG.

N The receiver is reporting physical receipt of a shipment but will delay the quantity determinations for the shipment of material for more than 10 days but no more than 60 days for source and LEU, or no more than 45 days for highly enriched uranium. When the determinations are completed, the receiver will prepare a DOE/NRC Form 741 with a B or E action code to report the receiver's quantity determinations. Use of this code (N) requires no entry of detailed data (block 27) by the receiver.

Y The receiver is reporting an acceptance of transfer of foreign obligation that involves no physical movement of material. Do not enter shipper (block 26) or receiver (block 27) detailed data.

7. DOCUMENTATION—Leave blank.

8. SHIPPER—Leave blank.

9. RECEIVER—Leave blank.

10. NUMBER OF DATA LINES—After completing block 26 (SHIPPER'S DATA) or block 27 (RECEIVER'S DATA), enter the total number of detail lines in block 26 or 27. The shipper and receiver must report the same number of entries, and the material types must agree line for line.

11. NATURE OF TRANSACTION—Leave blank.

12. SHIPPED FOR ACCOUNT OF—Leave blank.

13. SHIPPED TO ACCOUNT OF—Leave blank.

14. TRANSFER AUTHORITY—Leave blank.

15. EXPORT OR IMPORT TRANSFERS—For all exports to or imports from countries outside of the United States and its Caribbean territories, enter the NRC export or import license number under which SNM or source material is being transferred. If the NRC general license authorizes transfers, enter GEN-LIC. In some cases, the transfer may be exempt from licensing, such as exports of IAEA safeguards samples; in that case, enter LIC-EXEMPT. If several batches authorized by separate NRC import or export licenses are combined into one shipment, complete a separate DOE/NRC Form 741 for the portion for each NRC import or export license.

16. MATERIAL TYPE AND DESCRIPTION—Leave blank.

17. (FOREIGN OBLIGATION) LINE NUMBER—Enter a sequential line number beginning with the number 1.

18. COUNTRY OF OBLIGATION—Enter the two-character country or entity designation from Table 1 in Appendix F to this NUREG for the line numbers entered in block 17. See Appendix F for further instructions.

19. MATERIAL TYPE—Enter the material type to which the foreign obligation is attached. Refer to Table 2 in Appendix F to this NUREG. The only material types (see block 26g) to be reported are 10, 20, 50, 70, 81, and 88.

20. OBLIGATED ELEMENT WEIGHT—Enter the weight of the foreign obligated amount of the element for material types 10, 50, 81, or 88 and the element weight associated with the foreign obligated enriched uranium. See Appendix F for further instructions. For onsite inventory adjustments or corrections, enter positive or negative values to appropriately account for material addition or removal, respectively. Report a positive weight on reports with an action code of A, B, E, N, R, X, or Y. All others can be reported

with a positive or negative weight. The sum of foreign obligated element weight for a material type cannot exceed the sum of the element weight value listed in the detail lines (see blocks 26n and 27n).

21. OBLIGATED ISOTOPE WEIGHT—FOR ENRICHED URANIUM ONLY—Enter the weight of the foreign obligated amount of the isotope uranium (U)-233 or U-235. For onsite inventory adjustments or corrections, enter positive or negative values to appropriately account for material addition or removal, respectively. Report a positive weight on reports with an action code of A, B, E, N, R, X, or Y. All others can be reported with a positive or negative weight. The sum of foreign obligated isotope weight for a material type cannot exceed the sum of the isotope weight values listed in the detail lines (see block 26q or 27q).[1]

22. ACTION DATE—Follow the instructions below for blocks 22a through 22e.

22a. SHIPMENT (entry required by shipper)—Enter the date the nuclear material is shipped.

22b. SHIPPER'S CORRECTION (entry required by shipper)—If the DOE/NRC Form 741 is an acknowledgment of or a correction to a previously submitted DOE/NRC Form 741, enter the date the correction is recorded or the acknowledgment is made, as appropriate. However, the date of an acknowledgment must not precede the action date listed on the receiver's correction. Note that if a date preceding the current unreconciled period is used, the effect of the correction will be reflected in the current period, not the previous period, or periods, covered by postdated documents.

22c. RECEIPT (entry required by receiver)—Enter the date the nuclear material is received.

22d. RECEIVER'S MEASUREMENT (entry required by receiver)—This entry is required only if the receiver's action code is E. Enter the date the nuclear material is measured by the receiver.

22e. RECEIVER'S CORRECTION (entry required by receiver)—If the document is an acknowledgment or a correction to a previously issued transaction report, enter the date the correction is recorded or the acknowledgment is made, as appropriate. However, the date of an acknowledgment must not precede the action date listed on the receiver's correction. Note that if a date preceding the current unreconciled period is used, the effect of the correction will be reflected in the current period, not the previous period, or periods, covered by postdated documents.

Note that in the case of all imports (and for some exports; see Section 1.3 of this NUREG), licensees must complete a separate DOE/NRC Form 741 to document the foreign party action, including action dates in blocks 22a and 22c, as applicable.

23a. MISCELLANEOUS—Leave blank.

23b. CONCISE NOTE ATTACHED—Leave blank.

---

[1] Note that for enriched uranium, the foreign obligation is assigned to the U-233 and U-235 isotopes. Report the quantity of uranium element that contains the foreign obligated U-233 and U-235 in block 20.

23c. UK REPORTABLE—Facilities reporting material transfers involving facilities in the United Kingdom must indicate in this block (23c) whether the shipment is for peaceful nuclear activities (reportable to the IAEA) or for nonpeaceful nuclear activities (not reportable to the IAEA). Insert “R” to indicate that the transfer should be reported to the IAEA or “N” to indicate that the transfer should not be reported to the IAEA.

Note that typically all licensee shipments to and from the United Kingdom are reportable.

24. TOTAL GROSS WEIGHT—Enter the total gross weight of the shipment rounded to the nearest kilogram. An approximate or estimated gross weight rounded to the nearest kilogram is acceptable. Make no entry for M action code transactions, receipts, foreign obligation transfers, and correction documents.

25. TOTAL VOLUME (WASTE TRANSFERS ONLY)—For transfers of nuclear material to nuclear waste sites (i.e., receiver RIS begins with the letter V), enter the volume of the material to be buried, stated in cubic feet rounded to the nearest cubic foot. An entry in block 25 is not required for transfers to nuclear laundry services.

26. SHIPPER’S DATA—Enter the shipper’s data in block 26. Possessors of nuclear material outside facilities must provide an entry in this block even when documenting receipt of material in the RECEIVER’S DATA (field 27). Information in this block is needed to facilitate a match between shipper and receiver reporting to NMMSS. Instructions for completing this block are provided in blocks 26a through 26s.

Enter shipper and receiver measurement data on DOE/NRC Form 741 for each batch of material. A batch is a portion of nuclear material that is handled as a unit for accounting purposes at a possessor’s location and whose composition and quantity are defined by a single set of specifications or measurements. The batch may be in bulk form or contained in a number of separate items. Otherwise, material being transferred may be listed on one line of DOE/NRC Form 741 if the material is all of the same material type, composition, ownership, and weight percent of isotope (except as noted in the next paragraph). Material differing in any of these data elements must be listed on separate lines.

Two or more lines may be necessary to describe a single batch. If a batch consists of several material types, several consecutive lines should be used to describe the batch. The batch name should be repeated on all lines used to describe a single batch. The number of items is also repeated in block 26e on all lines with the same batch name.

26a. BACK-REFERENCE NUMBER—Enter the appropriate back-reference number adjustments to previously completed DOE/NRC Form 741 documents.

Licensees must enter the back-reference numbers for action codes C and D and for action code M when reporting adjustments. Licensees must report both the back-reference change digit and the back-reference line number.

The back-reference change digit represents the change digit of the document being corrected for a nullifying entry and the change digit of the document now being completed for a correcting entry. For example, if the DOE/NRC Form 741 being corrected is the original, or if the line being entered represents an addition only, enter zero.

The back-reference line number represents the line number of the line being corrected for a nullifying entry and the line number of the corresponding nullifying line for a correction entry. If the line being entered represents an addition only or represents a net change, enter zeros.

26b. LINE NUMBER—In providing detailed measurement data, enter a line number beginning with 1 for the first line of detailed shipper's data and increase the line number by one for each additional line of detailed shipper's data entered on the form. When two or more lines of measurement data refer to a single batch, repeat the unique batch name for each line of the batch data.

26c. TYPE OF INVENTORY CHANGE—Report all changes to inventory that meet the reporting criteria on DOE/NRC Form 741.

Appendix B to this NUREG explains the inventory change type codes and indicates whether they are to be entered in block 26c. Enrichment facilities may use the two-digit numerical value for indicating a change type or proceed as directed by the NRC. When shipping to a V RIS, the shipper must use inventory change type code 74. A measured discard can be documented as an onsite transfer, a discard to a pond/lagoon, or a transfer to a holding area. Discharges to a lagoon and movement to holding areas are documented with one of the following suffixes attached to the RIS:

- Use L when material is discarded into a pond or lagoon.
- Use H when material is transferred to a holding area (see the term "holding account" in the glossary in Appendix D to this NUREG) at the facility pending possible shipment off site for disposal.

Note that the use of a holding area or lagoon account requires the establishment of the account RIS code and prior approval by the NRC.

The shipper should enter its RIS in block 1 (SHIPPER'S RIS) and the same RIS in block 2 (RECEIVER'S RIS), but append an L or H to the receiver's RIS as appropriate. For example, if a facility with RIS XYZ discards material to a lagoon, the transaction on DOE/NRC Form 741 would be from XYZ to XYZL.

26d. BATCH NAME—Enter a name or number, or a combination of both, that identifies the batch of material being shipped (i.e., serial number of device). The shipper or receiver shall enter a name that identifies a unique portion of nuclear material handled as a unit for accounting purposes. The batch name must exclude special characters (e.g., #, :, /) and must not exceed 16 characters.

In the case of an import, the receiver must document the shipper's activity and use the same batch name that the shipper used.

When two or more lines of measurement data refer to a single batch, repeat the unique batch name for each line of the batch data.

26e. NUMBER OF ITEMS—Enter the number of similar items of which the line entry consists (e.g., cylinders, packs, drums, bird cages, bottles, tank vessels). In the case of a transfer of bulk material, enter the number 1. Leave blank if an M action code is used.

26f. PROJECT NUMBER—If reporting DOE-owned material, and a project number is applicable, provide the project number in this field. Otherwise, leave blank.

26g. MATERIAL TYPE—Enter the appropriate SNM or source material type code from the list below.

Domestic Transfers within Caribbean Territories	Imports into/Exports out of the Caribbean Territories	Description	Reporting Units
10	D	Depleted uranium	Kilogram
20	EG	Enriched uranium	Gram
50	P	Plutonium	Gram
70	EK	U-233	Gram
81	N	Normal uranium	Kilogram
83[2]	Pu	Pu-238	1/10 Gram
88	T	Thorium	Kilogram
89	No code	Uranium in cascade	Gram

26h. COMPOSITION/FACILITY CODE—Enter the appropriate code from the list provided in the facility attachment for possessors of nuclear material outside facilities.

Note: In accordance with 10 CFR 75.11, "Locations," the licensee should communicate to the NRC any change in operations or processes that would result in any changes in, additions to, or deletions from the list.

26i. OWNER CODE—This code identifies the ownership of the material at the time it was in the shipper's possession. Enter the appropriate code from the following:

G DOE-owned
J Not DOE-owned

Refer to the glossary in Appendix D to this NUREG for a description of DOE-owned material.

26j. KEY MEASUREMENT POINT (KMP)—Enter the appropriate code from the list provided in the locations outside facility attachment.

26k. MEASUREMENT IDENTIFICATION (see 26j)—Enter the appropriate code from the list provided in the locations outside facility attachment.

26k1. BASIS—Enter the appropriate code from the list provided in the locations outside facility attachment.

[2] Report plutonium (Pu)-238 as material type 83 if the contained Pu-238 is greater than 10 percent of total plutonium by weight; otherwise, report as plutonium (material type 50).

26k2. OTHER MEASUREMENT POINT (OMP)—Enter the appropriate code from the list provided in the locations outside facility attachment.

26k3. MEASUREMENT METHOD—Enter the appropriate code from the list provided in the locations outside facility attachment.

26l. GROSS WEIGHT—Leave blank.

26m. NET WEIGHT—Leave blank.

26n. ELEMENT WEIGHT—Enter the weight of the contained SNM or source material rounded to the quantities reported below.

Material	Reporting Units on Form 741
Plutonium (material type 50) or uranium enriched in U-235 or U-233	Nearest whole gram
Pu-238 (material type 83)	Nearest 1/10 gram
Source material	Nearest kilogram

If the quantity to be entered is equal to or greater than 0.5 of the reporting unit, round the quantity up to the next whole reporting unit. If the quantity to be entered is less than 0.5 of the reporting unit, round the quantity down to the next whole reporting unit.

Possessors with greater than 0.0 kilogram but less than 0.5 kilogram of source material or greater than 0.0 gram but less than 0.5 gram of SNM, either of which are rounded to a zero value when reported, shall provide a DOE/NRC Form 740M that includes the actual weights.

26o. ELEMENT LIMIT OF ERROR—Leave blank.

26p. WEIGHT % ISOTOPE—Enter the weight percent of the isotope U-235 contained in either enriched uranium or depleted uranium. Make no entry for U-235 in natural uranium. If plutonium, enter the weight percent of the isotope Pu-240. If Pu-238 (material type 83), enter the weight percent of the isotope Pu-238. Report weight percent to at least two but not more than four decimal places, depending on the accuracy of the measurement method (for example, “XX.XXXX%”). For U-233, enter the parts per million of U-232. For depleted uranium with an enrichment of 0.5 percent or less, if enrichment is unknown, enter “0.3%.” This column does not apply for normal uranium or thorium. Use separate lines to report material of different enrichments. This block (26p) does not apply to thorium. Use separate lines to report material of different enrichments.

26q. ISOTOPE WEIGHT—Enter the isotope weight. For enriched uranium or U-233, enter the weight to the nearest gram of U-235 or U-233, as appropriate. If plutonium, enter the sum of Pu-239 and Pu-241 to the nearest gram. If Pu-238 (material 83), enter the weight of the isotope Pu-238 to the nearest 0.1 gram. If natural or depleted uranium, enter the weight to the nearest gram of U-235. Make no entry for source material.

If the quantity to be entered is equal to or greater than 0.5 of the reporting unit, round the quantity up to the next whole reporting unit. If the quantity to be entered is less than 0.5 of the reporting unit, round the quantity down to the next whole reporting unit. Possessors are to provide a DOE/NRC Form 740M that includes the actual isotope weights.

26r. ISOTOPE LIMIT OF ERROR—Leave blank.

26s. SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED—An authorized representative of the licensee must sign and date the report if submitted on paper. Otherwise, no entry is required.

Each licensee must establish internal procedures to ensure that the information provided in the report is accurate and that only authorized licensee staff has prepared and issued the report.

Proprietary information must be included when necessary to provide an adequate response. An application to withhold such information from public disclosure may be made and will be dispositioned in accordance with the provisions of 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding." If any of this information is of particular sensitivity, a request may be made that such information not be transmitted to the IAEA. Such a request must refer to and conform with 10 CFR 75.13.

27. RECEIVER'S DATA—Enter the receiver's data in block 27. Possessors of nuclear material outside facilities that receive imports from outside the U.S. Caribbean territories must provide an entry in both the SHIPPER'S DATA (field 26) and the RECEIVER'S DATA (field 27.) Information in this field is needed to facilitate a match between the shipper and receiver reporting to NMMSS. Enter shipper and receiver measurement data on DOE/NRC Form 741 for each batch of material.

A batch is a portion of nuclear material that is handled as a unit, for accounting purposes, at a possessor's location and whose composition and quantity are defined by a single set of specifications or measurements. The batch may be in bulk form or contained in a number of separate items. Material being transferred may be listed on one line of DOE/NRC Form 741 if the material is all of the same material type, composition, ownership, and weight percent of isotope (except as noted in the next paragraph). List material differing in any of these data elements on separate lines.

Two or more lines may be necessary to describe a single batch (e.g., depleted uranium in shielding). If a batch consists of several types of nuclear material, use several consecutive lines to describe the batch. Repeat the batch name on all lines used to describe a single batch. In block 27e, also repeat the number of items on all lines with the same batch name.

The above general rules for grouping or batching material for reporting purposes also apply to licensees reporting imports or exports in accordance with 10 CFR Part 40, "Domestic Licensing of Source Material," or 10 CFR Part 74, "Material Control and Accounting of Special Nuclear Material." Batch names are optional for other transactions reported in accordance with 10 CFR Part 40 or 10 CFR Part 74.

27a. BACK-REFERENCE NUMBER—Must match the shipper's value. See block 26a.

27b. LINE NUMBER—Must match the shipper's value. See block 26b.

27c. TYPE OF INVENTORY CHANGE—Must match the shipper's value. See block 26c.

27d. BATCH NAME—See block 26d.

27e. NO. OF ITEMS—See block 26e.

27f. PROJECT NUMBER—See block 26f.

27g. MATERIAL TYPE—Must match the shipper's value. See block 26g.

27h. COMPOSITION/FACILITY CODE—See block 26h.

27i. OWNER CODE—Describes the material ownership at the time it comes into the receiver's possession. See block 26i.

27j. KEY MEASUREMENT POINT—See block 26j.

27k. MEASUREMENT IDENTIFICATION—See block 26k.

27l. GROSS WEIGHT—See block 26l.

27m. NET WEIGHT—See block 26m.

27n. ELEMENT WEIGHT—See block 26n.

27o. ELEMENT LIMIT OF ERROR—See block 26o.

27p. WEIGHT % ISOTOPE—See block 26p.

27q. ISOTOPE WEIGHT—See block 26q.

27r. ISOTOPE LIMIT OF ERROR—See block 26r.

27s. SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED—See block 26s.

G.2.2 Preparation of DOE/NRC Form 741 in Computer-Readable Format

NMMSS Report D-24, "Personal Computer Data Input for NRC Licensees," provides instructions for preparing DOE/NRC Form 741 in computer-readable format as required for submittals.

G.2.3 Distribution of DOE/NRC Form 741

Each shipper of reportable quantities of SNM or source material must dispatch a DOE/NRC Form 741, as described below, no later than the close of business the next working day after the shipment. Burials are reported when shipped. The burial site operator must prepare a DOE/NRC Form 741 and transmit it to NMMSS to document receipt and disposal.

Each receiver of reportable quantities of SNM or source material must dispatch a DOE/NRC Form 741, as described below, no later than 10 working days after receipt of the shipment.

When submitting safeguards information, a Concise Note (DOE/NRC Form 740M) must be submitted stating that the submission is safeguards information and should be handled in accordance with 10 CFR 73.21, “Protection of Safeguards Information: Performance Requirements.”

The completed DOE/NRC Form 741 is distributed as follows:

- Submit one copy in a computer-readable format to NMMSS. See Section 1.5 of this NUREG for information on the documentation and distribution of classified and unclassified reports.
- Retain one copy for the file.
- Provide a copy to another possessor of nuclear material outside facilities within the U.S. Caribbean territories.

There is no requirement to provide a copy of DOE/NRC Form 741 to shippers or receivers of nuclear material outside the U.S. Caribbean territories.

G.2.4 Instructions for Onsite Gains and Losses

When using action code M, possessors of nuclear material outside facilities should complete and distribute DOE/NRC Form 741 in accordance with the instructions in Chapter 3 of this NUREG.

G.2.5 Instructions for Correcting a DOE/NRC Form 741

When correcting a DOE/NRC Form 741, possessors of nuclear material outside facilities should follow instructions in accordance with Chapter 4 of this NUREG.

The revised DOE/NRC Form 741 is distributed as follows:

- Submit one copy in a computer-readable format to NMMSS.
- Retain one copy for the file.
- Provide a copy to another possessor of nuclear material outside facilities within the U.S. Caribbean territories.

There is no requirement to provide a copy of the revised DOE/NRC Form 741 to shippers or receivers of nuclear material outside the U.S. Caribbean territories.

G.2.6 Instructions for Completing a DOE/NRC Form 740M

A DOE/NRC Form 740M is used to explain circumstances under which Concise Notes must be submitted to the IAEA.

Possessors of nuclear material outside facilities should follow the instructions in Chapter 5 of this NUREG to complete numbered blocks 1–10 of DOE/NRC Form 740M.

DOE/NRC Form 740M should be put into computer-readable format following the guidance in NMMSS Report D-24.

Copies of DOE/NRC Form 740M must be attached to, and distributed with, DOE/NRC Forms 741, 742, or 742C, “Physical Inventory Listing,” as appropriate.

NRC FORM 335
(12-2010)
NRCMD 3.7

U.S. NUCLEAR REGULATORY COMMISSION

BIBLIOGRAPHIC DATA SHEET

(See instructions on the reverse)

1. REPORT NUMBER
(Assigned by NRC, Add Vol., Supp., Rev., and Addendum Numbers, if any.)

NUREG/BR-0006
Revision 9

2. TITLE AND SUBTITLE

Instructions for Completing Nuclear Material Transaction Reports (DOE/NRC Forms 741 and 740M) - FINAL

3. DATE REPORT PUBLISHED

MONTH	YEAR
August	2020

4. FIN OR GRANT NUMBER

5. AUTHOR(S)

Mirabelle Shoemaker

6. TYPE OF REPORT

Technical

7. PERIOD COVERED (Inclusive Dates)

8. PERFORMING ORGANIZATION - NAME AND ADDRESS (If NRC, provide Division, Office or Region, U. S. Nuclear Regulatory Commission, and mailing address; if contractor, provide name and mailing address.)

Division of Fuel Management
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

9. SPONSORING ORGANIZATION - NAME AND ADDRESS (If NRC, type "Same as above", if contractor, provide NRC Division, Office or Region, U. S. Nuclear Regulatory Commission, and mailing address.)

Same as above.

10. SUPPLEMENTARY NOTES

11. ABSTRACT (200 words or less)

U.S. Nuclear Regulatory Commission (NRC) regulations require licensees who ship, received, or adjust their physical inventory of source or special nuclear material (SNM) to document and report such activities. The reports are submitted using U.S. Department of Energy (DOE)/NRC Form 741. Licensees may need to provide additional information on some imports or exports of source or SNM. The additional information is reported using DOE/NRC Form 740M. This NUREG contains instructions for preparing these forms.

12. KEY WORDS/DESCRIPTORS (List words or phrases that will assist researchers in locating the report.)

Material Control and Accounting
Nuclear Materials Management and Safeguards System (NMMSS)
Form 741
Form 740M
Nuclear Material Transaction Reports

13. AVAILABILITY STATEMENT

unlimited

14. SECURITY CLASSIFICATION

(This Page)
unclassified

(This Report)
unclassified

15. NUMBER OF PAGES

16. PRICE

Printed
on recycled
paper

Federal Recycling Program

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

OFFICIAL BUSINESS

@NRCgov