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Semi-Annual Report on Strategic Special Nuclear Material Inventory Differences

January 1981

U.S. Department of Energy

Assistant Secretary for Defense Programs

Office of Safeguards and Security

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STATEMENT OF THE

DEPARTMENT OF ENERGY (DOE) DIRECTOR OF SAFEGUARDS AND SECURITY

The Department of Energy has specified accounting requirements as part of its integrated safeguards system for the protection of special nuclear materials. This report provides and explains the differences between the amounts of nuclear materials charged to DOE facilities and the amounts that could be physically inventoried.

These Inventory Differences, previously called Material Unaccounted For (MUF), are being publicly released on a semiannual basis, as required by the National Security Council. This report covers data for the period from October 1, 1979, through March 31, 1980, and includes accounting corrections for data from earlier periods. It is the seventh such semiannual report, subsequent to the August 4, 1977 publication (by DOE's predecessor, Energy Research and Development Administration) of all historical Inventory Difference data prior to October 1, 1976. All Inventory Differences reported here have been analyzed, investigated when necessary, and resolved.

These data and explanations, together with the absences of physical indications of any theft attempt, support a finding that during this period no theft or diversion of strategic special nuclear material has occurred.

George Weisz
Director
Office of Safeguards and Security
Defense Programs
Department of Energy

UNITED STATES DEPARTMENT OF ENERGY
REPORT ON STRATEGIC SPECIAL NUCLEAR MATERIAL INVENTORY DIFFERENCES
OCTOBER 1, 1979 THROUGH MARCH 31, 1980

This seventh periodic semiannual report of Inventory Differences (ID) covers the first six months of fiscal year 1980 (October 1, 1979, through March 31, 1980), for the Department of Energy (DOE) and DOE contractor facilities possessing significant quantities of strategic special nuclear material (SSNM)*. The initial ID report, issued as ERDA 77-68 in August 1977, contained data for fiscal year 1976 (July 1, 1975, through September 30, 1976), for the Energy Research and Development Administration (ERDA) and ERDA contractor facilities and also contained historical data for ERDA/AEC and ERDA/AEC contractor facilities from 1947 through fiscal year 1975 and for AEC licensees from 1954 through calendar year 1967, including cumulative IDs by facility. The first semiannual ID report was issued as DOE/DP-000-1 in January 1978, and covered the first six months of fiscal year 1977.

Inventory Differences are simply the differences between the amount of material shown in the accounting records and the amount of material reported in the physical inventory. These differences are generally due to errors in estimating material in unmeasurable form at the time of an inventory, unmeasurable holdup in equipment, measurement imprecisions, inaccuracies in initial determinations of SSNM produced or used in nuclear reactors, and inventory or bookkeeping errors. Both DOE and contractors operating DOE facilities carefully maintain, analyze, and investigate ID data.

Inventory Differences are expected in nuclear material processing and are not, in and of themselves, evidence of lost or stolen material. On the other hand, ID analysis provides valuable information on the effectiveness of the safeguards system's physical protection and material control measures as well as a check on the process controls and material management procedures. IDs outside safeguards control limits or involving a missing SSNM discrete item are investigated. If necessary, an operation may be shut down until an ID is resolved.

* Strategic special nuclear material is plutonium or uranium-233 or uranium-235 in material whose uranium-235 content is 20 percent or greater (known as highly enriched uranium). A significant quantity is either 2 kilograms of plutonium or uranium-233 or 5 kilograms of uranium-235 in highly enriched uranium or the appropriate weighted combination.

Analysis of accounting statistics alone, however, cannot show with absolute certainty that theft has not occurred. Therefore, DOE relies on a safeguards system that integrates stringent physical security and material control measures with material measurement and accounting to ensure that material is not misappropriated. It is this total integrated safeguards system coupled with analysis and, when necessary, investigations of IDs, that DOE and DOE contractors operating DOE facilities use to arrive at a judgment of whether theft of significant amounts of SSNM has occurred.

Analyses of the data as they were generated, in each case, have resulted in the explanations for the IDs provided in this report. These explanations, together with the absence of physical indications of any theft attempt, support a finding that during this period no theft or diversion of nuclear material has occurred.

Inventory Differences reported during this period represent the summation of numerical gains and losses. The volume of materials measured while in process, transferred and or in inventory has an effect upon the reported IDs. The ratio of IDs to the amount of material in inventory is a measure of the acceptability of the ID. In addition, analyses are made of each ID, to determine whether the explanations given are reasonable. In this report all the IDs are considered well within expected measurement variations. The explanations for the IDs in the report columns headed "Analysis Findings" indicate that there has not been any new unexplained variations from the reported IDs of previous years.

The IDs of the uranium processed through the gaseous diffusion facilities at Portsmouth, Paducah, and Oak Ridge, involve the measurement of materials largely in gas-tight process equipment in a reactive gaseous form under elevated temperature and pressure. The IDs for this period are reasonable and consistent with expected normal operations and the very large amounts of materials handled in these types of facilities. Not included in this report are data for the Rocky Flats and Y-12 nuclear weapons production facilities, in order to protect classified nuclear weapons information. However, the classified ID data from these facilities receive the same scrutiny and analysis as the unclassified data and similar conclusions were reached.

INVENTORY DIFFERENCE DATA

OCTOBER 1, 1979 TO MARCH 31, 1980

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
PLUTONIUM*

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Albuquerque</u>		
Los Alamos National Scientific Laboratory, Los Alamos, New Mexico	(2.9)	Cumulative inventory differences due to cleanup of equipment and gloveboxes in plutonium processing areas, and measurement differences which are small compared to throughput for difficult-to-measure processing residues.
Mason & Hanger-Silas Mason Co., Inc., Amarillo, Texas	None	All material contained in weapons parts which have all been accounted for.
Monsanto Research Corporation Mound Facility Miamisburg, Ohio	(<0.1)	Cumulative inventory differences due to rounding.
Sandia National Laboratories Albuquerque, New Mexico	None	All material is contained in discrete identifiable forms and have been accounted for.
<u>Chicago</u>		
Argonne National Laboratory Argonne, Illinois	(<0.1)	Cumulative inventory differences due to rounding.

<0.1 Means inventory difference amount is less than 50 grams.

() Means an inventory increase.

* This and subsequent Plutonium tables exclude Pu-238 which is reported separately.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
PLUTONIUM*

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Chicago (continued)</u>		
Argonne National Laboratory Idaho National Engineering Laboratory Idaho Falls, Idaho	<0.1	Cumulative inventory difference due to rounding.
Battelle, Columbus Laboratories Columbus, Ohio	(<0.1)	Cumulative inventory difference due to remeasurement adjustments.
Brookhaven National Laboratory Upton, New York	None	All material accounted for.
<u>Idaho</u>		
Exxon Nuclear Idaho Co., Inc. ICPP Idaho National Engineering Laboratory Idaho Falls, Idaho	(<0.1)	Minor inventory differences resulting from cleanup of laboratory area.
EG&G Idaho, Inc. TRA Idaho National Engineering Laboratory Idaho Falls, Idaho	None	All material accounted for.

<0.1 Means inventory difference amount is less than 50 grams.

() Means an inventory increase.

* This and subsequent Plutonium tables exclude Pu-238 which is reported separately.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
PLUTONIUM*

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Idaho (continued)</u>		
EG&G Idaho, Inc. ARA, LOFT, PBF, TAN Idaho National Engineering Laboratory Idaho Falls, Idaho	None	All material accounted for.
<u>Nevada</u>		
Nevada Test Site Mercury, Nevada	None	Contained in test devices. All material accounted for.
<u>Oak Ridge</u>		
Oak Ridge National Laboratory Oak Ridge, Tennessee	<0.1	Cumulative inventory difference due to small measurement inaccuracies.
<u>Pittsburgh Naval Reactors^o</u>		
Duquesne Light Company Shippingport, Pennsylvania	None	Contained in irradiated fuel elements. All elements accounted for.

<0.1 Means inventory difference amount is less than 50 grams.

* This and subsequent Plutonium tables exclude Pu-238 which is reported separately.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
PLUTONIUM*

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Pittsburgh Naval Reactors (continued)</u>		
Westinghouse, Naval Reactors Facility Idaho National Engineering Laboratory Idaho Falls, Idaho	None	Contained in irradiated fuel elements. All elements accounted for.
Westinghouse, Bettis Atomic Power Laboratory West Mifflin, Pennsylvania	None	Contained in sealed sources, samples and standards.
<u>Richland</u>		
Rockwell Hanford Operations Richland, Washington	8.4	Cumulative inventory differences resulting from remeasurement of plutonium inventories; primarily the remeasurement of inventories associated with Pu nitrate to oxide conversion.
Hanford Engineering Development Laboratory Richland, Washington	(2.1)	Cumulative small inventory differences resulting from material holdup, shipper/receiver adjustments and remeasurement of plutonium.
Battelle Pacific Northwest Laboratories Richland, Washington	0.2	Cumulative small inventory differences resulting from the remeasurement of plutonium.

() Means an inventory increase.

* This and subsequent Plutonium tables exclude Pu-238 which is reported separately.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
PLUTONIUM*

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Richland (continued)</u>		
United Nuclear Industries, Inc. Richland, Washington	<0.1	Cumulative small inventory differences from periodic inventory evaluations of plutonium contained in irradiated fuel elements.
<u>San Francisco</u>		
Atomics International Canoga Park, California	None	All items accounted for.
Lawrence Livermore National Laboratory Livermore, California	(0.2)	Cumulative inventory differences resulting from redetermination of material in process, rounding and shipper-receiver adjustment.
<u>Savannah River</u>		
E. I. duPont de Nemours Aiken, South Carolina	11.4	Cumulative inventory differences resulting from remeasurement adjustments, shipper-receiver adjustments and many small measurement inaccuracies in remotely operated areas.

<0.1 Means inventory difference amount is less than 50 grams.

() Means an inventory increase.

* This and subsequent Plutonium tables exclude Pu-238 which is reported separately.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
PLUTONIUM*

Field Office
and Contractor

Inventory Difference
in Kilograms

Analysis Findings

Schenectady Naval Reactors

General Electric Co.
Knolls Atomic Power
Laboratory
Schenectady, New York

None

All materials accounted for.

*This and subsequent Plutonium tables exclude Pu-238 which is reported separately.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
U-235 IN 20% AND GREATER ENRICHED URANIUM

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Albuquerque</u>		
Los Alamos National Scientific Laboratory, Los Alamos, New Mexico	(1.5)	Cumulative inventory differences due to remeasurement of difficult-to- measure process residues.
Mason & Hanger-Silas Mason, Co., Inc. Amarillo, Texas	None	Contained in weapons parts. All parts accounted for.
Monsanto Research Corporation Mound Facility Miamisburg, Ohio	<0.1	Cumulative inventory differences due to remeasurement and rounding.
Sandia National Laboratories Albuquerque, New Mexico	<0.1	Cumulative inventory differences due to rounding.
<u>Chicago</u>		
Argonne National Laboratory Argonne, Illinois	(<0.1)	Cumulative inventory differences due to recording and reporting errors.
Argonne National Laboratory Idaho National Engineering Laboratory Idaho Falls, Idaho	(0.2)	Cumulative inventory differences due to adjustment of EBR II batches to actual measured values and shipper/receiver difference.

<0.1 Means inventory difference amount is less than 50 grams.

() Means an inventory increase.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
U-235 IN 20% AND GREATER ENRICHED URANIUM

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Chicago (continued)</u>		
Battelle, Columbus Laboratories Columbus, Ohio	(<0.1)	Cumulative inventory differences due to remeasurement adjustments.
Brookhaven National Laboratory Upton, New York	(<0.1)	Cumulative inventory differences due to rounding.
<u>Idaho</u>		
Exxon Nuclear Idaho Co., Inc. ICPP Idaho National Engineering Laboratory Idaho Falls, Idaho	0.1	Cumulative inventory differences due to rounding, measurement adjustments, and a recording error.
EG&G Idaho, Inc. TRA Idaho National Engineering Laboratory Idaho Falls, Idaho	(<0.1)	Cumulative differences due to rounding and minor measurement adjustment.
EG&G Idaho, Inc. ARA, LOFT, PBF, TAN Idaho National Engineering Laboratory Idaho Falls, Idaho	<0.1	Cumulative differences due to rounding.

<0.1 Means inventory difference amount is less than 50 grams.
() Means an inventory increase.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
U-235 IN 20% AND GREATER ENRICHED URANIUM

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Nevada</u>		
Nevada Test Site Mercury, Nevada	None	Inventory consists principally of test devices and nuclear rocket fuel. All material accounted for.
<u>Oak Ridge</u>		
Goodyear Atomic Corporation Piketon, Ohio (except cascades)	(10.0)	Cumulative inventory differences due to remeasurement, sampling, and measurement uncertainties.
Oak Ridge National Laboratory Oak Ridge, Tennessee	(<0.1)	Cumulative inventory differences due to sampling and measurement uncertainties.
<u>Pittsburgh Naval Reactors</u>		
Pittsburgh Naval Reactors Office West Mifflin, Pennsylvania	None	Contained in unirradiated fuel elements. All elements accounted for.

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<0.1 Means inventory difference amount is less than 50 grams.

() Means an inventory increase.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
U-235 IN 20% AND GREATER ENRICHED URANIUM

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Pittsburgh Naval Reactors (continued)</u>		
Westinghouse, Bettis Atomic Power Laboratory West Mifflin, Pennsylvania	0.3	Cumulative inventory difference due to differences between estimated scrap value and measured material recovered, rounding, and measurement adjustments.
Westinghouse, Naval Reactors Facility Idaho National Engineering Laboratory Idaho Falls, Idaho	None	Contained in unirradiated and irradiated fuel elements. All elements accounted for.
<u>Richland</u>		
Rockwell Hanford Operations Richland, Washington	<0.1	Contained in scrap in static storage under seal. Inventory differences due to measurement adjustments.
Hanford Engineering Development Laboratory Richland, Washington	(0.2)	Cumulative small inventory differences resulting from the process holdup and remeasurement of discrete items.
Battelle, Pacific Northwest Laboratories Richland, Washington	<0.1	Cumulative small inventory differences resulting from the remeasurement of enriched uranium.

<0.1 Means inventory difference amount is less than 50 grams.

() Means an inventory increase.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
U-235 IN 20% AND GREATER ENRICHED URANIUM

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>San Francisco</u>		
Atomics International Canoga Park, California	(<0.1)	Cumulative inventory differences due to rounding.
Lawrence Livermore National Laboratory Livermore, California	0.1	Cumulative inventory differences resulting from a redetermination of discrete items, rounding, and recording and reporting error.
Lawrence Livermore National Laboratory Mercury, Nevada	None	Contained in reactor fuel. All items accounted for.
<u>Savannah River</u>		
E. I. duPont de Nemours Aiken, South Carolina	3.1	Cumulative inventory differences resulting from remeasurement adjustments associated with processing and inventorying scrap material from fuel fabrication.
<u>Schenectady Naval Reactors</u>		
General Electric Company Kesselring Site West Mifflin, New York	None	Inventory contained in irradiated fuel elements. All elements accounted for.

<0.1 Means inventory difference amount is less than 50 grams.
() Means an inventory increase.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
U-235 IN 20% AND GREATER ENRICHED URANIUM

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Schenectady Naval Reactors (continued)</u>		
General Electric Company Knolls Atomic Power Laboratory Schenectady, New York	<0.2	Cumulative inventory differences due to many small measurement differences and rounding.
General Electric Company Windsor Site Windsor, Connecticut	None	Inventory contained in irradiated fuel elements. All elements accounted for.

<0.1 Means inventory difference amount is less than 50 grams.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
FOR THE URANIUM GASEOUS DIFFUSION CASCADES

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Oak Ridge</u>		
Goodyear Atomic Corporation Piketon, Ohio (Average Enrichment = 1.4%)	39.0	The inventory differences at all facilities are due to equipment holdup, the combined uncertainties of sampling and measurement of receipts, removals, gas phase inventory, and rounding of inventories to the nearest kilogram in various material accountability areas.
Union Carbide, Nuclear Division Oak Ridge, Tennessee (Average Enrichment = 1.00%)	(0.5)	
Union Carbide, Nuclear Division Paducah, Kentucky (Average Enrichment = 0.69%)	9.0	

() Means an inventory increase.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
URANIUM-233

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Albuquerque</u>		
Los Alamos National Scientific Laboratory, Los Alamos, New Mexico	(<0.1)	Cumulative inventory differences due to rounding.
Monsanto Research Corporation Mound Facility Miamisburg, Ohio	None	No processing during this period.
<u>Chicago</u>		
Argonne National Laboratory Argonne, Illinois	None	All material accounted for.
Argonne National Laboratory Idaho National Engineering Laboratory Idaho Falls, Idaho	(<0.1)	Cumulative inventory differences due to rounding.
<u>Idaho</u>		
Exxon Nuclear Idaho Co., Inc. ICPP Idaho National Engineering Laboratory Idaho Fall, Idaho	None	All material accounted for.

<0.1 Means inventory difference amount is less than 50 grams.
(.) Means an inventory increase.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
URANIUM-233

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Idaho (continued)</u>		
EG&G Idaho, Inc. TRA Idaho National Engineering Laboratory Idaho Falls, Idaho	None	All materials accounted for.
 <u>Oak Ridge</u>		
Oak Ridge National Laboratory Oak Ridge, Tennessee	(<0.1)	Cumulative inventory differences due to measurement uncertainties.
 <u>Pittsburgh Naval Reactors</u>		
Duquesne Light Company Shippingport, Pennsylvania	None	Contained in irradiated fuel elements within an operating reactor. All elements accounted for.
Westinghouse, Bettis Atomic Power Laboratory West Mifflin, Pennsylvania	(<0.1)	Cumulative inventory differences due to redetermination of discrete items and measurement adjustments.
Westinghouse Electric Corporation Naval Reactors Facility Idaho Falls, Idaho	None	Contained in unirradiated and irradiated fuel elements. All elements accounted for.

<0.1 Means inventory difference amount is less than 50 grams.
() Means an inventory increase.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
URANIUM-233

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>San Francisco</u>		
Lawrence Livermore National Laboratory Livermore, California	(<0.1)	Cumulative inventory differences resulting from measurement adjust- ment and rounding.
<u>Savannah River</u>		
E. I. duPont de Nemours Aiken, South Carolina	None	Inventory consists principally of irradiated fuel in storage basin. All material accounted for.

<0.1 Means inventory difference amount is less than 50 grams.
() Means an inventory increase.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
PLUTONIUM-238

<u>Field Office and Contractor</u>	<u>Inventory Difference in Kilograms</u>	<u>Analysis Findings</u>
<u>Albuquerque</u>		
Los Alamos National Scientific Laboratory, Los Alamos, New Mexico	(<0.1)	Cumulative inventory differences from shutdown and cleanout of facility.
Monsanto Research Corporation Mound Facility Miamisburg, Ohio	(0.2)	Cumulative inventory differences from cleanup of equipment and "gloveboxes" in process area.
Sandia National Laboratories Albuquerque, New Mexico	None	Material contained in heat sources. All sources accounted for.
<u>Oak Ridge</u>		
Oak Ridge National Laboratory Oak	(<0.1)	Cumulative inventory difference due to measurement uncertainties.
<u>Idaho</u>		
Exxon Nuclear Idaho Co., Inc. ICPP Idaho National Engineering Laboratory Idaho Falls, Idaho	None	All material accounted for.

<0.1 Means inventory difference amount is less than 50 grams.
() Means an inventory increase.

FIRST HALF OF FISCAL YEAR 1980 INVENTORY DIFFERENCES
DOE AND DOE CONTRACTOR SPECIAL NUCLEAR MATERIALS
PLUTONIUM-238

Field Office
and Contractor

Inventory Difference
in Kilograms

Analysis Findings

Idaho (continued)

EG&G Idaho, Inc.
ARA, LOFT, PBF, TAN
Idaho National Engineering
Laboratory
Idaho Falls, Idaho

None

All material accounted for.

Richland

Rockwell Hanford Operations
Richland, Washington

(<0.1)

Contained in scrap in static storage
under seal. Inventory differences
due to rounding of quantities for
individual items after decay
adjustments.

Savannah River

E. I. duPont de Nemours
Aiken, South Carolina

1.8

Cumulative inventory differences
due to remeasurements, shipper/
receiver adjustments and many small
measurement inaccuracies associated
with a process area.

<0.1 Means inventory difference amount is less than 50 grams.

() Means an inventory increase.

ABBREVIATIONS

ICPP Idaho Chemical Processing Plant

TRA Test Reactor Area

ARA Auxiliary Reactor Area

LOFT Loss of Fluid Test

PBF Power Burst Facility

IAN Test Area North