

Title 40 CFR Part 191 Subparts B and C Compliance Recertification Application 2004

Annex J

TWBIR ID: RF-MT532B

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W068	Handling	CH	Stream Name	Particulate Sludge/TRM			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	MTRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3119

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	130	Isotope	Typical Concentration (Ci/m3)
TBD	Iron-Base Metal/Alloys	19.44	0.96	42.96	Residues:	N/A		Am-241	7.50E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Np-237	1.87E-04
	Other Metal/Alloys	23.87	23.87	23.87	PCBs:	N		Pu-238	6.73E-01
	Other Inorganic Materials	92.37	1.43	493.57	Source:	Waste Repackaging		Pu-239	1.47E+01
	Cellulosics	12.89	12.89	12.89				Pu-240	3.35E+00
	Rubber	0.00	0.00	0.00				Pu-241	8.33E+01
	Plastics	15.87	2.20	41.05				Pu-242	4.88E-04
	Solidified, Inorganic Matrix	80.40	0.48	339.39				U-234	7.08E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	2.61E-06
	Vitrified	0.00	0.00	0.00				U-238	4.60E-05
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	525.22							
	Packaging Material, Plastic	23.87							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-MT532B													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
55 Gallon POCs	0.0	0.0	0.0	0.0	0.0	82.2	55 Gallon POCs	0.0	0.0	0.0	0.0	0.0	82.2
As-Generated	Stored	0.0	Projected	82.2	Total	82.2	Final Form	Stored	0.0	Projected	82.2	Total	82.2

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Waste Stream Description "Downblended oxides, less than 10 percent, may contain moisture consists of plutonium oxides blended with surrogate materials to absorb free liquids and dilute plutonium concentration to less than 10 percent. Material is particulate ranging in size from finely divided powder to granular. "

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments EPA hazardous waste numbers are assigned to this waste stream based on process knowledge and confirmed by WIPP characterization sampling and analysis.

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-MT532C

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W068	Handling	CH	Stream Name	Particulate Sludge/TRM			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	MTRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3119

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	130	Isotope	Typical Concentration (Ci/m3)
TBD	Iron-Base Metal/Alloys	19.44	0.96	42.96	Residues:	N/A		Am-241	7.50E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Np-237	1.87E-04
	Other Metal/Alloys	23.87	23.87	23.87	PCBs:	N		Pu-238	6.73E-01
	Other Inorganic Materials	92.37	1.43	493.57	Source:	Waste Repackaging		Pu-239	1.47E+01
	Cellulosics	12.89	12.89	12.89				Pu-240	3.35E+00
	Rubber	0.00	0.00	0.00				Pu-241	8.33E+01
	Plastics	15.87	2.20	41.05				Pu-242	4.88E-04
	Solidified, Inorganic Matrix	80.40	0.48	339.39				U-234	7.08E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	2.61E-06
	Vitrified	0.00	0.00	0.00				U-238	4.60E-05
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	525.22							
	Packaging Material, Plastic	23.87							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-MT532C													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
55 Gallon POCs	0.0	0.0	0.0	0.0	0.0	164.7	55 Gallon POCs	0.0	0.0	0.0	0.0	0.0	164.7
As-Generated	Stored	0.0	Projected	164.7	Total	164.7	Final Form	Stored	0.0	Projected	164.7	Total	164.7

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "Downblended miscellaneous oxides, less than 10 percent consists of plutonium and uranium oxides blended with surrogate materials to dilute plutonium/uranium concentration to less than 10 percent. Material is particulate ranging in size from finely divided powder to granular. "

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments EPA hazardous waste numbers are assigned to this waste stream based on process knowledge and confirmed by WIPP characterization sampling and analysis.

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-MT532D

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W068	Handling	CH	Stream Name	Particulate Sludge/TRM			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	MTRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3119

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	130	Isotope	Typical Concentration (Ci/m3)
TBD	Iron-Base Metal/Alloys	19.44	0.96	42.96	Residues:	N/A		Am-241	7.50E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Np-237	1.87E-04
	Other Metal/Alloys	23.87	23.87	23.87	PCBs:	N		Pu-238	6.73E-01
	Other Inorganic Materials	92.37	1.43	493.57	Source:	Waste Repackaging		Pu-239	1.47E+01
	Cellulosics	12.89	12.89	12.89				Pu-240	3.35E+00
	Rubber	0.00	0.00	0.00				Pu-241	8.33E+01
	Plastics	15.87	2.20	41.05				Pu-242	4.88E-04
	Solidified, Inorganic Matrix	80.40	0.48	339.39				U-234	7.08E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	2.61E-06
	Vitrified	0.00	0.00	0.00				U-238	4.60E-05
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	525.22							
	Packaging Material, Plastic	23.87							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-MT532D													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
55 gallon POCs	0.0	0.0	0.0	0.0	0.0	1.0	55 Gallon POCs	0.0	0.0	0.0	0.0	0.0	1.0
As-Generated	Stored	0.0	Projected	1.0	Total	1.0	Final Form	Stored	0.0	Projected	1.0	Total	1.0

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	N/A
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	EPA hazardous waste numbers are assigned to this waste stream based on process knowledge and confirmed by WIPP characterization sampling and analysis.
Management Comments	New Waste Stream being added to TWBIR
Acceptance Comments	N/A
Final Form Comments	N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W123	Handling	CH	Stream Name	Oxides/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3119

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	111	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	8.59	8.59	8.59	Residues:	N/A		Am-241	2.65E-01
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Np-237	1.65E-05
	Other Metal/Alloys	47.73	47.73	47.73	PCBs:	N		Pu-238	8.40E-02
	Other Inorganic Materials	0.00	0.00	0.00	Source:	Decontamination and Decommissioning		Pu-239	1.79E+00
	Cellulosics	12.89	12.89	12.89				Pu-240	4.10E-01
	Rubber	0.00	0.00	0.00				Pu-241	1.05E+01
	Plastics	1.91	1.91	1.91				Pu-242	5.18E-05
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	3.53E-04
	Cement (Solidified)	0.00	0.00	0.00				U-235	4.07E-05
	Vitrified	0.00	0.00	0.00				U-238	3.16E-03
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.57							
	Packaging Material, Plastic	32.46							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0069													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.2	Projected 0.0	Total 0.2			Final Form	Stored 0.2	Projected 0.0	Total 0.2				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Depleted uranium oxide from decontamination and decommissioning of Buildings 776 and 777.

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0200

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	Metal/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal		Waste Matrix Code	S5111

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	0.00	0.00	0.00	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	35.32	35.32	35.32	
Other Inorganic Materials	0.00	0.00	0.00	
Cellulosics	12.89	12.89	12.89	
Rubber	0.00	0.00	0.00	
Plastics	0.96	0.96	0.96	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.57			
Packaging Material, Plastic	32.46			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	117
Residues:	N/A	
Asbestos:	N	
PCBs:	N	
Source:	Multiple Sources.	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	5.29E+00
Np-237	1.15E-05
Pu-238	1.13E+00
Pu-239	2.46E+01
Pu-240	5.64E+00
Pu-241	1.35E+02
Pu-242	6.90E-04
U-234	1.76E-06
U-235	5.67E-08
U-238	5.01E-10

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0200													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.6	0.0	0.0	0.0	0.0	0.6	55 Gallon Drum	0.6	0.0	0.0	0.0	0.0	0.6
As-Generated	Stored 0.6	Projected 0.0	Total 0.6				Final Form	Stored 0.6	Projected 0.0	Total 0.6			

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	"Radiological standards including enriched and depleted uranium, americium, and plutonium used for calibration of instrumentation."
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	New Waste Stream being added to TWBIR
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0299

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT0299	Handling	CH	Stream Name	N/A			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3129

EPA Codes	
As-Generated	
N/A	

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	7.16	7.16	7.16	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	0.00	0.00	0.00	
Cellulosics	0.00	0.00	0.00	
Rubber	0.00	0.00	0.00	
Plastics	8.59	8.59	8.59	
Solidified, Inorganic Matrix	10.50	10.50	10.50	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.43			
Packaging Material, Plastic	23.87			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	111, 112
Residues:	N/A	
Asbestos:	N/A	
PCBs:	N/A	
Source:	N/A	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	9.67E+01
Pu-238	6.28E+00
Pu-239	1.34E+02
Pu-240	3.06E+01
Pu-241	7.83E+02
Pu-242	3.87E-03
U-238	1.22E-04

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0299													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	Total
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.2	Projected 0.0				Total 0.2	Final Form	Stored 0.2	Projected 0.0				Total 0.2

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	N/A
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0300

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W117	Handling	CH	Stream Name	Coarse Graphite/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Graphite	Waste Matrix Code	S5126

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	115	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	2.75	0.96	6.68	Residues:	No		Am-241	1.68E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	No		Np-237	1.01E-05
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-238	8.66E-01
	Other Inorganic Materials	292.83	7.16	416.72	Source:	Facility/Equipment Operation and Maintenance Waste		Pu-239	1.86E+01
	Cellulosics	12.49	10.50	12.89				Pu-240	4.28E+00
	Rubber	0.00	0.00	0.00				Pu-241	9.23E+01
	Plastics	22.13	8.11	25.78				Pu-242	4.56E-04
	Solidified, Inorganic Matrix	18.57	18.57	18.57				U-234	1.94E-04
	Cement (Solidified)	0.00	0.00	0.00				U-235	6.26E-06
	Vitrified	0.00	0.00	0.00				U-238	3.67E-06
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	231.27							
	Packaging Material, Plastic	25.68							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0300													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 10 gallon	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	30.4	0.0	0.0	0.0	0.0	31.7
Drum / 55 gallon	30.2	1.2	0.0	0.0	0.0	31.4	55 Gallon POCs	10.0	0.0	0.0	0.0	0.0	10.0
POC / 55 gallon	10.0	0.0	0.0	0.0	0.0	10.0							
As-Generated	Stored	40.2	Projected	1.2	Total	41.4	Final Form	Stored	40.4	Projected	1.3	Total	41.7

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste form includes graphite chunks and coarse graphite .

Waste Stream Source Description Item Description Code 300, Graphite Molds

During the casting of plutonium in production foundry operations, the plutonium casting operations in Building 707 generated used graphite molds. The working surfaces were coated with calcium fluoride prior to using the mold. After the plutonium casting was removed from the mold, the molds were collected in a drum. Drums that contained recoverable amounts of plutonium were stored for subsequent scarfing of molds.

Item Description Code 301, Classified Graphite Shapes

During the casting of plutonium in production foundry operations, classified molds are segregated from nonclassified molds. Prior to 1984, the classified molds were destroyed in Building 776.

Item Description Code 303, Scarfed Graphite Chunks

After the casting of plutonium in production foundry operations, IDCs 300 and 301 were mechanically cleaned using a hand-held rotary-type sanding tool to grind off contamination in Buildings 371, 707, 771, and 777, generating Scarfed Graphite Chunks. The mechanical cleaning (scarfing) of the mold surface removes most of the mold coating and plutonium contamination. This process generated IDC 303 and 310, as well as IDC 312.

Item Description Code 310, Graphite Scarfing and Fines

After the casting of plutonium in production foundry operations, IDC 300 was mechanically cleaned in Buildings 371, 707, 771, and 777, generating graphite scarfings and fines. The mechanical cleaning (scarfing) of the mold surface removes most of the mold coating and plutonium contamination. Material generated in this process were fines and small pieces of graphite coated with calcium fluoride and plutonium. This material was then subjected to nondestructive assay to determine actinide content, and collected for disposition.

Item Description Code 312, Graphite Coarse

After the casting of plutonium in production foundry operation, IDC 300 was mechanically cleaned in Buildings 371, 707, 771, and 777, generating coarse graphite. Material generated in this process was chunk pieces of graphite produced as a by-product of IDC 310 generation.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0301

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W117	Handling	CH	Stream Name	Coarse Graphite/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Graphite	Waste Matrix Code	S5126

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	2.75	0.96	6.68	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	292.83	7.16	416.72	
Cellulosics	12.49	10.50	12.89	
Rubber	0.00	0.00	0.00	
Plastics	22.13	8.11	25.78	
Solidified, Inorganic Matrix	18.57	18.57	18.57	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.44			
Packaging Material, Plastic	26.25			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	115
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Facility/Equipment Operation and Maintenance Waste	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	1.68E+00
Np-237	1.01E-05
Pu-238	8.66E-01
Pu-239	1.86E+01
Pu-240	4.28E+00
Pu-241	9.23E+01
Pu-242	4.56E-04
U-234	1.94E-04
U-235	6.26E-06
U-238	3.67E-06

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0301													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	5.8	0.0	0.0	0.0	0.0	5.8	55 Gallon Drum	5.8	0.0	0.0	0.0	0.0	5.8
As-Generated	Stored 5.8	Projected 0.0	Total 5.8			Final Form	Stored 5.8	Projected 0.0	Total 5.8				

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TWBIR ID: RF-TT0301

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	This waste form includes graphite chunks and coarse graphite .
<hr/>	
Waste Stream Source Description	<p>Item Description Code 300, Graphite Molds</p> <p>During the casting of plutonium in production foundry operations, the plutonium casting operations in Building 707 generated used graphite molds. The working surfaces were coated with calcium fluoride prior to using the mold. After the plutonium casting was removed from the mold, the molds were collected in a drum. Drums that contained recoverable amounts of plutonium were stored for subsequent scarfing of molds.</p> <p>Item Description Code 301, Classified Graphite Shapes</p> <p>During the casting of plutonium in production foundry operations, classified molds are segregated from nonclassified molds. Prior to 1984, the classified molds were destroyed in Building 776.</p> <p>Item Description Code 303, Scarfed Graphite Chunks</p> <p>After the casting of plutonium in production foundry operations, IDCs 300 and 301 were mechanically cleaned using a hand-held rotary-type sanding tool to grind off contamination in Buildings 371, 707, 771, and 777, generating Scarfed Graphite Chunks. The mechanical cleaning (scarfing) of the mold surface removes most of the mold coating and plutonium contamination. This process generated IDC 303 and 310, as well as IDC 312.</p> <p>Item Description Code 310, Graphite Scarfing and Fines</p> <p>After the casting of plutonium in production foundry operations, IDC 300 was mechanically cleaned in Buildings 371, 707, 771, and 777, generating graphite scarfings and fines. The mechanical cleaning (scarfing) of the mold surface removes most of the mold coating and plutonium contamination. Material generated in this process were fines and small pieces of graphite coated with calcium fluoride and plutonium. This material was then subjected to nondestructive assay to determine actinide content, and collected for disposition.</p> <p>Item Description Code 312, Graphite Coarse</p> <p>After the casting of plutonium in production foundry operation, IDC 300 was mechanically cleaned in Buildings 371, 707, 771, and 777, generating coarse graphite. Material generated in this process was chunk pieces of graphite produced as a by-product of IDC 310 generation.</p>
<hr/>	
Current Container Comments	N/A
<hr/>	
EPA Comments	N/A
<hr/>	
Management Comments	N/A
<hr/>	
Acceptance Comments	N/A
<hr/>	
Final Form Comments	N/A

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TWBIR ID: RF-TT0302

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W101	Handling	CH	Stream Name	Combustibles/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5313

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	121	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	5.28	0.48	41.43	Residues:	No		Am-241	6.28E-02
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	No		Np-237	3.21E-07
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-238	1.85E-02
	Other Inorganic Materials	0.00	0.00	0.00	Source:	Other/Multiple Sources		Pu-239	4.30E-01
	Cellulosics	12.89	12.89	12.89				Pu-240	9.86E-02
	Rubber	0.00	0.00	0.00				Pu-241	2.27E+00
	Plastics	193.70	42.96	304.54				Pu-242	1.12E-05
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	4.03E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	1.30E-06
	Vitrified	0.00	0.00	0.00				U-238	1.15E-08
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.44							
	Packaging Material, Plastic	25.78							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0302													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	7.7	1.0	0.0	0.0	0.0	8.7	55 Gallon Drum	7.7	0.0	0.0	0.0	0.0	8.8
As-Generated	Stored 7.7	Projected 1.0	Total 8.7			Final Form	Stored 7.7	Projected 1.0	Total 8.8				

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TWBIR ID: RF-TT0302

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste consists of Benelex shielding and Plexiglass glovebox windows.

Waste Stream Source Description IDC 302 includes Benelex and Plexiglas. Benelex is a very dense organic material used for radiation shielding around gloveboxes and tanks. In some cases, Benelex is laminated with lead. However, none of the containers identified here have lead lamination. The Benelex used by RFETS is usually 2 inches thick, although occasionally two 2-inch thick pieces were bolted together to increase shield thickness. Plexiglas is a trade name used to describe a family of polycarbonate materials used for radiation shielding in glovebox windows and equipment enclosures. Plexiglas glovebox windows are generally 2- to 4-inches thick and can be in various sizes and shapes.

Benelex and Plexiglas in the inventory were generated in Buildings 371, 707, 771, and 776. The IDC was generated as waste during replacement of shielding or stripout of unnecessary shielding during the installation of new gloveboxes or tanks.

IDC 330 is dry combustibles such as cloth, paper, and wood. This IDC changes to 821, 831, 851, or 861 at the point of assay, depending upon radiological content

IDC 336, wet combustibles, are materials such as, paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent an accumulation of free liquid. This IDC changes to 822, 832, 833, or 862 at the point of assay.

IDC 337 is PVC sheeting, poly bottles, supplied-air suits, polyethylene, and other plastics. This IDC changes to 825, 833, 853, or 863 at the point of assay.

IDC 487 is classified plastic shapes used in handling and shipping. If TRU, shapes must be declassified prior to shipment. If LLW, IDC must be authorized by NTS prior to shipment. Classified Waste drums must be stenciled and handled according to Safeguards and Security procedures.

IDC 821 is dry combustibles such as paper, cloth, and wood.

IDC 822 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

ICD 825 is PVC sheeting, poly bottles, supplied-air suits, and other plastic.

IDC 831 is dry combustibles such as paper, cloth, and wood.

IDC 832 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

IDC 833 is PVC sheeting, poly bottles, supplied-air suits, and other plastics.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Final Form Comments N/A

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TWBIR ID: RF-TT0303

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W117	Handling	CH	Stream Name	Coarse Graphite/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Graphite	Waste Matrix Code	S5126

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	0.00	0.00	0.00	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	447.75	440.11	455.38	
Cellulosics	0.00	0.00	0.00	
Rubber	0.00	0.00	0.00	
Plastics	12.89	8.59	17.18	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.43			
Packaging Material, Plastic	23.87			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	115
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Facility/Equipment Operation and Maintenance Waste	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	3.06E+00
Np-237	3.91E-05
Pu-238	8.58E-01
Pu-239	1.83E+01
Pu-240	4.19E+00
Pu-241	1.07E+02
Pu-242	5.29E-04
U-234	8.31E-04
U-235	2.68E-05
U-238	2.21E-05

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0303													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	1.2	0.0	0.0	0.0	0.0	1.2	55 Gallon Drum	1.3	0.0	0.0	0.0	0.0	1.3
As-Generated	Stored 1.2	Projected 0.0	Total 1.2			Final Form	Stored 1.3	Projected 0.0	Total 1.3				

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TWBIR ID: RF-TT0303

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	This waste form includes graphite chunks and coarse graphite .
Waste Stream Source Description	<p>Item Description Code 300, Graphite Molds</p> <p>During the casting of plutonium in production foundry operations, the plutonium casting operations in Building 707 generated used graphite molds. The working surfaces were coated with calcium fluoride prior to using the mold. After the plutonium casting was removed from the mold, the molds were collected in a drum. Drums that contained recoverable amounts of plutonium were stored for subsequent scarfing of molds.</p> <p>Item Description Code 301, Classified Graphite Shapes</p> <p>During the casting of plutonium in production foundry operations, classified molds are segregated from nonclassified molds. Prior to 1984, the classified molds were destroyed in Building 776.</p> <p>Item Description Code 303, Scarfed Graphite Chunks</p> <p>After the casting of plutonium in production foundry operations, IDCs 300 and 301 were mechanically cleaned using a hand-held rotary-type sanding tool to grind off contamination in Buildings 371, 707, 771, and 777, generating Scarfed Graphite Chunks. The mechanical cleaning (scarfing) of the mold surface removes most of the mold coating and plutonium contamination. This process generated IDC 303 and 310, as well as IDC 312.</p> <p>Item Description Code 310, Graphite Scarfing and Fines</p> <p>After the casting of plutonium in production foundry operations, IDC 300 was mechanically cleaned in Buildings 371, 707, 771, and 777, generating graphite scarfings and fines. The mechanical cleaning (scarfing) of the mold surface removes most of the mold coating and plutonium contamination. Material generated in this process were fines and small pieces of graphite coated with calcium fluoride and plutonium. This material was then subjected to nondestructive assay to determine actinide content, and collected for disposition.</p> <p>Item Description Code 312, Graphite Coarse</p> <p>After the casting of plutonium in production foundry operation, IDC 300 was mechanically cleaned in Buildings 371, 707, 771, and 777, generating coarse graphite. Material generated in this process was chunk pieces of graphite produced as a by-product of IDC 310 generation.</p>
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	N/A
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0310

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT0310	Handling	CH	Stream Name	N/A			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5126

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	115	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	7.51	1.10	11.93	Residues:	N/A		Am-241	3.80E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N/A		Np-237	1.91E-05
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	N/A		Pu-238	1.61E+00
	Other Inorganic Materials	14.85	0.96	31.98	Source:	N/A		Pu-239	3.29E+01
	Cellulosics	136.23	12.89	167.07				Pu-240	7.77E+00
	Rubber	0.00	0.00	0.00				Pu-241	1.57E+02
	Plastics	3.03	0.33	5.73				Pu-242	8.34E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	5.94E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	1.91E-06
	Vitrified	0.00	0.00	0.00				U-238	1.69E-08
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	405.55							
	Packaging Material, Plastic	27.11							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0310													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.4	0.0	0.0	0.0	0.0	0.4	55 Gallon Drum	0.4	0.0	0.0	0.0	0.0	0.4
POC / 55 gallon	2.7	0.0	0.0	0.0	0.0	2.7	55 Gallon POCs	2.7	0.0	0.0	0.0	0.0	2.7
As-Generated	Stored	3.1	Projected	0.0	Total	3.1	Final Form	Stored	3.1	Projected	0.0	Total	3.1

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	N/A
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0312

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W117	Handling	CH	Stream Name	Coarse Graphite/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Graphite	Waste Matrix Code	S5126

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	115	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	15.99	2.39	143.68	Residues:	No		Am-241	5.76E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	No		Np-237	7.46E-06
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-238	1.57E+00
	Other Inorganic Materials	36.55	1.43	273.99	Source:	Facility/Equipment Operation and Maintenance Waste		Pu-239	3.88E+01
	Cellulosics	164.93	12.89	167.07				Pu-240	8.81E+00
	Rubber	0.00	0.00	0.00				Pu-241	1.78E+02
	Plastics	26.75	9.55	132.70				Pu-242	9.17E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	3.05E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	9.83E-07
	Vitrified	0.00	0.00	0.00				U-238	2.18E-07
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	436.60							
	Packaging Material, Plastic	25.63							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0312													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	3.7	0.0	0.0	0.0	0.0	3.7	55 Gallon Drum	3.8	0.0	0.0	0.0	0.0	3.8
POC / 55 gallon	54.1	0.0	0.0	0.0	0.0	54.1	55 Gallon POCs	54.2	0.0	0.0	0.0	0.0	54.2
As-Generated	Stored	57.8	Projected	0.0	Total	57.8	Final Form	Stored	57.9	Projected	0.0	Total	57.9

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	This waste form includes graphite chunks and coarse graphite .
Waste Stream Source Description	<p>Item Description Code 300, Graphite Molds</p> <p>During the casting of plutonium in production foundry operations, the plutonium casting operations in Building 707 generated used graphite molds. The working surfaces were coated with calcium fluoride prior to using the mold. After the plutonium casting was removed from the mold, the molds were collected in a drum. Drums that contained recoverable amounts of plutonium were stored for subsequent scarfing of molds.</p> <p>Item Description Code 301, Classified Graphite Shapes</p> <p>During the casting of plutonium in production foundry operations, classified molds are segregated from nonclassified molds. Prior to 1984, the classified molds were destroyed in Building 776.</p> <p>Item Description Code 303, Scarfed Graphite Chunks</p> <p>After the casting of plutonium in production foundry operations, IDCs 300 and 301 were mechanically cleaned using a hand-held rotary-type sanding tool to grind off contamination in Buildings 371, 707, 771, and 777, generating Scarfed Graphite Chunks. The mechanical cleaning (scarfing) of the mold surface removes most of the mold coating and plutonium contamination. This process generated IDC 303 and 310, as well as IDC 312.</p> <p>Item Description Code 310, Graphite Scarfing and Fines</p> <p>After the casting of plutonium in production foundry operations, IDC 300 was mechanically cleaned in Buildings 371, 707, 771, and 777, generating graphite scarfings and fines. The mechanical cleaning (scarfing) of the mold surface removes most of the mold coating and plutonium contamination. Material generated in this process were fines and small pieces of graphite coated with calcium fluoride and plutonium. This material was then subjected to nondestructive assay to determine actinide content, and collected for disposition.</p> <p>Item Description Code 312, Graphite Coarse</p> <p>After the casting of plutonium in production foundry operation, IDC 300 was mechanically cleaned in Buildings 371, 707, 771, and 777, generating coarse graphite. Material generated in this process was chunk pieces of graphite produced as a by-product of IDC 310 generation.</p>
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	N/A
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0317

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W113	Handling	CH	Stream Name	Glass/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3119

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	122	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	57.28	57.28	57.28	Residues:	N/A		Am-241	4.21E-02
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Pu-238	4.74E-01
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	N		Pu-239	1.01E+01
	Other Inorganic Materials	34.37	34.37	34.37	Source:	Residue Vitrification Study		Pu-240	2.31E+00
	Cellulosics	0.00	0.00	0.00				Pu-241	5.92E+01
	Rubber	0.00	0.00	0.00				Pu-242	2.92E-04
	Plastics	17.18	17.18	17.18					
	Solidified, Inorganic Matrix	0.00	0.00	0.00					
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.43							
	Packaging Material, Plastic	23.87							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0317													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.2	Projected 0.0	Total 0.2			Final Form	Stored 0.2	Projected 0.0	Total 0.2				

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TWBIR ID: RF-TT0317

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Monoliths created from the vitrification of ash residues and glass frit.

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0320

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W111	Handling	CH	Stream Name	Heavy Metal (non-SS)/TRU			Inventory Date	9/30/2002	
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal		Waste Matrix Code	S5111

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	117	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	41.91	1.91	144.16	Residues:	No		Am-241	5.29E+00
	Aluminum-Base Metal/Alloys	4.77	4.77	4.77	Asbestos:	No		Np-237	1.15E-05
	Other Metal/Alloys	126.66	11.31	398.10	PCBs:	No		Pu-238	1.13E+00
	Other Inorganic Materials	38.31	37.95	38.67	Source:	Other/Multiple Sources		Pu-239	2.46E+01
	Cellulosics	29.91	25.78	31.98				Pu-240	5.64E+00
	Rubber	0.00	0.00	0.00				Pu-241	1.35E+02
	Plastics	19.94	3.01	47.73				Pu-242	6.90E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	1.76E-06
	Cement (Solidified)	0.00	0.00	0.00				U-235	5.67E-08
	Vitrified	0.00	0.00	0.00				U-238	5.01E-10
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.47							
	Packaging Material, Plastic	27.94							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0320													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
8802 Can	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	21.9	0.0	0.0	0.0	0.0	24.8
8804 Can	0.0	0.0	0.0	0.0	0.0	0.0							
Drum / 55 gallon	21.4	2.9	0.0	0.0	0.0	24.3	Final Form	Stored	21.9	Projected	2.9	Total	24.8
As-Generated	Stored	21.4	Projected	2.9	Total	24.3							

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Typically, these scrap metals consist of crucibles, funnels, rods and fixturing from several processes and production operations. Tantalum, tungsten and platinum are examples of scrap metals at the RFP.

Waste Stream Source Description Heavy metals have been produced as by-products of Rocky Flats operations in Buildings 371, 707, 771, 776, 777, 779, and 865; they are identified by IDC 320. The IDC 320 heavy nonspecial source metal was generated in various locations throughout the Rocky Flats and is stored in Resource Conservation and Recovery Act (RCRA) Units 11, 12, 13, 15A, and 20. This IDC includes nonstainless-steel metals that are heavier than iron. Examples of this waste include crucibles, funnels, rods, and process fixtures. These items are made primarily from tantalum, tungsten, and platinum, but some parts could have been manufactured or contaminated with lead if the accumulation start date was prior to 1987. IDC 320 originally included lead.

During maintenance operations, the maintenance shop in Building 371 generated heavy metal vessels, instruments, rods, and plates fabricated from tantalum, tungsten, and platinum. The shop generated these items during 4 1/2 years of operation from 1983 until 1988. Of these containers in storage, 19 backlog containers have an EPA Code of D008 (lead); eight of these were produced after 1987. Building 707, Modules A and J, generated heavy metals in its foundry operations. These heavy metals were primarily crucibles and pans used for presampling. These processes generated material during 6 1/2 years of operation from 1985 until 1991. Nine backlog containers have an EPA Code of D008 (lead). The plutonium recovery operations in Building 771 generated leached Oralloid parts consisting of tantalum, tungsten, and platinum. The system generated material during 3 years of operation from 1987 until 1990. Five backlog containers have an EPA Code of D008 (lead); Four of these backlog containers were produced after 1987. Building 776, Pyrochemical Processing, generated material during heel processes. Eight containers have an EPA Code of D008 (lead). Building 777, the Coatings Laboratory, generated material during a 2-year period of operation from 1988 until 1990. This material consists primarily of various heavy metals used in the research and development of coating technologies. These backlog containers have been associated with lead as a constituent and were produced after 1987. The Residue Treatment Technology Group, Building 779, generated crucibles, stirrers, and other general lab equipment derived from tantalum and tungsten. In Building 779, the Physical Metallurgy Group generated tantalum materials used in casting and cast testing. Additionally, the Surface Analysis Laboratory in Building 779 generated heavy metal samples primarily of depleted uranium (D-38). IDC 320 material was produced by Building 779 operations over a 10-year period from 1981 until 1991. Nine backlog containers have an EPA Code of D008 (lead), six were produced after 1987.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W101	Handling	CH	Stream Name	Combustibles/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5390

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	116	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	8.97	1.43	32.94	Residues:	No		Am-241	3.43E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	No		Np-237	8.47E-06
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-238	6.41E-01
	Other Inorganic Materials	0.00	0.00	0.00	Source:	Other/Multiple Sources		Pu-239	2.53E+01
	Cellulosics	0.00	0.00	0.00				Pu-240	6.22E+00
	Rubber	0.00	0.00	0.00				Pu-241	6.86E+01
	Plastics	37.23	8.59	159.43				Pu-242	4.28E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00					
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.52							
	Packaging Material, Plastic	22.72							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0330													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	13.1	1.9	0.0	0.0	0.0	15.0	55 Gallon Drum	13.1	0.0	0.0	0.0	0.0	15.0
As-Generated	Stored	13.1	Projected	1.9	Total	15.0	Final Form	Stored	13.1	Projected	1.9	Total	15.0

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills.

Waste Stream Source Description IDC 302 includes Benelex and Plexiglas. Benelex is a very dense organic material used for radiation shielding around gloveboxes and tanks. In some cases, Benelex is laminated with lead. However, none of the containers identified here have lead lamination. The Benelex used by RFETS is usually 2 inches thick, although occasionally two 2-inch thick pieces were bolted together to increase shield thickness. Plexiglas is a trade name used to describe a family of polycarbonate materials used for radiation shielding in glovebox windows and equipment enclosures. Plexiglas glovebox windows are generally 2- to 4-inches thick and can be in various sizes and shapes.

Benelex and Plexiglas in the inventory were generated in Buildings 371, 707, 771, and 776. The IDC was generated as waste during replacement of shielding or stripout of unnecessary shielding during the installation of new gloveboxes or tanks.

IDC 330 is dry combustibles such as cloth, paper, and wood. This IDC changes to 821, 831, 851, or 861 at the point of assay, depending upon radiological content

IDC 336, wet combustibles, are materials such as, paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent an accumulation of free liquid. This IDC changes to 822, 832, 833, or 862 at the point of assay.

IDC 337 is PVC sheeting, poly bottles, supplied-air suits, polyethylene, and other plastics. This IDC changes to 825, 833, 853, or 863 at the point of assay.

IDC 487 is classified plastic shapes used in handling and shipping. If TRU, shapes must be declassified prior to shipment. If LLW, IDC must be authorized by NTS prior to shipment. Classified Waste drums must be stenciled and handled according to Safeguards and Security procedures.

IDC 821 is dry combustibles such as paper, cloth, and wood.

IDC 822 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

ICD 825 is PVC sheeting, poly bottles, supplied-air suits, and other plastic.

IDC 831 is dry combustibles such as paper, cloth, and wood.

IDC 832 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

IDC 833 is PVC sheeting, poly bottles, supplied-air suits, and other plastics.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Final Form Comments N/A

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TWBIR ID: RF-TT-0331

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT-0331	Handling	CH	Stream Name	N/A			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Filter	Waste Matrix Code	S5410

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	115.41	0.48	280.20	
Aluminum-Base Metal/Alloys	119.34	119.34	119.34	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	36.78	1.91	173.75	
Cellulosics	12.89	12.89	12.89	
Rubber	0.00	0.00	0.00	
Plastics	91.22	3.34	406.70	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	3.66	2.86	4.77	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.54			
Packaging Material, Plastic	31.45			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	119
Residues:	N/A	
Asbestos:	N/A	
PCBs:	N/A	
Source:	N/A	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	4.16E+00
Np-237	1.02E-05
Pu-238	7.93E-01
Pu-239	2.20E+01
Pu-240	4.93E+00
Pu-241	7.91E+01
Pu-242	5.17E-04
U-234	8.43E-04
U-235	2.72E-05
U-238	5.58E-07

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT-0331													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	Total
Drum / 10 gallon	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	63.6	0.0	0.0	0.0	0.0	67.3
Drum / 55 gallon	63.2	3.7	0.0	0.0	0.0	67.0							
As-Generated	Stored	Projected	Total				Final Form	Stored	Projected	Total			
	63.3	3.7	67.0					63.6	3.8	67.3			

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	N/A
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT-0334

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT-0334	Handling	CH	Stream Name	N/A			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal			
EPA Codes		Waste Material Parameters (kg/m3)			Final Waste Form Descriptors		TRUCON Codes		Final Form Radionuclides	

As-Generated
N/A

Material Parameter	Average	Lower	Upper
Iron-Base Metal/Alloys	0.00	0.00	0.00
Aluminum-Base Metal/Alloys	0.00	0.00	0.00
Other Metal/Alloys	0.00	0.00	0.00
Other Inorganic Materials	0.00	0.00	0.00
Cellulosics	0.00	0.00	0.00
Rubber	0.00	0.00	0.00
Plastics	2.36	2.20	2.53
Solidified, Inorganic Matrix	0.00	0.00	0.00
Cement (Solidified)	0.00	0.00	0.00
Vitrified	0.00	0.00	0.00
Solidified, Organic Matrix	0.00	0.00	0.00
Soils	0.00	0.00	0.00
Packaging Material, Steel	138.57		
Packaging Material, Plastic	32.46		
Packaging Material, Lead	0.00		
Packaging Material, Steel Plug	0.00		

Category:	Defense TRU Waste	122
Residues:	N/A	
Asbestos:	N/A	
PCBs:	N/A	
Source:	N/A	

Isotope	Typical Concentration (Ci/m3)
Am-241	3.64E+00
Np-237	2.83E-05
Pu-238	9.76E+00
Pu-239	2.08E+02
Pu-240	4.76E+01
Pu-241	1.22E+03
Pu-242	6.02E-03

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT-0334

ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036	
8804 Can	0.0	0.0	0.0	0.0	0.0	0.0
Drum / 55 gallon	2.3	1.0	0.0	0.0	0.0	3.3
As-Generated	Stored	Projected	Total			
	2.3	1.0	3.3			

ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036	
55 Gallon Drum	2.5	0.0	0.0	0.0	0.0	3.5
Final Form	Stored	Projected	Total			
	2.5	1.0	3.5			

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	N/A
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).
Acceptance Comments	N/A
Final Form Comments	N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W120	Handling	CH	Stream Name	Filters & media/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Filter	Waste Matrix Code	S5410

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	119	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	11.02	0.48	72.46	Residues:	Yes		Am-241	1.16E+00
	Aluminum-Base Metal/Alloys	9.08	0.05	58.48	Asbestos:	Yes		Np-237	1.32E-05
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-238	3.13E-01
	Other Inorganic Materials	5.39	0.19	59.19	Source:	Facility/Equipment Operation and Maintenance Waste		Pu-239	7.47E+00
	Cellulosics	12.63	4.31	12.89				Pu-240	1.72E+00
	Rubber	8.24	0.05	58.48				Pu-241	3.46E+01
	Plastics	17.31	1.43	49.64				Pu-242	1.82E-04
	Solidified, Inorganic Matrix	2.27	0.05	5.73				U-234	6.50E-04
	Cement (Solidified)	0.00	0.00	0.00				U-235	2.02E-05
	Vitrified	0.00	0.00	0.00				U-238	1.86E-06
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.47	0.48	0.48					
	Packaging Material, Steel	138.81							
	Packaging Material, Plastic	27.69							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0335													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	50.8	27.7	0.0	0.0	0.0	78.4	55 Gallon Drum	50.9	0.0	0.0	0.0	0.0	78.6
Standard Waste Box	1.9	0.0	0.0	0.0	0.0	1.9	Standard Waste Box	1.9	0.0	0.0	0.0	0.0	1.9
As-Generated	Stored	52.7	Projected	27.7	Total	80.3	Final Form	Stored	52.8	Projected	27.7	Total	80.5

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Glovebox HEPA filters.

Waste Stream Source Description Item Description Code 338-Filter Media

The material in this IDC is either the filter media portion of HEPA filters or surface-water filter. HEPA filters are used on gloveboxes and in large filter plenums. Sock filters were used to prefilter operable unit 2 (OU-2) surface water prior to activated carbon treatment.

IDC 338 filter media in this backlog population was derived from HEPA filters from Buildings 371, 374, 559, 707, 771, 776, and from surface-water filters used in OU-2. The HEPA filters could have originally been assigned IDCs 335, 342, 490, 491, or 492. Filter media from building 374 could have been generated from HEPA filters used in saltcrete processing; therefore, they could be contaminated with RCRA metals and F-listed solvents and sludges. Filter media from Building 771 could have been used to filter nitric acid vapors. Analytical data on the OU-2 surface waters indicates the sock filters are contaminated with F-Listed constituents carbon tetrachloride, trichloroethylene, and tetrachloroethylene. Chloroform, 1,1-dichloroethene, and vinyl chloride were also detected in the influent water analysis.

Item Description Code-331 Ful-Flo filters Not From Incinerator

These Ful-Flo filters are in-line cartridge filters used throughout Rocky Flats to remove particulates from fluid streams and typically filter down to 5, 1, and 0.5 micron-sized particulates. Ful-Flo filters are used in various liquid systems that include nitric- and chloride-acid systems, such as those found in plutonium recovery operations; caustic systems, such as those found in utilities scrubbing; solvent systems using carbon tetrachloride in machining operations; water systems, such as steam cleaning; and condensate collection. These filters are also used in lubricant oil filtration.

Ful-Flo filters are poly-fiber-wound cartridges, about 10" long by 3.5" in diameter. Other fiber filters, such as R-6 pads, may be included in this IDC. R-6 pads are cloth filters, about sixteen inches in diameter, used to filter solids from nitric acid solutions. Therefore, backlog material in this IDC cannot be considered homogeneous. Filter elements are produced by combining a media blanket and spirally wound matrix yarn on an inner core. The filter elements might have a polypropylene cap on one end. Both the media blanket and matrix yarn can be cotton or polypropylene. The inner core material can be constructed of polypropylene, tinned steel, or stainless steel. Warehouse data from Rocky Flats indicate that the inner-core material is polypropylene.

During normal process operations, IDC 331 Ful-Flo filters in this backlog population were used to filter particulates from liquid waste streams in Buildings 371, 707, 771, 776, 777, and 779. These waste streams were primarily from filtration of caustic solutions in Building 371, the carbon tetrachloride system and oil systems, and from filtration of water and developer in Building 707. In Building 771, the primary waste streams filtered were anion column feed, potassium hydroxide, nitrate feed, spent nitric acid and hydrofluoric acid from the scrubber, eluate and effluent exiting the ion-exchange columns, floor pick-up solution, steam condensate, and miscellaneous aqueous solutions. Hydraulic oil and floor pick-up solution were filtered in Building 776. In Buildings 777 and 779, Ful-Flo filters were used in the carbon tetrachloride system for purification of Freon TF and for filtration of incoming waters.

Typically, Ful-Flo filters were placed on drying racks pending bag-out of a glovebox. Filters were not always dried before removal from the glovebox. Filters were then "bagged out" of the glovebox and placed in a second layer of plastic. Next, the filters were placed in a "Poly Bottle" or "Clam Shell" (hard plastic container), then placed in a double-lined drum.

These Ful-Flo filters may be contaminated with acids, bases, carbon tetrachloride, chromium, Freon, and oil. They may contain relatively small amounts of free liquids.

Item Description Code 335-HEPA Glovebox Filters, Not Acid Contaminated

The material in this IDC is High Efficiency Particulate Air (HEPA) filters used in ventilation systems at Rocky Flats. HEPA filters have been and are used in all of the buildings which contain plutonium processing activities. HEPA filters are used on gloveboxes and in large filter plenums that filter the room air.

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Used filters were removed from their position in the ventilation system and packaged for further processing. The filters used on gloveboxes (nominal 8" x 8" x 5") were identified as IDC 335 if they were not acid contaminated.

Item Description Code 342-HEPA Glovebox Filters, Acid Contaminated

HEPA filters are used on all gloveboxes to remove particulates from the atmosphere exiting the glovebox to the plenum exhaust system. The filters in IDC 342 are from gloveboxes with atmospheres that could cause the filters to be contaminated with acids or bases used in chemical processing.

Item Description Code 491-Plenum Prefilters

The material in this IDC is a variety of plenum prefilters used in the ventilation systems at Rocky Flats. Plenum prefilters have been and are used in all of the buildings that contain plutonium processing activities. These prefilters are used in large plenums that filter the room and glovebox air. Used prefilters were removed from their position in the ventilation system and packaged for further processing.

IDC 491 plenum prefilters range from furnace-type filters to pleated fiberglass filters and can be as large as 24" x 24" x 12". The filter medium consists of fiberglass packing or paper which may be more or less dense, depending on filtering needs. Wire mesh can be used to hold the media in place. The frame material for these prefilters is cardboard.

Item Description Code 490--HEPA Filters (24" x 24"), Not Acid Contaminated

The material in this IDC is HEPA filters used in the ventilation systems at the RFETS. HEPA filters are used in all of the buildings that contain plutonium processing activities. These HEPA filters are used in large filter plenums that filter the room and glovebox air.

Used filters were removed from their position in the ventilation system and packaged for further processing. The larger-sized filters used in filters plenums were identified and packaged as IDC 490 if not acid contaminated.

IDC 490 HEPA filters (24" x 24"), not acid contaminated, are large HEPA filters (nominal 24" x 24" x 5 or 24" x 12) that were used in filter plenum racks. These filters consist of filter media contained within a wooden or metal frame.

The filter medium is composed of glass fibers, with a small percentage percentage of asbestos. An organic binder, elastomeric adhesive, or polyurethane sealant was use during construction. The medium also contains corrugated aluminum foil. The newer HEPA media will consist of glass and aromatic polyamide fibers (Nomex) and aluminum alloy metal coated with a thermoset vinly or epoxy. Various sealants could be present. The material will not be homogenous because of the different materials used in the different sizes and by the different manufacturers of the filters. The material in IDC 490 has not been contaminated with acid.

The frame material will be either 3/4", fire-retareant, exterior-grade plywood or wood-particle board and 14-gauge cadmium-plated or chromized carbon steel. neoprene, closed-cell, expanded rubber, precoated with a rubber-based adhesive is present on each filter.

More information on HEPA filters can be obtained from RFETS Standard SMU-401 (EG&G 1991).

The IDC 490 HEPA filters in this backlog population consist of filters from Buildings 374, 771, 774, 776, and 777. The majority of these filtes do not contain hazardous consitutents, although evaporated solvents may have been contacted. HEPA filters from Plenums 104A and 104B in Building 374 have contacted hazardous constituents from the Saltcrete Process.

Current Container Comments N/A

EPA Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0336

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W101	Handling	CH	Stream Name	Combustibles/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5390

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	116	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	1.59	0.96	2.39	Residues:	No		Am-241	5.61E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	No		Np-237	9.34E-07
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-238	1.21E+00
	Other Inorganic Materials	0.00	0.00	0.00	Source:	Other/Multiple Sources		Pu-239	3.09E+01
	Cellulosics	0.00	0.00	0.00				Pu-240	7.05E+00
	Rubber	0.00	0.00	0.00				Pu-241	1.18E+02
	Plastics	17.72	2.39	59.67				Pu-242	8.20E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	1.27E-04
	Cement (Solidified)	0.00	0.00	0.00				U-235	4.11E-06
	Vitrified	0.00	0.00	0.00				U-238	3.63E-08
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.55							
	Packaging Material, Plastic	29.67							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0336							
As-Generated Volumes				Final Form Volumes			
ContainerType	Stored End of CY 2001	Projected				Total	
		2002-2006	2007-2016	2017-2026	2027-2036		
Drum / 10 gallon	0.0	0.0	0.0	0.0	0.0	0.0	
Drum / 55 gallon	18.9	2.1	0.0	0.0	0.0	21.0	
Slip Lid Can	0.0	0.0	0.0	0.0	0.0	0.0	
As-Generated	Stored 19.0	Projected 2.1			Total 21.1		

ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036	
55 Gallon Drum	19.4	0.0	0.0	0.0	0.0	21.5
Final Form	Stored 19.4	Projected 2.1			Total 21.5	

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills.

Waste Stream Source Description IDC 302 includes Benelex and Plexiglas. Benelex is a very dense organic material used for radiation shielding around gloveboxes and tanks. In some cases, Benelex is laminated with lead. However, none of the containers identified here have lead lamination. The Benelex used by RFETS is usually 2 inches thick, although occasionally two 2-inch thick pieces were bolted together to increase shield thickness. Plexiglas is a trade name used to describe a family of polycarbonate materials used for radiation shielding in glovebox windows and equipment enclosures. Plexiglas glovebox windows are generally 2- to 4-inches thick and can be in various sizes and shapes.

Benelex and Plexiglas in the inventory were generated in Buildings 371, 707, 771, and 776. The IDC was generated as waste during replacement of shielding or stripout of unnecessary shielding during the installation of new gloveboxes or tanks.

IDC 330 is dry combustibles such as cloth, paper, and wood. This IDC changes to 821, 831, 851, or 861 at the point of assay, depending upon radiological content

IDC 336, wet combustibles, are materials such as, paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent an accumulation of free liquid. This IDC changes to 822, 832, 833, or 862 at the point of assay.

IDC 337 is PVC sheeting, poly bottles, supplied-air suits, polyethylene, and other plastics. This IDC changes to 825, 833, 853, or 863 at the point of assay.

IDC 487 is classified plastic shapes used in handling and shipping. If TRU, shapes must be declassified prior to shipment. If LLW, IDC must be authorized by NTS prior to shipment. Classified Waste drums must be stenciled and handled according to Safeguards and Security procedures.

IDC 821 is dry combustibles such as paper, cloth, and wood.

IDC 822 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

ICD 825 is PVC sheeting, poly bottles, supplied-air suits, and other plastic.

IDC 831 is dry combustibles such as paper, cloth, and wood.

IDC 832 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

IDC 833 is PVC sheeting, poly bottles, supplied-air suits, and other plastics.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Final Form Comments N/A

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TWBIR ID: RF-TT0337

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W101	Handling	CH	Stream Name	Combustibles/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5390

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	116	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	1.85	0.48	4.77	Residues:	No		Am-241	3.55E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	No		Np-237	5.97E-07
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-238	6.79E-01
	Other Inorganic Materials	10.50	0.96	20.05	Source:	Other/Multiple Sources		Pu-239	1.93E+01
	Cellulosics	0.00	0.00	0.00				Pu-240	4.35E+00
	Rubber	0.00	0.00	0.00				Pu-241	5.92E+01
	Plastics	120.69	7.16	350.37				Pu-242	4.12E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	2.76E-04
	Cement (Solidified)	0.00	0.00	0.00				U-235	8.88E-06
	Vitrified	0.00	0.00	0.00				U-238	7.86E-08
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	139.71							
	Packaging Material, Plastic	29.83							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0337													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	39.5	2.7	0.0	0.0	0.0	42.2	55 Gallon Drum	39.6	0.0	0.0	0.0	0.0	42.3
Standard Waste Box	3.8	0.0	0.0	0.0	0.0	3.8	Standard Waste Box	3.8	0.0	0.0	0.0	0.0	3.8
As-Generated	Stored	43.3	Projected	2.7	Total	46.0	Final Form	Stored	43.4	Projected	2.7	Total	46.1

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills.

Waste Stream Source Description IDC 302 includes Benelex and Plexiglas. Benelex is a very dense organic material used for radiation shielding around gloveboxes and tanks. In some cases, Benelex is laminated with lead. However, none of the containers identified here have lead lamination. The Benelex used by RFETS is usually 2 inches thick, although occasionally two 2-inch thick pieces were bolted together to increase shield thickness. Plexiglas is a trade name used to describe a family of polycarbonate materials used for radiation shielding in glovebox windows and equipment enclosures. Plexiglas glovebox windows are generally 2- to 4-inches thick and can be in various sizes and shapes.

Benelex and Plexiglas in the inventory were generated in Buildings 371, 707, 771, and 776. The IDC was generated as waste during replacement of shielding or stripout of unnecessary shielding during the installation of new gloveboxes or tanks.

IDC 330 is dry combustibles such as cloth, paper, and wood. This IDC changes to 821, 831, 851, or 861 at the point of assay, depending upon radiological content

IDC 336, wet combustibles, are materials such as, paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent an accumulation of free liquid. This IDC changes to 822, 832, 833, or 862 at the point of assay.

IDC 337 is PVC sheeting, poly bottles, supplied-air suits, polyethylene, and other plastics. This IDC changes to 825, 833, 853, or 863 at the point of assay.

IDC 487 is classified plastic shapes used in handling and shipping. If TRU, shapes must be declassified prior to shipment. If LLW, IDC must be authorized by NTS prior to shipment. Classified Waste drums must be stenciled and handled according to Safeguards and Security procedures.

IDC 821 is dry combustibles such as paper, cloth, and wood.

IDC 822 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

IDC 825 is PVC sheeting, poly bottles, supplied-air suits, and other plastic.

IDC 831 is dry combustibles such as paper, cloth, and wood.

IDC 832 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

IDC 833 is PVC sheeting, poly bottles, supplied-air suits, and other plastics.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Final Form Comments N/A

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TWBIR ID: RF-TT0338

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W120	Handling	CH	Stream Name	Filters & media/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Filter	Waste Matrix Code	S5410

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	130	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	35.72	0.48	175.66	Residues:	No		Am-241	4.68E+00
	Aluminum-Base Metal/Alloys	13.67	0.48	40.10	Asbestos:	No		Np-237	1.58E-05
	Other Metal/Alloys	0.48	0.48	0.48	PCBs:	No		Pu-238	7.89E-01
	Other Inorganic Materials	16.43	0.24	234.85	Source:	Facility/Equipment Operation and Maintenance Waste		Pu-239	2.42E+01
	Cellulosics	12.89	12.89	12.89				Pu-240	5.44E+00
	Rubber	9.07	0.48	16.71				Pu-241	8.47E+01
	Plastics	12.27	0.95	66.83				Pu-242	5.09E-04
	Solidified, Inorganic Matrix	0.48	0.48	0.48				U-234	5.38E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	3.42E-06
	Vitrified	0.00	0.00	0.00				U-238	2.13E-07
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.55							
	Packaging Material, Plastic	31.05							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0338													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
8802 Can	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	117.6	0.0	0.0	0.0	0.0	134.5
Drum / 55 gallon	117.1	16.8	0.0	0.0	0.0	134.0							
As-Generated	Stored	117.1	Projected	16.8	Total	134.0	Final Form	Stored	117.6	Projected	16.9	Total	134.5

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This material consists of pieces ranging in size from 20" x 20" x 4" to 2" x 2" square pieces. These pieces are composed of glass fibers with a small percentage of asbestos. An organic binder, elastomeric adhesive, or polyurethane sealant was used during construction. The pieces also contain corrugated aluminum foil. The newer media consist of glass and aromatic polyamide fibers (Nomex) and aluminum alloy metal coated with a thermoset vinyl or epoxy. Various sealants could be present. The material is not homogenous because of the different materials used and the different manufacturers of the filters. IDC 338 could also contain R-4 filter pads from the dicesium hexachloraplutonate (DCHP) process. The pads are about 12-inch diameter cloth filters.

Waste Stream Source Description Item Description Code 338-Filter Media

The material in this IDC is either the filter media portion of HEPA filters or surface-water filter. HEPA filters are used on gloveboxes and in large filter plenums. Sock filters were used to prefilter operable unit 2 (OU-2) surface water prior to activated carbon treatment.

IDC 338 filter media in this backlog population was derived from HEPA filters from Buildings 371, 374, 559, 707, 771, 776, and from surface-water filters used in OU-2. The HEPA filters could have originally been assigned IDCs 335, 342, 490, 491, or 492. Filter media from building 374 could have been generated from HEPA filters used in saltcrete processing; therefore, they could be contaminated with RCRA metals and F-listed solvents and sludges. Filter media from Building 771 could have been used to filter nitric acid vapors. Analytical data on the OU-2 surface waters indicates the sock filters are contaminated with F-Listed constituents carbon tetrachloride, trichloroethylene, and tetrachloroethylene. Chloroform, 1,1-dichloroethene, and vinyl chloride were also detected in the influent water analysis.

Item Description Code-331 Ful-Flo filters Not From Incinerator

These Ful-Flo filters are in-line cartridge filters used throughout Rocky Flats to remove particulates from fluid streams and typically filter down to 5, 1, and 0.5 micron-sized particulates. Ful-Flo filters are used in various liquid systems that include nitric- and chloride-acid systems, such as those found in plutonium recovery operations; caustic systems, such as those found in utilities scrubbing; solvent systems using carbon tetrachloride in machining operations; water systems, such as steam cleaning; and condensate collection. These filters are also used in lubricant oil filtration.

Ful-Flo filters are poly-fiber-wound cartridges, about 10" long by 3.5" in diameter. Other fiber filters, such as R-6 pads, may be included in this IDC. R-6 pads are cloth filters, about sixteen inches in diameter, used to filter solids from nitric acid solutions. Therefore, backlog material in this IDC cannot be considered homogeneous. Filter elements are produced by combining a media blanket and spirally wound matrix yarn on an inner core. The filter elements might have a polypropylene cap on one end. Both the media blanket and matrix yarn can be cotton or polypropylene. The inner core material can be constructed of polypropylene, tinned steel, or stainless steel. Warehouse data from Rocky Flats indicate that the inner-core material is polypropylene.

During normal process operations, IDC 331 Ful-Flo filters in this backlog population were used to filter particulates from liquid waste streams in Buildings 371, 707, 771, 776, 777, and 779. These waste streams were primarily from filtration of caustic solutions in Building 371, the carbon tetrachloride system and oil systems, and from filtration of water and developer in Building 707. In Building 771, the primary waste streams filtered were anion column feed, potassium hydroxide, nitrate feed, spent nitric acid and hydrofluoric acid from the scrubber, eluate and effluent exiting the ion-exchange columns, floor pick-up solution, steam condensate, and miscellaneous aqueous solutions. Hydraulic oil and floor pick-up solution were filtered in Building 776. In Buildings 777 and 779, Ful-Flo filters were used in the carbon tetrachloride system for purification of Freon TF and for filtration of incoming waters.

Typically, Ful-Flo filters were placed on drying racks pending bag-out of a glovebox. Filters were not always dried before removal from the glovebox. Filters were then "bagged out" of the glovebox and placed in a second layer of plastic. Next, the filters were placed in a "Poly Bottle" or "Clam Shell" (hard plastic container), then placed in a double-lined drum.

These Ful-Flo filters may be contaminated with acids, bases, carbon tetrachloride, chromium, Freon, and oil. They may contain relatively small amounts of free liquids.

Item Description Code 335-HEPA Glovebox Filters, Not Acid Contaminated

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

The material in this IDC is High Efficiency Particulate Air (HEPA) filters used in ventilation systems at Rocky Flats. HEPA filters have been and are used in all of the buildings which contain plutonium processing activities. HEPA filters are used on gloveboxes and in large filter plenums that filter the room air.

Used filters were removed from their position in the ventilation system and packaged for further processing. The filters used on gloveboxes (nominal 8" x 8" x 5") were identified as IDC 335 if they were not acid contaminated.

Item Description Code 342-HEPA Glovebox Filters, Acid Contaminated

HEPA filters are used on all gloveboxes to remove particulates from the atmosphere exiting the glovebox to the plenum exhaust system. The filters in IDC 342 are from gloveboxes with atmospheres that could cause the filters to be contaminated with acids or bases used in chemical processing.

Item Description Code 491-Plenum Prefilters

The material in this IDC is a variety of plenum prefilters used in the ventilation systems at Rocky Flats. Plenum prefilters have been and are used in all of the buildings that contain plutonium processing activities. These prefilters are used in large plenums that filter the room and glovebox air. Used prefilters were removed from their position in the ventilation system and packaged for further processing.

IDC 491 plenum prefilters range from furnace-type filters to pleated fiberglass filters and can be as large as 24" x 24" x 12". The filter medium consists of fiberglass packing or paper which may be more or less dense, depending on filtering needs. Wire mesh can be used to hold the media in place. The frame material for these prefilters is cardboard.

Item Description Code 490--HEPA Filters (24" x 24"), Not Acid Contaminated

The material in this IDC is HEPA filters used in the ventilation systems at the RFETS. HEPA filters are used in all of the buildings that contain plutonium processing activities. These HEPA filters are used in large filter plenums that filter the room and glovebox air.

Used filters were removed from their position in the ventilation system and packaged for further processing. The larger-sized filters used in filter plenums were identified and packaged as IDC 490 if not acid contaminated.

IDC 490 HEPA filters (24" x 24"), not acid contaminated, are large HEPA filters (nominal 24" x 24" x 5 or 24" x 12) that were used in filter plenum racks. These filters consist of filter media contained within a wooden or metal frame.

The filter medium is composed of glass fibers, with a small percentage of asbestos. An organic binder, elastomeric adhesive, or polyurethane sealant was used during construction. The medium also contains corrugated aluminum foil. The newer HEPA media will consist of glass and aromatic polyamide fibers (Nomex) and aluminum alloy metal coated with a thermoset vinyl or epoxy. Various sealants could be present. The material will not be homogenous because of the different materials used in the different sizes and by the different manufacturers of the filters. The material in IDC 490 has not been contaminated with acid.

The frame material will be either 3/4", fire-retardant, exterior-grade plywood or wood-particle board and 14-gauge cadmium-plated or chromized carbon steel. neoprene, closed-cell, expanded rubber, precoated with a rubber-based adhesive is present on each filter.

More information on HEPA filters can be obtained from RFETS Standard SMU-401 (EG&G 1991).

The IDC 490 HEPA filters in this backlog population consist of filters from Buildings 374, 771, 774, 776, and 777. The majority of these filters do not contain hazardous constituents, although evaporated solvents may have been contacted. HEPA filters from Plenums 104A and 104B in Building 374 have contacted hazardous constituents from the Saltcrete Process.

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Current Container Comments	N/A
EPA Comments	N/A
Management Comments	N/A
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0340

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W104	Handling	CH	Stream Name	Particulate Sludge/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3129

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	111	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	7.16	7.16	7.16	Residues:	N/A		Pu-238	3.17E-01
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Pu-239	6.75E+00
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	N		Pu-240	1.55E+00
	Other Inorganic Materials	0.00	0.00	0.00	Source:	Recovery/Waste		Pu-241	3.95E+01
	Cellulosics	0.00	0.00	0.00		Repackaging/Decontamination		Pu-242	1.96E-04
	Rubber	0.00	0.00	0.00		and Decommissioni			
	Plastics	8.59	8.59	8.59					
	Solidified, Inorganic Matrix	10.50	10.50	10.50					
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	503.12							
	Packaging Material, Plastic	23.87							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0340													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.4	0.0	0.0	0.0	0.0	0.4	55 Gallon Drum	0.4	0.0	0.0	0.0	0.0	0.4
POC / 55 gallon	6.9	0.0	0.0	0.0	0.0	6.9	55 Gallon POCs	6.9	0.0	0.0	0.0	0.0	6.9
As-Generated	Stored	7.3	Projected	0.0	Total	7.3	Final Form	Stored	7.3	Projected	0.0	Total	7.3

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TWBIR ID: RF-TT0340

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste form consists of sludge from washing leaded gloves and metal in Size Reduction Process.

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments Waste Stream currently exists in the TWBIR as a mixed waste or residue, (i.e., RF-MRXXXX or RF-MTXXXX), but is being re-characterized as non-mixed waste.

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0342

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT0342	Handling	CH	Stream Name	N/A			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Filter	Waste Matrix Code	S5410

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	7.47	3.82	16.71	
Aluminum-Base Metal/Alloys	12.86	0.48	176.62	
Other Metal/Alloys	4.30	4.30	4.30	
Other Inorganic Materials	7.58	0.96	84.49	
Cellulosics	12.62	10.50	12.89	
Rubber	9.61	0.48	27.69	
Plastics	24.64	1.91	47.73	
Solidified, Inorganic Matrix	1.67	0.48	2.86	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	8.59	8.59	8.59	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.46			
Packaging Material, Plastic	26.15			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	119
Residues:	N/A	
Asbestos:	N/A	
PCBs:	N/A	
Source:	N/A	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	1.20E+00
Np-237	2.05E-05
Pu-238	5.21E-01
Pu-239	1.31E+01
Pu-240	2.95E+00
Pu-241	5.25E+01
Pu-242	2.75E-04
U-234	1.40E-04
U-235	4.52E-06
U-238	2.77E-06

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0342													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	17.7	2.1	0.0	0.0	0.0	19.8	55 Gallon Drum	17.7	0.0	0.0	0.0	0.0	19.8
As-Generated	Stored 17.7	Projected 2.1	Total 19.8				Final Form	Stored 17.7	Projected 2.1	Total 19.8			

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TWBIR ID: RF-TT0342

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	N/A
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0360

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W114	Handling	CH	Stream Name	Mg Oxide Crucibles/TRU			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123

EPA Codes	
As-Generated	
N/A	

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	6.70	1.91	19.09	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	90.70	90.70	90.70	
Other Inorganic Materials	113.57	1.91	654.91	
Cellulosics	102.83	12.89	167.07	
Rubber	0.00	0.00	0.00	
Plastics	36.16	7.35	90.69	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	131.00			
Packaging Material, Plastic	25.44			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	118
Residues:	N/A	
Asbestos:	N	
PCBs:	N	
Source:	Pyrochemistry Research.	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	4.33E+00
Np-237	5.49E-05
Pu-238	9.37E-01
Pu-239	2.08E+01
Pu-240	4.83E+00
Pu-241	1.10E+02
Pu-242	5.71E-04
U-234	1.01E-05
U-235	3.26E-07
U-238	2.89E-09

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0360													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.6	0.0	0.0	0.0	0.0	0.6	55 Gallon Drum	0.6	0.0	0.0	0.0	0.0	0.6
As-Generated	Stored 0.6	Projected 0.0	Total 0.6				Final Form	Stored 0.6	Projected 0.0	Total 0.6			

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TWBIR ID: RF-TT0360

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	Aluminum oxide crucibles and irregularly shaped crucible pieces from pyrochemistry research. May include pyrochemical salts.
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	New Waste Stream being added to TWBIR
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0368

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT0368	Handling	CH	Stream Name	Mg Oxide Crucibles/TRU			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	6.70	1.91	19.09	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	90.70	90.70	90.70	
Other Inorganic Materials	113.57	1.91	654.91	
Cellulosics	102.83	12.89	167.07	
Rubber	0.00	0.00	0.00	
Plastics	36.16	7.35	90.69	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	251.04			
Packaging Material, Plastic	25.44			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	118
Residues:	N/A	
Asbestos:	N/A	
PCBs:	N/A	
Source:	N/A	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	4.33E+00
Np-237	5.49E-05
Pu-238	9.37E-01
Pu-239	2.08E+01
Pu-240	4.83E+00
Pu-241	1.10E+02
Pu-242	5.71E-04
U-234	1.01E-05
U-235	3.26E-07
U-238	2.89E-09

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0368													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	Total
8804 Can	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	4.4	0.0	0.0	0.0	0.0	4.4
Can / 6-Liter	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon POCs	8.1	0.0	0.0	0.0	0.0	8.1
Drum / 55 gallon	3.5	0.0	0.0	0.0	0.0	3.5							
POC / 55 gallon	8.1	0.0	0.0	0.0	0.0	8.1							
As-Generated	Stored	11.7	Projected	0.0	Total	11.7	Final Form	Stored	12.5	Projected	0.0	Total	12.5

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Magnesium oxide crucibles and crucible pieces from pyrochemistry operations. Crucibles may be crushed to pass through a ¼ inch sieve. Pyrochemical salts may exist in varying amounts. This waste stream does not include LECO crucibles or crucible inserts.

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0370

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT0370	Handling	CH	Stream Name	N/A			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal		
				Waste Matrix Code	S5123				

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	118	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	19.78	1.96	128.88	Residues:	N/A		Am-241	5.82E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N/A		Np-237	2.72E-04
	Other Metal/Alloys	51.08	51.08	51.08	PCBs:	N/A		Pu-238	1.48E+00
	Other Inorganic Materials	58.52	7.35	327.93	Source:	N/A		Pu-239	3.40E+01
	Cellulosics	153.05	12.89	167.07				Pu-240	7.79E+00
	Rubber	0.00	0.00	0.00				Pu-241	1.71E+02
	Plastics	7.50	1.62	18.76				Pu-242	8.68E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	4.59E-04
	Cement (Solidified)	0.00	0.00	0.00				U-235	1.49E-05
	Vitrified	0.00	0.00	0.00				U-238	1.32E-07
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	360.42							
	Packaging Material, Plastic	27.39							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0370													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	Total
Drum / 55 gallon	2.7	0.0	0.0	0.0	0.0	2.7	55 Gallon Drum	2.7	0.0	0.0	0.0	0.0	2.7
POC / 55 gallon	14.4	0.0	0.0	0.0	0.0	14.4	55 Gallon POCs	14.4	0.0	0.0	0.0	0.0	14.4
As-Generated	Stored	17.1	Projected	0.0	Total	17.1	Final Form	Stored	17.1	Projected	0.0	Total	17.1

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "The crucibles are 1 inch by 1 inch to 4 inches by 3/4 inch and have a composition of an aluminum silicate-based ceramic with about one-half percent chromium. The used crucibles contain fused plutonium metal or oxide, stainless steel, and an accelerator (copper, iron, tungsten, or tin)."

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0371

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W114	Handling	CH	Stream Name	Mg Oxide Crucibles/TRU			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	122	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	0.96	0.96	0.96	Residues:	N/A		Am-241	1.03E+01
	Aluminum-Base Metal/Alloys	1.91	1.91	1.91	Asbestos:	N		Np-237	1.07E-04
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	N		Pu-238	2.45E+00
	Other Inorganic Materials	236.28	83.06	382.83	Source:	Decontamination and Decommissioning		Pu-239	5.22E+01
	Cellulosics	0.00	0.00	0.00				Pu-240	1.20E+01
	Rubber	0.00	0.00	0.00				Pu-241	3.06E+02
	Plastics	50.76	9.55	123.15				Pu-242	1.51E-03
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	6.34E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	2.05E-06
	Vitrified	0.00	0.00	0.00				U-238	1.81E-08
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.48							
	Packaging Material, Plastic	20.53							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0371													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.2	Projected 0.0	Total 0.2			Final Form	Stored 0.2	Projected 0.0	Total 0.2				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Firebrick consists of brick and chunks of high-density alumina ceramic material used to line the firebox of the incinerator.

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W114	Handling	CH	Stream Name	Mg Oxide Crucibles/TRU			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	4.77	4.77	4.77	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	115.80	16.71	346.07	
Cellulosics	12.89	12.89	12.89	
Rubber	0.00	0.00	0.00	
Plastics	17.50	9.07	25.78	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.48			
Packaging Material, Plastic	29.60			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	122
Residues:	N/A	
Asbestos:	N	
PCBs:	N	
Source:	Materials Production	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	3.58E-01
Np-237	1.45E-06
Pu-238	2.42E-01
Pu-239	5.11E+00
Pu-240	1.17E+00
Pu-241	2.65E+01
Pu-242	1.33E-04
U-234	1.64E-04
U-235	5.29E-06
U-238	4.68E-08

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0372													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.4	0.0	0.0	0.0	0.0	0.4	55 Gallon Drum	0.4	0.0	0.0	0.0	0.0	0.4
As-Generated	Stored 0.4	Projected 0.0	Total 0.4			Final Form	Stored 0.4	Projected 0.0	Total 0.4				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	"Primarily iron metal or aluminum oxide shot or beads, but could include glass or ceramic beads, or walnut shells used for etching numbers in parts."
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	New Waste Stream being added to TWBIR
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0374

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W107	Handling	CH	Stream Name	Soil & Cleanup Debris/TRU			Inventory Date	9/30/2002
Local ID	IDC 374	Waste Type	TRU	Generator Site	RF	Final Waste Form	Heterogeneous Debris		
Waste Matrix Code		S5420							

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	121	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	18.66	4.77	32.56	Residues:	No		Am-241	5.57E-01
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	No		Np-237	7.90E-06
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-238	2.08E-01
	Other Inorganic Materials	447.28	16.23	821.03	Source:	Other/Multiple Sources		Pu-239	4.42E+00
	Cellulosics	12.89	12.89	12.89				Pu-240	1.01E+00
	Rubber	5.44	5.44	5.44				Pu-241	2.59E+01
	Plastics	18.14	3.68	38.19				Pu-242	1.28E-04
	Solidified, Inorganic Matrix	840.22	840.22	840.22				U-234	5.30E-06
	Cement (Solidified)	0.00	0.00	0.00				U-235	9.46E-07
	Vitrified	0.00	0.00	0.00				U-238	5.64E-06
	Solidified, Organic Matrix	608.13	608.13	608.13					
	Soils	239.96	139.86	417.77					
	Packaging Material, Steel	138.52							
	Packaging Material, Plastic	31.17							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0374													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	9.2	1.0	0.0	0.0	0.0	10.2	55 Gallon Drum	9.2	0.0	0.0	0.0	0.0	10.2
As-Generated	Stored 9.2	Projected 1.0	Total 10.2			Final Form	Stored 9.2	Projected 1.0	Total 10.2				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste stream is construction rubble generated during decontamination and decommissioning activities. This waste consists of blacktop/concrete/dirt/sand. The waste is generated from construction/demolition within the plutonium process buildings. The waste is usually packed in 55-gal. drums with multiple bag liners, a fiberboard liner, and a rigid polyethylene liner. Also, the waste can be packaged in DOT 7A, Type A metal boxes which are lined with a fiberboard and PVC liner. This waste is identified by IDC 374. Inventory data include mixed residues in this IDC.

IDC 374-Construction rubble generated during decontamination and decommissioning operations.

Waste Stream Source Description Soil and cleanup-debris (IDC 374) were generated during cleanup and construction activities around Rocky Flats. In most cases, construction or demolition activities generated rubble consisting of blacktop, concrete, dirt, sand, and rock. The rubble was packaged in plywood boxes with a fiberboard liner and a polyvinyl chloride (PVC) bag liner or in 55-gallon, DOT Type 7A drums. The waste was generated on a nonroutine basis. Information describing spendid activities generating soil and debris were often unavailable.

Current Container Comments N/A

EPA Comments A-Process knowledge based upon general knowledge of waste type or source (e.g., there is some probability of a waste constituent being present or absent).

Bounding analytical data have not been compiled in a form that is compatible with this report. This effort is in progress and the results will be incorporated when the effort is complete.

No information available regarding uncertainty.

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0375A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W105	Handling	CH	Stream Name	Solidified Process Solids/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3113

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	122	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	0.00	0.00	0.00	Residues:	N/A		Am-241	1.56E-03
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Pu-238	1.27E-02
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	N		Pu-239	2.71E-01
	Other Inorganic Materials	108.12	46.78	169.46	Source:	Materials Production/Waste Repackaging		Pu-240	6.21E-02
	Cellulosics	0.96	0.96	0.96				Pu-241	1.59E+00
	Rubber	0.00	0.00	0.00				Pu-242	7.85E-06
	Plastics	23.87	23.87	23.87					
	Solidified, Inorganic Matrix	0.00	0.00	0.00					
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.43							
	Packaging Material, Plastic	32.46							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0375A													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.4	1.2	0.0	0.0	0.0	1.7	55 Gallon Drum	0.4	0.0	0.0	0.0	0.0	1.7
As-Generated	Stored 0.4	Projected 1.2	Total 1.7				Final Form	Stored 0.4	Projected 1.3	Total 1.7			

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Oil-Dry used to absorb non-hazardous aqueous liquids.

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0375B

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W105	Handling	CH	Stream Name	Solidified Process Solids/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Organics		Waste Matrix Code	S3114

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	122	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	0.00	0.00	0.00	Residues:	N/A		Am-241	1.56E-03
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Pu-238	1.27E-02
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	N		Pu-239	2.71E-01
	Other Inorganic Materials	108.12	46.78	169.46	Source:	Materials Production/Waste Repackaging		Pu-240	6.21E-02
	Cellulosics	0.96	0.96	0.96				Pu-241	1.59E+00
	Rubber	0.00	0.00	0.00				Pu-242	7.85E-06
	Plastics	23.87	23.87	23.87					
	Solidified, Inorganic Matrix	0.00	0.00	0.00					
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.43							
	Packaging Material, Plastic	32.46							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0375B													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.4	1.2	0.0	0.0	0.0	1.7	55 Gallon Drum	0.4	0.0	0.0	0.0	0.0	1.7
As-Generated	Stored 0.4	Projected 1.2	Total 1.7				Final Form	Stored 0.4	Projected 1.3	Total 1.7			

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TWBIR ID: RF-TT0375B

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Oil-Dry used to absorb non-hazardous organic liquids.

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0376

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W121	Handling	CH	Stream Name	Cemented filters/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Filter	Waste Matrix Code	S5410

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	130	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	2.52	0.48	11.93	Residues:	No		Am-241	1.48E+00
	Aluminum-Base Metal/Alloys	16.25	4.77	52.51	Asbestos:	No		Np-237	8.42E-06
	Other Metal/Alloys	172.56	19.09	326.02	PCBs:	No		Pu-238	5.03E-01
	Other Inorganic Materials	73.46	2.86	441.54	Source:	Facility/Equipment Operation and Maintenance Waste		Pu-239	1.32E+01
	Cellulosics	12.68	9.55	12.89				Pu-240	3.08E+00
	Rubber	8.99	2.86	21.96				Pu-241	5.72E+01
	Plastics	13.79	2.86	22.91				Pu-242	2.98E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	7.25E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	2.34E-06
	Vitrified	0.00	0.00	0.00				U-238	4.49E-06
	Solidified, Organic Matrix	10.26	4.77	15.75					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.44							
	Packaging Material, Plastic	27.71							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0376													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	11.4	0.0	0.0	0.0	0.0	11.4	55 Gallon Drum	11.5	0.0	0.0	0.0	0.0	11.5
As-Generated	Stored 11.4	Projected 0.0	Total 11.4			Final Form	Stored 11.5	Projected 0.0	Total 11.5				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Processed filter media, IDC 376, is material which has been treated using Portland cement to absorb moisture and neutralize acid contamination. Filter waste is packaged in 55-gallon drums and metal standard waste boxes. Inventory data include residues within the same IDCs because they are regulated as waste.

Waste Stream Source Description The material in this IDC is the filter media portion of acid-contaminated glovebox or plenum HEPA filters or Ful-Flo filters with free liquids. Processing was performed in the Site Reduction Vaults in Building 776.

Used HEPA filters were processed to separate any portions containing high plutonium content from portions with low content. The wood frames were separated from the media and usually disposed of as waste by packing in a drum that was assigned IDC 330. The filter media pieces were identified as IDC 339 if they were high in radioactivity and packaged and stored for future recovery of the plutonium. If the pieces of media were low in radioactivity, they were identified as IDC 376 and packaged for shipment as waste. The media were placed in crates, Portland cement was added, then crates were sealed. Some IDC 376 material could be the remaining material after the IDC 338 media were processed to recover the plutonium.

Ful-Flo filters which were used to filter corrosive gas were also processed to separate any portions containing high plutonium content from portions with low plutonium content. Pieces of media with low activity were identified as IDC 376 and packaged for shipment as waste. The media were placed in approximately 10-gallon plastic bags and Portland cement was added. The bags were then sealed and placed in a drum.

IDC 376 filter media in this backlog population was derived from the processing of HEPA filters from Buildings 371, 771, 776, and 770. The HEPA filters could have originally been assigned ICDs 335 342, 490, 491 or 492. Filter media from Building 771 could have been used to filter nitric acid vapors.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0377

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W114	Handling	CH	Stream Name	Mg Oxide Crucibles/TRU			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123

EPA Codes	Waste Material Parameters (kg/m3)			
As-Generated	Material Parameter	Average	Lower	Upper
N/A	Iron-Base Metal/Alloys	25.22	2.86	95.47
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00
	Other Metal/Alloys	0.00	0.00	0.00
	Other Inorganic Materials	110.43	2.39	512.66
	Cellulosics	12.89	12.89	12.89
	Rubber	0.00	0.00	0.00
	Plastics	19.64	2.86	41.53
	Solidified, Inorganic Matrix	0.00	0.00	0.00
	Cement (Solidified)	0.00	0.00	0.00
	Vitrified	0.00	0.00	0.00
	Solidified, Organic Matrix	0.00	0.00	0.00
	Soils	0.00	0.00	0.00
	Packaging Material, Steel	138.51		
	Packaging Material, Plastic	29.93		
	Packaging Material, Lead	0.00		
	Packaging Material, Steel Plug	0.00		

Final Waste Form Descriptors	TRUCON Codes
Category: Defense TRU Waste	122
Residues: N/A	
Asbestos: N	
PCBs: N	
Source: Decontamination and Decommissioning	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	2.25E+00
Np-237	4.20E-05
Pu-238	8.11E-01
Pu-239	1.73E+01
Pu-240	3.96E+00
Pu-241	1.01E+02
Pu-242	5.00E-04
U-234	1.37E-04
U-235	4.35E-06
U-238	3.83E-08

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0377													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	1.7	1.0	0.0	0.0	0.0	2.7	55 Gallon Drum	1.7	0.0	0.0	0.0	0.0	2.7
As-Generated	Stored 1.7	Projected 1.0	Total 2.7			Final Form	Stored 1.7	Projected 1.0	Total 2.7				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "Firebrick, coarse consists of chunks of the unpulverized plutonium bearing surface layer of the high-density alumina ceramic material. Material is smaller than 1 inch in diameter and larger than 1/4 inch in diameter."

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0391

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W116	Handling	CH	Stream Name	"Sand, Slag, and Crucible/TRU"			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	28.20	16.23	45.35	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	26.93	15.75	39.14	
Cellulosics	167.07	167.07	167.07	
Rubber	0.00	0.00	0.00	
Plastics	0.00	0.00	0.00	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	131.00			
Packaging Material, Plastic	37.00			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	122
Residues:	N/A	
Asbestos:	N	
PCBs:	N	
Source:	Materials Production	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	6.21E+00
Np-237	8.90E-06
Pu-238	1.06E+00
Pu-239	4.05E+01
Pu-240	9.14E+00
Pu-241	1.64E+02
Pu-242	6.57E-04

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0391													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.4	0.0	0.0	0.0	0.0	0.4	55 Gallon Drum	0.4	0.0	0.0	0.0	0.0	0.4
As-Generated	Stored 0.4	Projected 0.0	Total 0.4				Final Form	Stored 0.4	Projected 0.0	Total 0.4			

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TWBIR ID: RF-TT0391

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	Unpulverized magnesium oxide sand and crucible generated from the separation of sand and crucible residues from slag residues following plutonium metal button breakout in Building 771.
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0392

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W116	Handling	CH	Stream Name	"Sand, Slag, and Crucible/TRU"			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	26.82	5.73	57.28	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	25.48	4.30	45.83	
Cellulosics	167.07	167.07	167.07	
Rubber	0.00	0.00	0.00	
Plastics	0.00	0.00	0.00	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	131.00			
Packaging Material, Plastic	37.00			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	122
Residues:	N/A	
Asbestos:	N	
PCBs:	N	
Source:	Materials Production	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	4.44E+00
Pu-238	1.33E+00
Pu-239	4.24E+01
Pu-240	9.66E+00
Pu-241	1.13E+02
Pu-242	6.19E-04
U-234	7.91E-07
U-235	2.55E-08
U-238	2.26E-10

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0392													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.2	Projected 0.0				Total 0.2	Final Form	Stored 0.2	Projected 0.0				Total 0.2

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "Unpulverized magnesium oxide sand, calcium fluoride slag, and magnesium oxide crucible generated during plutonium metal button breakout following plutonium tetrafluoride reduction in Building 771."

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0393

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W116	Handling	CH	Stream Name	"Sand, Slag, and Crucible/TRU"			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3119

EPA Codes	
As-Generated	
N/A	

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	0.00	0.00	0.00	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	235.33	235.33	235.33	
Cellulosics	0.00	0.00	0.00	
Rubber	0.00	0.00	0.00	
Plastics	33.41	33.41	33.41	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.57			
Packaging Material, Plastic	41.05			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	130
Residues:	N/A	
Asbestos:	N	
PCBs:	N	
Source:	Materials Recovery	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	5.43E+00
Np-237	1.10E-03
Pu-238	1.75E+00
Pu-239	3.72E+01
Pu-240	8.53E+00
Pu-241	2.18E+02
Pu-242	1.08E-03

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0393													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	11.0	0.0	0.0	0.0	0.0	11.0	55 Gallon Drum	11.0	0.0	0.0	0.0	0.0	11.0
As-Generated	Stored 11.0	Projected 0.0	Total 11.0			Final Form	Stored 11.0	Projected 0.0	Total 11.0				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	"Undissolved solids from dissolution of pulverized magnesium oxide sand, calcium fluoride slag, and magnesium oxide crucible (IDCs 396 and 398) in nitric acid. "
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a mixed waste or residue, (i.e., RF-MRXXXX or RF-MTXXXX), but is being re-characterized as non-mixed waste.
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0398

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W116	Handling	CH	Stream Name	"Sand, Slag, and Crucible/TRU"			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	122	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	21.60	8.12	45.35	Residues:	N/A		Am-241	3.80E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Pu-238	1.22E+00
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	N		Pu-239	3.97E+01
	Other Inorganic Materials	22.49	9.07	45.35	Source:	Materials Recovery		Pu-240	8.98E+00
	Cellulosics	167.07	167.07	167.07				Pu-241	1.07E+02
	Rubber	0.00	0.00	0.00				Pu-242	5.44E-04
	Plastics	0.96	0.96	0.96				U-234	2.12E-07
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-235	6.82E-09
	Cement (Solidified)	0.00	0.00	0.00				U-238	6.04E-11
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	131.00							
	Packaging Material, Plastic	37.00							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0398													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
8801 Can	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	0.4	0.0	0.0	0.0	0.0	0.4
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2							
As-Generated	Stored	0.2	Projected	0.0	Total	0.2	Final Form	Stored	0.4	Projected	0.0	Total	0.4

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "Pulverized sand, slag, and crucible generated from the crushing and grinding of magnesium oxide sand, calcium fluoride slag, and broken magnesium oxide reduction crucibles (IDC 392), in preparation for dissolution."

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0409

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT0409	Handling	CH	Stream Name	N/A			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Salt	Waste Matrix Code	S3141

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	124	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	11.20	3.34	35.80	Residues:	N/A		Am-241	9.69E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N/A		Pu-238	1.14E+00
	Other Metal/Alloys	6.51	5.73	11.46	PCBs:	N/A		Pu-239	4.09E+01
	Other Inorganic Materials	18.41	4.30	44.39	Source:	N/A		Pu-240	9.26E+00
	Cellulosics	167.07	167.07	167.07				Pu-241	8.25E+01
	Rubber	0.00	0.00	0.00				Pu-242	7.25E-04
	Plastics	1.27	1.15	2.29				U-234	3.02E-06
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-235	9.75E-08
	Cement (Solidified)	0.00	0.00	0.00				U-238	8.62E-10
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	131.00							
	Packaging Material, Plastic	37.00							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0409													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.2	Projected 0.0	Total 0.2			Final Form	Stored 0.2	Projected 0.0	Total 0.2				

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TWBIR ID: RF-TT0409

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	N/A
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0412

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT0412	Handling	CH	Stream Name	N/A			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Salt	Waste Matrix Code	S3141

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	11.20	3.34	35.80	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	6.51	5.73	11.46	
Other Inorganic Materials	18.41	4.30	44.39	
Cellulosics	167.07	167.07	167.07	
Rubber	0.00	0.00	0.00	
Plastics	1.27	1.15	2.29	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	131.00			
Packaging Material, Plastic	37.00			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	124
Residues:	N/A	
Asbestos:	N/A	
PCBs:	N/A	
Source:	N/A	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	9.69E+00
Pu-238	1.14E+00
Pu-239	4.09E+01
Pu-240	9.26E+00
Pu-241	8.25E+01
Pu-242	7.25E-04
U-234	3.02E-06
U-235	9.75E-08
U-238	8.62E-10

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0412													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.2	Projected 0.0	Total 0.2			Final Form	Stored 0.2	Projected 0.0	Total 0.2				

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TWBIR ID: RF-TT0412

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	N/A
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0414

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT0414	Handling	CH	Stream Name	N/A			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Salt	Waste Matrix Code	S3141

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	124	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	11.20	3.34	35.80	Residues:	N/A		Am-241	9.69E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N/A		Pu-238	1.14E+00
	Other Metal/Alloys	6.51	5.73	11.46	PCBs:	N/A		Pu-239	4.09E+01
	Other Inorganic Materials	18.41	4.30	44.39	Source:	N/A		Pu-240	9.26E+00
	Cellulosics	167.07	167.07	167.07				Pu-241	8.25E+01
	Rubber	0.00	0.00	0.00				Pu-242	7.25E-04
	Plastics	1.27	1.15	2.29				U-234	3.02E-06
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-235	9.75E-08
	Cement (Solidified)	0.00	0.00	0.00				U-238	8.62E-10
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	131.00							
	Packaging Material, Plastic	37.00							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0414													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	6.4	0.0	0.0	0.0	0.0	6.4	55 Gallon Drum	6.5	0.0	0.0	0.0	0.0	6.5
As-Generated	Stored 6.4	Projected 0.0	Total 6.4			Final Form	Stored 6.5	Projected 0.0	Total 6.5				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	N/A
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0430

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W122	Handling	CH	Stream Name	Organic Resins/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5313

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	121	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	0.00	0.00	0.00	Residues:	No		Pu-238	2.64E-02
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	No		Pu-239	5.63E-01
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-240	1.29E-01
	Other Inorganic Materials	0.00	0.00	0.00	Source:	Materials		Pu-241	3.30E+00
	Cellulosics	0.00	0.00	0.00		Production/Recovery Effluents		Pu-242	1.63E-05
	Rubber	0.00	0.00	0.00					
	Plastics	26.73	26.73	26.73					
	Solidified, Inorganic Matrix	0.00	0.00	0.00					
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	34.37	34.37	34.37					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.43							
	Packaging Material, Plastic	23.87							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0430													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.2	Projected 0.0	Total 0.2			Final Form	Stored 0.2	Projected 0.0	Total 0.2				

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TWBIR ID: RF-TT0430

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description It consists of unleached resin (IDC 430).

Waste Stream Source Description Organic residues were generated at RFETS by process treatments in Buildings 371 and 771 and encompass IDCs 430 and 431. The purification processes generated unleached resin, IDC 430. There are about eight drums of this IDC in storage. The approximate dates of generation for this IDC began on October 24, 1986. The IDC 431, leached resin, was also generated by the cation exchange and anion exchange processes in Buildings 371 and 771. There are about one hundred and thirty containers of IDC 431 material in storage. The approximate dates of generation for this IDC began on July 31, 1987. Additional information specific to the ion-exchange resins were important to the plutonium purification processes at RFETS. Plutonium-contaminated materials were often dissolved in nitric acid and processed through ion exchange. The ion-exchange resin contained in an ion-exchange column was charged with highly concentrated nitric acids by trickling this solution through the columns. A plutonium-contaminated solution was then trickled through the column. The charged resin beads attracted the plutonium from the contaminated solution to the surface of the resin bead. The loaded resin beads were then leached by trickling another nitric acid solution through the tube. This final nitric solution drew the plutonium from the beads into solution and allowed for purification of the plutonium. The resin was periodically replaced when this process had depleted the efficiency of the resin. The ion exchange resins in use at Rocky Flats were generally small plastic (polystyrene) beads in which long-chain organic compounds with an activated group are imbedded (such as Dowex 1 x 2).

Item Description Code 430--Resin, Unleached

Unleached resin, IDC 430, was produced when the resin in ion exchange columns was replaced. Though this IDC is titled "unleached" resin, the generators of resins confirm that all resins were rinsed with, at least, weak acid before the resins were removed from the columns.

Item Description Code 431--Resin, Leached

Leached resin, IDC 431, was produced when the resin in ion exchange columns were replaced. The resin leached (rinsed) with water before the resin was removed from the columns.

Item Description Code 809-Cemented Resins

IDC 430 and 431 are cemented into waste forms IDC 809 due to being fine particulate nature. The solid waste form will be looked at to make sure it meets the WIPP WAC criteria.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0431

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W122	Handling	CH	Stream Name	Organic Resins/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5313

EPA Codes	Waste Material Parameters (kg/m3)			
As-Generated	Material Parameter	Average	Lower	Upper
N/A	Iron-Base Metal/Alloys	2.27	1.43	4.77
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00
	Other Metal/Alloys	0.00	0.00	0.00
	Other Inorganic Materials	4.77	4.77	4.77
	Cellulosics	0.00	0.00	0.00
	Rubber	0.00	0.00	0.00
	Plastics	25.99	6.68	62.53
	Solidified, Inorganic Matrix	0.00	0.00	0.00
	Cement (Solidified)	0.00	0.00	0.00
	Vitrified	0.00	0.00	0.00
	Solidified, Organic Matrix	121.07	47.73	265.40
	Soils	0.00	0.00	0.00
	Packaging Material, Steel	138.45		
	Packaging Material, Plastic	25.89		
	Packaging Material, Lead	0.00		
	Packaging Material, Steel Plug	0.00		

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	121
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Materials Production/Recovery Effluents	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	1.17E-02
Np-237	7.78E-08
Pu-238	5.89E-02
Pu-239	1.26E+00
Pu-240	2.89E-01
Pu-241	7.14E+00
Pu-242	3.52E-05
U-234	9.72E-06
U-235	3.14E-07
U-238	2.78E-09

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0431

As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
8804 Can	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	20.6	0.0	0.0	0.0	0.0	21.7
Drum / 55 gallon	20.0	1.0	0.0	0.0	0.0	21.0							
Drum / 85 gallon	0.3	0.0	0.0	0.0	0.0	0.3							
As-Generated	Stored 20.3	Projected 1.0			Total 21.3		Final Form	Stored 20.6	Projected 1.0			Total 21.7	

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TWBIR ID: RF-TT0431

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description It consists of leached resin (IDC 431).

Waste Stream Source Description Organic residues were generated at RFETS by process treatments in Buildings 371 and 771 and encompass IDCs 430 and 431. The purification processes generated unleached resin, IDC 430. There are about eight drums of this IDC in storage. The approximate dates of generation for this IDC began on October 24, 1986. The IDC 431, leached resin, was also generated by the cation exchange and anion exchange processes in Buildings 371 and 771. There are about one hundred and thirty containers of IDC 431 material in storage. The approximate dates of generation for this IDC began on July 31, 1987. Additional information specific to the ion-exchange resins were important to the plutonium purification processes at RFETS. Plutonium-contaminated materials were often dissolved in nitric acid and processed through ion exchange. The ion-exchange resin contained in an ion-exchange column was charged with highly concentrated nitric acids by trickling this solution through the columns. A plutonium-contaminated solution was then trickled through the column. The charged resin beads attracted the plutonium from the contaminated solution to the surface of the resin bead. The loaded resin beads were then leached by trickling another nitric acid solution through the tube. This final nitric solution drew the plutonium from the beads into solution and allowed for purification of the plutonium. The resin was periodically replaced when this process had depleted the efficiency of the resin. The ion exchange resins in use at Rocky Flats were generally small plastic (polystyrene) beads in which long-chain organic compounds with an activated group are imbedded (such as Dowex 1 x 2).

Item Description Code 430--Resin, Unleached

Unleached resin, IDC 430, was produced when the resin in ion exchange columns was replaced. Though this IDC is titled "unleached" resin, the generators of resins confirm that all resins were rinsed with, at least, weak acid before the resins were removed from the columns.

Item Description Code 431--Resin, Leached

Leached resin, IDC 431, was produced when the resin in ion exchange columns were replaced. The resin leached (rinsed) with water before the resin was removed from the columns.

Item Description Code 809-Cemented Resins

IDC 430 and 431 are cemented into waste forms IDC 809 due to being fine particulate nature. The solid waste form will be looked at to make sure it meets the WIPP WAC criteria.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0438

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W115	Handling	CH	Stream Name	Insulation/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129

EPA Codes	
As-Generated	
N/A	

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	29.75	0.48	148.93	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	40.01	0.96	189.03	
Cellulosics	12.89	12.89	12.89	
Rubber	2.01	2.01	2.01	
Plastics	15.52	1.43	47.73	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	140.47			
Packaging Material, Plastic	27.48			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	122
Residues:	Yes	
Asbestos:	No	
PCBs:	No	
Source:	Other/Multiple Sources	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	2.55E+00
Np-237	3.99E-06
Pu-238	7.10E-01
Pu-239	2.04E+01
Pu-240	4.64E+00
Pu-241	6.69E+01
Pu-242	3.89E-04
U-234	2.10E-05
U-235	6.79E-07
U-238	6.01E-09

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0438													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	Total
1/2 Wood Box	1.6	0.0	0.0	0.0	0.0	1.6	55 Gallon Drum	56.5	0.0	0.0	0.0	0.0	59.4
8802 Can	0.0	0.0	0.0	0.0	0.0	0.0	Standard Waste Box	9.4	0.0	0.0	0.0	0.0	9.4
8804 Can	0.0	0.0	0.0	0.0	0.0	0.0							
Box / Misc.	0.0	0.0	0.0	0.0	0.0	0.0							
Drum / 55 gallon	56.0	2.9	0.0	0.0	0.0	58.9							
As-Generated	Stored	57.6	Projected	2.9	Total	60.5	Final Form	Stored	65.9	Projected	2.9	Total	68.9

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TWBIR ID: RF-TT0438

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste stream is contaminated insulation.

Waste Stream Source Description Item Description Code 334

During normal operations, fire blankets become soiled, contaminated, or are not longer needed in an area. There is one backlog drum of IDC 334. This drum was generated in Buidling 771 from July 1991 to December 1991.

Item Description Code 438

Maintenance, repair, and strip-out operations in Buildings 371, 374, 444, 559, 666, 707, 771, 774, 776, 777, 779, 865, 881, and 883 produced waste insulation. Insulation waste is generated by replacement of furnace heating elements, construction, maintenance, and demolition activities within the Protected Area at Rocky Flats. During these activities, insulation material is removed from furnaces, boilers, piping, ceilings and walls, and heating and cooling systems.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0440

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W113	Handling	CH	Stream Name	Glass/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	12.14	0.48	280.68	
Aluminum-Base Metal/Alloys	0.87	1.38	1.38	
Other Metal/Alloys	0.45	0.72	0.72	
Other Inorganic Materials	180.35	3.82	415.29	
Cellulosics	9.60	4.31	12.89	
Rubber	0.00	0.00	0.00	
Plastics	20.72	5.73	89.74	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	148.49			
Packaging Material, Plastic	19.10			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	118
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Facility/Equipment Operation and Maintenance Waste	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	2.22E-01
Np-237	5.75E-06
Pu-238	6.93E-02
Pu-239	2.02E+00
Pu-240	4.73E-01
Pu-241	7.52E+00
Pu-242	4.36E-05
U-234	7.20E-05
U-235	2.36E-06
U-238	7.12E-07

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0440

As-Generated Volumes						
ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036	
8802 Can	0.0	0.0	0.0	0.0	0.0	0.0
8804 Can	0.0	0.0	0.0	0.0	0.0	0.0
Drum / 55 gallon	27.5	2.1	0.0	0.0	0.0	29.5
POC / 55 gallon	0.6	0.0	0.0	0.0	0.0	0.6
Standard Waste Box	1.9	17.1	0.0	0.0	0.0	19.0

Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036	
55 Gallon Drum	29.0	0.0	0.0	0.0	0.0	31.1
55 Gallon POCs	0.6	0.0	0.0	0.0	0.0	0.6
Standard Waste Box	1.9	0.0	0.0	0.0	0.0	18.9

Final Form	Stored	31.5	Projected	19.1	Total	50.6
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As-Generated	Stored	30.0	Projected	19.2	Total	49.2
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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	This waste stream is made up of glass from analytical labs, recovery processes, ceramics, and glovebox windows.
Waste Stream Source Description	<p>IDC 440 includes glass waste from analytical laboratories and recovery processes, standard light bulbs generated inside the PA, and ceramic materials. Glass waste assigned IDC 440 was generated in Buildings 123, 371, 444, 559, 707, 771, 776, 777, 889.</p> <p>IDC 441 includes unleached Raschig Rings to be discarded. Raschig Rings are borosilicate glass rings used to maintain subcritical conditions in fissile solution storage tanks that are not safe by dimension. The boron in the rings is a neutron poison, an element that absorbs neutrons. The volume of the ring displaces a proportionate volume of solution and, in combination with the boron, creates a critically safe configuration. Over time, the rings can become broken or otherwise damaged, especially in air-sparged tanks. In those cases, the rings were removed and replaced. The rings were also replaced if the assay of the tank exceeded acceptable limits. The old rings were assayed, and if the material count was above the economic discard limit (EDL), the rings were leached (rinsed with water or acid) and stored for plutonium recovery. If the material count was below EDL, the rings were packaged for discard without leaching. The unleached rings were assigned IDC 441.</p> <p>Raschig Rings assigned IDC 441 were generated in Buildings 371 and 771. Rings generated in Building 371 were generated by the Process Vent Scrubber System in Rooms 1105 and 2319. The system removed nitric- and sulfuric-acid vapors and entrained liquids from the process vent header streams connected to the Building 371 tanks. The acids were neutralized with potassium hydroxide and water. Vent scrubbers D229 A and B were filled with Raschig Rings. Rings generated in Building 771 were generated in production processes in tanks used to temporarily store radioactive solutions. The solutions could have contained nitric or sulfuric acids, or potassium hydroxide.</p> <p>Raschig Rings currently in WEMS assigned IDC 442 were generated in Buildings 771, 776, and 777. Prior to being replaced, the tanks were drained and the rings were leached with dilute nitric acid or water. The rings generated in Building 771 are from the production processes and Tanks D80-D85, D0-360, D-361, D-451-D-454, D-467, D-750, D-706, D-922, D-973, D-974, D-980, D-1008, D-1013, D-1022, and D-1081. Rings generated in Building 776 are from the Size Reduction Process and Tanks SR 3,4, and 5 and as unused rings.</p>
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	N/A
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0441

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W113	Handling	CH	Stream Name	Glass			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	247.74	2.39	623.88	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	370.89	370.89	370.89	
Other Inorganic Materials	480.51	4.77	726.99	
Cellulosics	12.89	12.89	12.89	
Rubber	0.00	0.00	0.00	
Plastics	15.45	5.73	35.32	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.56			
Packaging Material, Plastic	36.75			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	118
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Facility/Equipment Operation and Maintenance Waste	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	4.87E-01
Np-237	2.25E-06
Pu-238	1.61E-01
Pu-239	3.46E+00
Pu-240	7.93E-01
Pu-241	1.98E+01
Pu-242	9.83E-05
U-234	3.19E-05
U-235	1.05E-06
U-238	2.50E-06

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0441													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	Total
Drum / 55 gallon	138.9	2.7	0.0	0.0	0.0	141.6	55 Gallon Drum	139.2	0.0	0.0	0.0	0.0	142.0
As-Generated	Stored	138.9	Projected	2.7	Total	141.6	Final Form	Stored	139.2	Projected	2.7	Total	142.0

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	This waste stream is made up of Raschig Rings which are borosilicate glass rings used to maintain subcritical conditions in fissile solution storage tanks.
Waste Stream Source Description	<p>IDC 440 includes glass waste from analytical laboratories and recovery processes, standard light bulbs generated inside the PA, and ceramic materials. Glass waste assigned IDC 440 was generated in Buildings 123, 371, 444, 559, 707, 771, 776, 777, 889.</p> <p>IDC 441 includes unleached Raschig Rings to be discarded. Raschig Rings are borosilicate glass rings used to maintain subcritical conditions in fissile solution storage tanks that are not safe by dimension. The boron in the rings is a neutron poison, an element that absorbs neutrons. The volume of the ring displaces a proportionate volume of solution and, in combination with the boron, creates a critically safe configuration. Over time, the rings can become broken or otherwise damaged, especially in air-sparged tanks. In those cases, the rings were removed and replaced. The rings were also replaced if the assay of the tank exceeded acceptable limits. The old rings were assayed, and if the material count was above the economic discard limit (EDL), the rings were leached (rinsed with water or acid) and stored for plutonium recovery. If the material count was below EDL, the rings were packaged for discard without leaching. The unleached rings were assigned IDC 441.</p> <p>Raschig Rings assigned IDC 441 were generated in Buildings 371 and 771. Rings generated in Building 371 were generated by the Process Vent Scrubber System in Rooms 1105 and 2319. The system removed nitric- and sulfuric-acid vapors and entrained liquids from the process vent header streams connected to the Building 371 tanks. The acids were neutralized with potassium hydroxide and water. Vent scrubbers D229 A and B were filled with Raschig Rings. Rings generated in Building 771 were generated in production processes in tanks used to temporarily store radioactive solutions. The solutions could have contained nitric or sulfuric acids, or potassium hydroxide.</p> <p>Raschig Rings currently in WEMS assigned IDC 442 were generated in Buildings 771, 776, and 777. Prior to being replaced, the tanks were drained and the rings were leached with dilute nitric acid or water. The rings generated in Building 771 are from the production processes and Tanks D80-D85, D0-360, D-361, D-451-D-454, D-467, D-750, D-706, D-922, D-973, D-974, D-980, D-1008, D-1013, D-1022, and D-1081. Rings generated in Building 776 are from the Size Reduction Process and Tanks SR 3,4, and 5 and as unused rings.</p>
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	N/A
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0442

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W113	Handling	CH	Stream Name	Glass/TRU			Inventory Date	9/30/2002	
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal		Waste Matrix Code	S5122

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	4.54	0.48	9.55	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	306.14	42.96	493.09	
Cellulosics	12.84	10.50	13.37	
Rubber	0.00	0.00	0.00	
Plastics	21.90	5.25	50.60	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	153.52			
Packaging Material, Plastic	25.97			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	118
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Facility/Equipment Operation and Maintenance Waste	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	2.38E-01
Np-237	9.86E-07
Pu-238	8.27E-02
Pu-239	1.91E+00
Pu-240	4.36E-01
Pu-241	7.68E+00
Pu-242	3.95E-05
U-234	1.14E-04
U-235	3.52E-06
U-238	3.87E-07

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0442													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
8804 Can	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	38.8	0.0	0.0	0.0	0.0	40.9
Box / Metal	6.3	0.0	0.0	0.0	0.0	6.3	55 Gallon POCs	1.7	0.0	0.0	0.0	0.0	1.7
Drum / 55 gallon	37.9	2.1	0.0	0.0	0.0	39.9	Standard Waste Box	3.8	0.0	0.0	0.0	0.0	3.8
POC / 55 gallon	1.7	0.0	0.0	0.0	0.0	1.7							
As-Generated	Stored	45.9	Projected	2.1	Total	48.0	Final Form	Stored	44.2	Projected	2.1	Total	46.3

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	This waste stream is made up of Raschig Rings which are borosilicate glass rings used to maintain subcritical conditions in fissile solution storage tanks.
Waste Stream Source Description	<p>IDC 440 includes glass waste from analytical laboratories and recovery processes, standard light bulbs generated inside the PA, and ceramic materials. Glass waste assigned IDC 440 was generated in Buildings 123, 371, 444, 559, 707, 771, 776, 777, 889.</p> <p>IDC 441 includes unleached Raschig Rings to be discarded. Raschig Rings are borosilicate glass rings used to maintain subcritical conditions in fissile solution storage tanks that are not safe by dimension. The boron in the rings is a neutron poison, an element that absorbs neutrons. The volume of the ring displaces a proportionate volume of solution and, in combination with the boron, creates a critically safe configuration. Over time, the rings can become broken or otherwise damaged, especially in air-sparged tanks. In those cases, the rings were removed and replaced. The rings were also replaced if the assay of the tank exceeded acceptable limits. The old rings were assayed, and if the material count was above the economic discard limit (EDL), the rings were leached (rinsed with water or acid) and stored for plutonium recovery. If the material count was below EDL, the rings were packaged for discard without leaching. The unleached rings were assigned IDC 441.</p> <p>Raschig Rings assigned IDC 441 were generated in Buildings 371 and 771. Rings generated in Building 371 were generated by the Process Vent Scrubber System in Rooms 1105 and 2319. The system removed nitric- and sulfuric-acid vapors and entrained liquids from the process vent header streams connected to the Building 371 tanks. The acids were neutralized with potassium hydroxide and water. Vent scrubbers D229 A and B were filled with Raschig Rings. Rings generated in Building 771 were generated in production processes in tanks used to temporarily store radioactive solutions. The solutions could have contained nitric or sulfuric acids, or potassium hydroxide.</p> <p>Raschig Rings currently in WEMS assigned IDC 442 were generated in Buildings 771, 776, and 777. Prior to being replaced, the tanks were drained and the rings were leached with dilute nitric acid or water. The rings generated in Building 771 are from the production processes and Tanks D80-D85, D0-360, D-361, D-451-D-454, D-467, D-750, D-706, D-922, D-973, D-974, D-980, D-1008, D-1013, D-1022, and D-1081. Rings generated in Building 776 are from the Size Reduction Process and Tanks SR 3,4, and 5 and as unused rings.</p>
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	N/A
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0443

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W113	Handling	CH	Stream Name	Glass/TRU			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5122

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	0.00	0.00	0.00	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	337.60	0.96	542.74	
Cellulosics	12.89	12.89	12.89	
Rubber	0.00	0.00	0.00	
Plastics	19.65	7.16	33.41	
Solidified, Inorganic Matrix	0.96	0.96	0.96	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.44			
Packaging Material, Plastic	24.56			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	118
Residues:	N/A	
Asbestos:	N	
PCBs:	N	
Source:	Materials Production/Decontamination and Decommissioning	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	2.93E-02
Np-237	1.10E-07
Pu-238	5.86E-02
Pu-239	1.28E+00
Pu-240	2.92E-01
Pu-241	6.89E+00
Pu-242	3.44E-05
U-234	8.16E-06
U-235	3.34E-07
U-238	7.68E-06

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0443													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.2	0.8	0.0	0.0	0.0	1.0	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	1.0
As-Generated	Stored 0.2	Projected 0.8	Total 1.0				Final Form	Stored 0.2	Projected 0.8	Total 1.0			

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "Rachig rings leached with dilute nitric acid or water, and rinsed with carbon tetrachloride or 1,1,1-trichloroethane prior to removal from process tanks. These rings have no visible solvent contamination."

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0479

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	METAL/TRU			Inventory Date	9/30/2002	
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal		Waste Matrix Code	S5111

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	117	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	85.09	53.94	102.63	Residues:	No		Pu-238	1.15E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	No		Pu-239	2.44E+01
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-240	5.59E+00
	Other Inorganic Materials	0.00	0.00	0.00	Source:	Other/Multiple Sources		Pu-241	1.43E+02
	Cellulosics	12.89	12.89	12.89				Pu-242	7.07E-04
	Rubber	0.00	0.00	0.00					
	Plastics	6.52	2.39	8.59					
	Solidified, Inorganic Matrix	0.00	0.00	0.00					
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.57							
	Packaging Material, Plastic	28.64							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0479													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	1.0	0.0	0.0	0.0	0.0	1.0	55 Gallon Drum	1.0	0.0	0.0	0.0	0.0	1.0
As-Generated	Stored 1.0	Projected 0.0	Total 1.0			Final Form	Stored 1.0	Projected 0.0	Total 1.0				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Empty stainless steel transfer cans.

Waste Stream Source Description IDC 479 is assigned to empty reusable cans generated in Building 559, 707, and 771 (containers currently in WEMS from these buildings). Stainless-steel cans were used to handle plutonium-contaminated material. Primary generation was through the use of these cans to manually transfer materials between gloveboxes. Cans that were introduced to the process were typically recycled and reused. There were no generation process descriptions in WSRIC for this waste in Buildings 559, 707, and 771. In Building 371, the Dicesium Hexachloroplutonate (DCHP) Process often used the cans for transferring materials into the stacker.

IDC 480 is assigned to line- and nonline-generated light metals generated in Building 371, 374, 444, 559, 707, 774, 776, 777, 779, 865, and 991 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance-generated materials were generated throughout the entire facility. Backlog containers of this IDC may contain a matrix of all light metals listed above.

IDC 481 was assigned to light, nonspecial source metals. This material consisted primarily of stainless-steel and aluminum equipment used throughout the plant; this equipment was rinsed to remove plutonium contamination. This IDC is no longer active and has been replaced by IDC 480. The three containers in inventory were generated in Buildings 771, 776, and 777 in November 1984.

IDC 484 was assigned to classified non-nuclear material scrap metal shapes made primarily of stainless steel and aluminum. Prior to 1987, IDC 484 included beryllium shapes. These items were generated in Buildings 777 and 779 during disassembly operations of site-return units. Buildings 444, 707, and 883 generated rejected parts. Containers in inventory were generated from February 1983 to May 1991.

IDC 485 was assigned to scrap D-38 classified metal shapes. Generation of this material occurred in Building 777 during disassembly of site-return units. Building 444 generated rejected parts. Containers in inventory were generated from July 1987 to August 1992.

IDC 486 was assigned to classified tooling for disposal. Generation of these tools occurred in Buildings 707 and 777. The material consists primarily of obsolete tooling including pot chucks and inspection gauges. Containers in inventory were generated from October 1982 to December 1992.

IDC 489 was assigned to scrap D-38 classified metal shapes generated in Buildings 777 and 779 during disassembly of site-return units. containers in inventory were generated from February 1986 to September 1990.

IDC 824 is assigned to transuranic light metals generated in Buildings 371, 559, 707, and 771 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0480

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	METAL/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal		
				Waste Matrix Code	S5111				

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	117	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	244.02	10.50	1279.27	Residues:	No		Am-241	4.31E-01
	Aluminum-Base Metal/Alloys	44.09	0.68	521.26	Asbestos:	No		Cs-137	6.22E-05
	Other Metal/Alloys	41.90	1.81	444.40	PCBs:	No		Np-237	1.36E-06
	Other Inorganic Materials	8.14	0.14	87.45	Source:	Other/Multiple Sources		Pu-238	1.31E-01
	Cellulosics	7.41	4.31	12.89				Pu-239	2.81E+00
	Rubber	2.92	0.33	7.86				Pu-240	6.43E-01
	Plastics	12.37	1.63	76.85				Pu-241	1.50E+01
	Solidified, Inorganic Matrix	0.00	0.00	0.00				Pu-242	7.50E-05
	Cement (Solidified)	0.00	0.00	0.00				U-234	2.07E-05
	Vitrified	0.00	0.00	0.00				U-235	6.70E-07
	Solidified, Organic Matrix	0.03	0.04	0.04				U-238	3.31E-07
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	147.52							
	Packaging Material, Plastic	13.35							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0480													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
8802 Can	0.1	0.0	0.0	0.0	0.0	0.1	55 Gallon Drum	42.5	0.0	0.0	0.0	0.0	84.2
Box / Metal	3.2	0.0	0.0	0.0	0.0	3.2	Standard Waste Box	64.3	0.0	0.0	0.0	0.0	147.4
Box / Misc.	3.2	0.0	0.0	0.0	0.0	3.2							
Drum / 55 gallon	36.2	41.6	0.0	0.0	0.0	77.8	Final Form	Stored	106.8	Projected	124.8	Total	231.6
Drum / 85 gallon	2.6	0.0	0.0	0.0	0.0	2.6							
Standard Waste Box	60.8	83.6	0.0	0.0	0.0	144.4							
As-Generated	Stored	106.0	Projected	125.2	Total	231.2							

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste includes items such as gloveboxes and machinery, and empty containers. Items that are difficult to reduce to a size that would fit in a 55-gal. drum are placed in DOT 7A, Type A metal boxes. These drums are lined with a rigid polyethylene liner, fiberboard liner and several bag liners. The boxes are lined with a fiberboard and PVC liner.

Waste Stream Source Description IDC 479 is assigned to empty reusable cans generated in Building 559, 707, and 771 (containers currently in WEMS from these buildings). Stainless-steel cans were used to handle plutonium-contaminated material. Primary generation was through the use of these cans to manually transfer materials between gloveboxes. Cans that were introduced to the process were typically recycled and reused. There were no generation process descriptions in WSRIC for this waste in Buildings 559, 707, and 771. In Building 371, the Dicesium Hexachloroplutonate (DCHP) Process often used the cans for transferring materials into the stacker.

IDC 480 is assigned to line- and nonline-generated light metals generated in Building 371, 374, 444, 559, 707, 774, 776, 777, 779, 865, and 991 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance-generated materials were generated throughout the entire facility. Backlog containers of this IDC may contain a matrix of all light metals listed above.

IDC 481 was assigned to light, nonspecial source metals. This material consisted primarily of stainless-steel and aluminum equipment used throughout the plant; this equipment was rinsed to remove plutonium contamination. This IDC is no longer active and has been replaced by IDC 480. The three containers in inventory were generated in Buildings 771, 776, and 777 in November 1984.

IDC 484 was assigned to classified non-nuclear material scrap metal shapes made primarily of stainless steel and aluminum. Prior to 1987, IDC 484 included beryllium shapes. These items were generated in Buildings 777 and 779 during disassembly operations of site-return units. Buildings 444, 707, and 883 generated rejected parts. Containers in inventory were generated from February 1983 to May 1991.

IDC 485 was assigned to scrap D-38 classified metal shapes. Generation of this material occurred in Building 777 during disassembly of site-return units. Building 444 generated rejected parts. Containers in inventory were generated from July 1987 to August 1992.

IDC 486 was assigned to classified tooling for disposal. Generation of these tools occurred in Buildings 707 and 777. The material consists primarily of obsolete tooling including pot chucks and inspection gauges. Containers in inventory were generated from October 1982 to December 1992.

IDC 489 was assigned to scrap D-38 classified metal shapes generated in Buildings 777 and 779 during disassembly of site-return units. containers in inventory were generated from February 1986 to September 1990.

IDC 824 is assigned to transuranic light metals generated in Buildings 371, 559, 707, and 771 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

Current Container Comments N/A

EPA Comments N/A

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TWBIR ID: RF-TT0480

TRU WASTE BASELINE INVENTORY WASTE PROFILE

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	METAL/TRU			Inventory Date	9/30/2002	
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal		Waste Matrix Code	S5111

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	289.03	10.50	1279.27	
Aluminum-Base Metal/Alloys	107.52	2.86	521.26	
Other Metal/Alloys	54.96	1.81	444.40	
Other Inorganic Materials	10.28	0.33	87.45	
Cellulosics	12.85	10.74	12.89	
Rubber	2.10	0.48	3.82	
Plastics	20.00	2.34	76.85	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.43			
Packaging Material, Plastic	23.87			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	117
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Other/Multiple Sources	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	4.31E-01
Cs-137	6.22E-05
Np-237	1.36E-06
Pu-238	1.31E-01
Pu-239	2.81E+00
Pu-240	6.43E-01
Pu-241	1.50E+01
Pu-242	7.50E-05
U-234	2.07E-05
U-235	6.70E-07
U-238	3.31E-07

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0481													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	Total
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.2	Projected 0.0	Total 0.2				Final Form	Stored 0.2	Projected 0.0	Total 0.2			

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Light Metal, IDC480, was rinsed to remove plutonium contamination and assigned IDC481.

Waste Stream Source Description IDC 479 is assigned to empty reusable cans generated in Building 559, 707, and 771 (containers currently in WEMS from these buildings). Stainless-steel cans were used to handle plutonium-contaminated material. Primary generation was through the use of these cans to manually transfer materials between gloveboxes. Cans that were introduced to the process were typically recycled and reused. There were no generation process descriptions in WSRIC for this waste in Buildings 559, 707, and 771. In Building 371, the Dicesium Hexachloroplutonate (DCHP) Process often used the cans for transferring materials into the stacker.

IDC 480 is assigned to line- and nonline-generated light metals generated in Building 371, 374, 444, 559, 707, 774, 776, 777, 779, 865, and 991 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance-generated materials were generated throughout the entire facility. Backlog containers of this IDC may contain a matrix of all light metals listed above.

IDC 481 was assigned to light, nonspecial source metals. This material consisted primarily of stainless-steel and aluminum equipment used throughout the plant; this equipment was rinsed to remove plutonium contamination. This IDC is no longer active and has been replaced by IDC 480. The three containers in inventory were generated in Buildings 771, 776, and 777 in November 1984.

IDC 484 was assigned to classified non-nuclear material scrap metal shapes made primarily of stainless steel and aluminum. Prior to 1987, IDC 484 included beryllium shapes. These items were generated in Buildings 777 and 779 during disassembly operations of site-return units. Buildings 444, 707, and 883 generated rejected parts. Containers in inventory were generated from February 1983 to May 1991.

IDC 485 was assigned to scrap D-38 classified metal shapes. Generation of this material occurred in Building 777 during disassembly of site-return units. Building 444 generated rejected parts. Containers in inventory were generated from July 1987 to August 1992.

IDC 486 was assigned to classified tooling for disposal. Generation of these tools occurred in Buildings 707 and 777. The material consists primarily of obsolete tooling including pot chucks and inspection gauges. Containers in inventory were generated from October 1982 to December 1992.

IDC 489 was assigned to scrap D-38 classified metal shapes generated in Buildings 777 and 779 during disassembly of site-return units. containers in inventory were generated from February 1986 to September 1990.

IDC 824 is assigned to transuranic light metals generated in Buildings 371, 559, 707, and 771 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0483

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	Metal/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal			
EPA Codes		Waste Material Parameters (kg/m3)			Final Waste Form Descriptors		TRUCON Codes		Final Form Radionuclides	

As-Generated
N/A

Material Parameter	Average	Lower	Upper
Iron-Base Metal/Alloys	4.77	4.77	4.77
Aluminum-Base Metal/Alloys	0.00	0.00	0.00
Other Metal/Alloys	430.08	327.93	532.24
Other Inorganic Materials	0.00	0.00	0.00
Cellulosics	0.00	0.00	0.00
Rubber	0.00	0.00	0.00
Plastics	17.18	17.18	17.18
Solidified, Inorganic Matrix	0.00	0.00	0.00
Cement (Solidified)	0.00	0.00	0.00
Vitrified	0.00	0.00	0.00
Solidified, Organic Matrix	0.00	0.00	0.00
Soils	0.00	0.00	0.00
Packaging Material, Steel	138.43		
Packaging Material, Plastic	23.87		
Packaging Material, Lead	0.00		
Packaging Material, Steel Plug	0.00		

Category:	Defense TRU Waste	117
Residues:	N/A	
Asbestos:	N	
PCBs:	N	
Source:	Decontamination and Decommissioning	

Isotope	Typical Concentration (Ci/m3)
Pu-238	1.76E-01
Pu-239	3.76E+00
Pu-240	8.61E-01
Pu-241	2.20E+01
Pu-242	1.09E-04
U-234	2.06E-02
U-235	1.26E-03
U-238	1.54E-01

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0483

As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.8	0.0	0.0	0.0	0.0	0.8	55 Gallon Drum	0.8	0.0	0.0	0.0	0.0	0.8
As-Generated	Stored 0.8	Projected 0.0	Total 0.8			Final Form	Stored 0.8	Projected 0.0	Total 0.8				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Depleted uranium stock material removed from plutonium buildings during decontamination and decommissioning activities.

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0484

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	METAL/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal		
Waste Matrix Code		S5111							

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	8.59	8.59	8.59	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	121.29	57.76	252.99	
Other Inorganic Materials	38.82	14.32	87.83	
Cellulosics	12.89	12.89	12.89	
Rubber	0.00	0.00	0.00	
Plastics	10.36	5.25	14.32	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.57			
Packaging Material, Plastic	20.74			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	117
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Other/Multiple Sources	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	7.74E-02
Np-237	1.23E-06
Pu-238	6.23E-02
Pu-239	1.33E+00
Pu-240	3.04E-01
Pu-241	7.78E+00
Pu-242	3.84E-05
U-234	1.14E-05
U-235	8.69E-07
U-238	5.42E-05

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0484													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	9.8	0.0	0.0	0.0	0.0	9.8	55 Gallon Drum	9.8	0.0	0.0	0.0	0.0	9.8
As-Generated	Stored 9.8	Projected 0.0	Total 9.8				Final Form	Stored 9.8	Projected 0.0	Total 9.8			

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Classified non-nuclear material non-metal shapes.

Waste Stream Source Description IDC 479 is assigned to empty reusable cans generated in Building 559, 707, and 771 (containers currently in WEMS from these buildings). Stainless-steel cans were used to handle plutonium-contaminated material. Primary generation was through the use of these cans to manually transfer materials between gloveboxes. Cans that were introduced to the process were typically recycled and reused. There were no generation process descriptions in WSRIC for this waste in Buildings 559, 707, and 771. In Building 371, the Dicesium Hexachloroplutonate (DCHP) Process often used the cans for transferring materials into the stacker.

IDC 480 is assigned to line- and nonline-generated light metals generated in Building 371, 374, 444, 559, 707, 774, 776, 777, 779, 865, and 991 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance-generated materials were generated throughout the entire facility. Backlog containers of this IDC may contain a matrix of all light metals listed above.

IDC 481 was assigned to light, nonspecial source metals. This material consisted primarily of stainless-steel and aluminum equipment used throughout the plant; this equipment was rinsed to remove plutonium contamination. This IDC is no longer active and has been replaced by IDC 480. The three containers in inventory were generated in Buildings 771, 776, and 777 in November 1984.

IDC 484 was assigned to classified non-nuclear material scrap metal shapes made primarily of stainless steel and aluminum. Prior to 1987, IDC 484 included beryllium shapes. These items were generated in Buildings 777 and 779 during disassembly operations of site-return units. Buildings 444, 707, and 883 generated rejected parts. Containers in inventory were generated from February 1983 to May 1991.

IDC 485 was assigned to scrap D-38 classified metal shapes. Generation of this material occurred in Building 777 during disassembly of site-return units. Building 444 generated rejected parts. Containers in inventory were generated from July 1987 to August 1992.

IDC 486 was assigned to classified tooling for disposal. Generation of these tools occurred in Buildings 707 and 777. The material consists primarily of obsolete tooling including pot chucks and inspection gauges. Containers in inventory were generated from October 1982 to December 1992.

IDC 489 was assigned to scrap D-38 classified metal shapes generated in Buildings 777 and 779 during disassembly of site-return units. containers in inventory were generated from February 1986 to September 1990.

IDC 824 is assigned to transuranic light metals generated in Buildings 371, 559, 707, and 771 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0485

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	METAL/TRU			Inventory Date	9/30/2002	
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal			
EPA Codes		Waste Material Parameters (kg/m3)			Final Waste Form Descriptors		TRUCON Codes		Final Form Radionuclides	

As-Generated
N/A

Material Parameter	Average	Lower	Upper
Iron-Base Metal/Alloys	0.00	0.00	0.00
Aluminum-Base Metal/Alloys	0.00	0.00	0.00
Other Metal/Alloys	35.32	35.32	35.32
Other Inorganic Materials	0.00	0.00	0.00
Cellulosics	12.89	12.89	12.89
Rubber	0.00	0.00	0.00
Plastics	0.96	0.96	0.96
Solidified, Inorganic Matrix	0.00	0.00	0.00
Cement (Solidified)	0.00	0.00	0.00
Vitrified	0.00	0.00	0.00
Solidified, Organic Matrix	0.00	0.00	0.00
Soils	0.00	0.00	0.00
Packaging Material, Steel	138.57		
Packaging Material, Plastic	32.46		
Packaging Material, Lead	0.00		
Packaging Material, Steel Plug	0.00		

Category:	Defense TRU Waste	117
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Other/Multiple Sources	

Isotope	Typical Concentration (Ci/m3)
Am-241	2.15E-02
Pu-238	6.95E-03
Pu-239	1.48E-01
Pu-240	3.39E-02
Pu-241	8.67E-01
Pu-242	4.29E-06
U-234	5.13E-05
U-235	5.94E-06
U-238	4.59E-04

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0485

As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	5.4	0.0	0.0	0.0	0.0	5.4	55 Gallon Drum	5.4	0.0	0.0	0.0	0.0	5.4
As-Generated	Stored 5.4	Projected 0.0	Total 5.4			Final Form	Stored 5.4	Projected 0.0	Total 5.4				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Scrap D-38 classified metal shapes.

Waste Stream Source Description IDC 479 is assigned to empty reusable cans generated in Building 559, 707, and 771 (containers currently in WEMS from these buildings). Stainless-steel cans were used to handle plutonium-contaminated material. Primary generation was through the use of these cans to manually transfer materials between gloveboxes. Cans that were introduced to the process were typically recycled and reused. There were no generation process descriptions in WSRIC for this waste in Buildings 559, 707, and 771. In Building 371, the Dicesium Hexachloroplutonate (DCHP) Process often used the cans for transferring materials into the stacker.

IDC 480 is assigned to line- and nonline-generated light metals generated in Building 371, 374, 444, 559, 707, 774, 776, 777, 779, 865, and 991 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance-generated materials were generated throughout the entire facility. Backlog containers of this IDC may contain a matrix of all light metals listed above.

IDC 481 was assigned to light, nonspecial source metals. This material consisted primarily of stainless-steel and aluminum equipment used throughout the plant; this equipment was rinsed to remove plutonium contamination. This IDC is no longer active and has been replaced by IDC 480. The three containers in inventory were generated in Buildings 771, 776, and 777 in November 1984.

IDC 484 was assigned to classified non-nuclear material scrap metal shapes made primarily of stainless steel and aluminum. Prior to 1987, IDC 484 included beryllium shapes. These items were generated in Buildings 777 and 779 during disassembly operations of site-return units. Buildings 444, 707, and 883 generated rejected parts. Containers in inventory were generated from February 1983 to May 1991.

IDC 485 was assigned to scrap D-38 classified metal shapes. Generation of this material occurred in Building 777 during disassembly of site-return units. Building 444 generated rejected parts. Containers in inventory were generated from July 1987 to August 1992.

IDC 486 was assigned to classified tooling for disposal. Generation of these tools occurred in Buildings 707 and 777. The material consists primarily of obsolete tooling including pot chucks and inspection gauges. Containers in inventory were generated from October 1982 to December 1992.

IDC 489 was assigned to scrap D-38 classified metal shapes generated in Buildings 777 and 779 during disassembly of site-return units. containers in inventory were generated from February 1986 to September 1990.

IDC 824 is assigned to transuranic light metals generated in Buildings 371, 559, 707, and 771 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0486

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	METAL/TRU			Inventory Date	9/30/2002	
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal			
EPA Codes		Waste Material Parameters (kg/m3)			Final Waste Form Descriptors		TRUCON Codes		Final Form Radionuclides	

As-Generated
N/A

Material Parameter	Average	Lower	Upper
Iron-Base Metal/Alloys	0.00	0.00	0.00
Aluminum-Base Metal/Alloys	0.00	0.00	0.00
Other Metal/Alloys	368.19	262.06	474.95
Other Inorganic Materials	0.00	0.00	0.00
Cellulosics	12.89	12.89	12.89
Rubber	0.00	0.00	0.00
Plastics	16.23	12.89	23.39
Solidified, Inorganic Matrix	0.00	0.00	0.00
Cement (Solidified)	0.00	0.00	0.00
Vitrified	0.00	0.00	0.00
Solidified, Organic Matrix	0.00	0.00	0.00
Soils	0.00	0.00	0.00
Packaging Material, Steel	138.57		
Packaging Material, Plastic	15.43		
Packaging Material, Lead	0.00		
Packaging Material, Steel Plug	0.00		

Category:	Defense TRU Waste	117
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Other/Multiple Sources	

Isotope	Typical Concentration (Ci/m3)
Am-241	4.77E-02
Np-237	2.14E-07
Pu-238	1.55E-02
Pu-239	3.31E-01
Pu-240	7.58E-02
Pu-241	1.94E+00
Pu-242	9.58E-06
U-234	1.58E-05
U-235	1.83E-06
U-238	1.42E-04

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0486													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	14.4	0.0	0.0	0.0	0.0	14.4	55 Gallon Drum	14.4	0.0	0.0	0.0	0.0	14.4
As-Generated	Stored 14.4	Projected 0.0	Total 14.4			Final Form	Stored 14.4	Projected 0.0	Total 14.4				

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Waste Stream Description Classified tooling.

Waste Stream Source Description IDC 479 is assigned to empty reusable cans generated in Building 559, 707, and 771 (containers currently in WEMS from these buildings). Stainless-steel cans were used to handle plutonium-contaminated material. Primary generation was through the use of these cans to manually transfer materials between gloveboxes. Cans that were introduced to the process were typically recycled and reused. There were no generation process descriptions in WSRIC for this waste in Buildings 559, 707, and 771. In Building 371, the Dicesium Hexachloroplutonate (DCHP) Process often used the cans for transferring materials into the stacker.

IDC 480 is assigned to line- and nonline-generated light metals generated in Building 371, 374, 444, 559, 707, 774, 776, 777, 779, 865, and 991 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance-generated materials were generated throughout the entire facility. Backlog containers of this IDC may contain a matrix of all light metals listed above.

IDC 481 was assigned to light, nonspecial source metals. This material consisted primarily of stainless-steel and aluminum equipment used throughout the plant; this equipment was rinsed to remove plutonium contamination. This IDC is no longer active and has been replaced by IDC 480. The three containers in inventory were generated in Buildings 771, 776, and 777 in November 1984.

IDC 484 was assigned to classified non-nuclear material scrap metal shapes made primarily of stainless steel and aluminum. Prior to 1987, IDC 484 included beryllium shapes. These items were generated in Buildings 777 and 779 during disassembly operations of site-return units. Buildings 444, 707, and 883 generated rejected parts. Containers in inventory were generated from February 1983 to May 1991.

IDC 485 was assigned to scrap D-38 classified metal shapes. Generation of this material occurred in Building 777 during disassembly of site-return units. Building 444 generated rejected parts. Containers in inventory were generated from July 1987 to August 1992.

IDC 486 was assigned to classified tooling for disposal. Generation of these tools occurred in Buildings 707 and 777. The material consists primarily of obsolete tooling including pot chucks and inspection gauges. Containers in inventory were generated from October 1982 to December 1992.

IDC 489 was assigned to scrap D-38 classified metal shapes generated in Buildings 777 and 779 during disassembly of site-return units. containers in inventory were generated from February 1986 to September 1990.

IDC 824 is assigned to transuranic light metals generated in Buildings 371, 559, 707, and 771 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

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Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W101	Handling	CH	Stream Name	Combustibles/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5390

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	1.85	0.48	4.77	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	10.50	0.96	20.05	
Cellulosics	0.00	0.00	0.00	
Rubber	0.00	0.00	0.00	
Plastics	120.69	7.16	350.37	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.56			
Packaging Material, Plastic	32.30			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	116
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Other/Multiple Sources	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	1.83E+00
Np-237	1.18E-05
Pu-238	2.69E-01
Pu-239	6.07E+00
Pu-240	1.38E+00
Pu-241	3.17E+01
Pu-242	1.69E-04
U-234	1.72E-04
U-235	5.59E-06
U-238	5.48E-06

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0487													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.6	1.0	0.0	0.0	0.0	1.7	55 Gallon Drum	0.6	0.0	0.0	0.0	0.0	1.7
As-Generated	Stored 0.6	Projected 1.0	Total 1.7				Final Form	Stored 0.6	Projected 1.0	Total 1.7			

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Classified plastic shapes.

Waste Stream Source Description IDC 302 includes Benelex and Plexiglas. Benelex is a very dense organic material used for radiation shielding around gloveboxes and tanks. In some cases, Benelex is laminated with lead. However, none of the containers identified here have lead lamination. The Benelex used by RFETS is usually 2 inches thick, although occasionally two 2-inch thick pieces were bolted together to increase shield thickness. Plexiglas is a trade name used to describe a family of polycarbonate materials used for radiation shielding in glovebox windows and equipment enclosures. Plexiglas glovebox windows are generally 2- to 4-inches thick and can be in various sizes and shapes.

Benelex and Plexiglas in the inventory were generated in Buildings 371, 707, 771, and 776. The IDC was generated as waste during replacement of shielding or stripout of unnecessary shielding during the installation of new gloveboxes or tanks.

IDC 330 is dry combustibles such as cloth, paper, and wood. This IDC changes to 821, 831, 851, or 861 at the point of assay, depending upon radiological content

IDC 336, wet combustibles, are materials such as, paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent an accumulation of free liquid. This IDC changes to 822, 832, 833, or 862 at the point of assay.

IDC 337 is PVC sheeting, poly bottles, supplied-air suits, polyethylene, and other plastics. This IDC changes to 825, 833, 853, or 863 at the point of assay.

IDC 487 is classified plastic shapes used in handling and shipping. If TRU, shapes must be declassified prior to shipment. If LLW, IDC must be authorized by NTS prior to shipment. Classified Waste drums must be stenciled and handled according to Safeguards and Security procedures.

IDC 821 is dry combustibles such as paper, cloth, and wood.

IDC 822 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

ICD 825 is PVC sheeting, poly bottles, supplied-air suits, and other plastic.

IDC 831 is dry combustibles such as paper, cloth, and wood.

IDC 832 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

IDC 833 is PVC sheeting, poly bottles, supplied-air suits, and other plastics.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

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Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	METAL/TRU			Inventory Date	9/30/2002	
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal			
EPA Codes		Waste Material Parameters (kg/m3)			Final Waste Form Descriptors		TRUCON Codes		Final Form Radionuclides	

As-Generated
N/A

Material Parameter	Average	Lower	Upper
Iron-Base Metal/Alloys	0.00	0.00	0.00
Aluminum-Base Metal/Alloys	0.00	0.00	0.00
Other Metal/Alloys	211.46	152.75	298.34
Other Inorganic Materials	0.00	0.00	0.00
Cellulosics	12.89	12.89	12.89
Rubber	0.00	0.00	0.00
Plastics	10.31	6.68	12.89
Solidified, Inorganic Matrix	0.00	0.00	0.00
Cement (Solidified)	0.00	0.00	0.00
Vitrified	0.00	0.00	0.00
Solidified, Organic Matrix	0.00	0.00	0.00
Soils	0.00	0.00	0.00
Packaging Material, Steel	138.57		
Packaging Material, Plastic	17.18		
Packaging Material, Lead	0.00		
Packaging Material, Steel Plug	0.00		

Category:	Defense TRU Waste	117
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Other/Multiple Sources	

Isotope	Typical Concentration (Ci/m3)
Am-241	9.50E-02
Np-237	8.19E-07
Pu-238	3.64E-02
Pu-239	7.75E-01
Pu-240	1.77E-01
Pu-241	4.54E+00
Pu-242	2.24E-05
U-234	1.07E-05
U-235	1.24E-06
U-238	9.61E-05

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0489

As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	9.4	0.0	0.0	0.0	0.0	9.4	55 Gallon Drum	9.4	0.0	0.0	0.0	0.0	9.4
As-Generated	Stored 9.4	Projected 0.0	Total 9.4			Final Form	Stored 9.4	Projected 0.0	Total 9.4				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Classified beryllium shapes.

Waste Stream Source Description IDC 479 is assigned to empty reusable cans generated in Building 559, 707, and 771 (containers currently in WEMS from these buildings). Stainless-steel cans were used to handle plutonium-contaminated material. Primary generation was through the use of these cans to manually transfer materials between gloveboxes. Cans that were introduced to the process were typically recycled and reused. There were no generation process descriptions in WSRIC for this waste in Buildings 559, 707, and 771. In Building 371, the Dicesium Hexachloroplutonate (DCHP) Process often used the cans for transferring materials into the stacker.

IDC 480 is assigned to line- and nonline-generated light metals generated in Building 371, 374, 444, 559, 707, 774, 776, 777, 779, 865, and 991 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance-generated materials were generated throughout the entire facility. Backlog containers of this IDC may contain a matrix of all light metals listed above.

IDC 481 was assigned to light, nonspecial source metals. This material consisted primarily of stainless-steel and aluminum equipment used throughout the plant; this equipment was rinsed to remove plutonium contamination. This IDC is no longer active and has been replaced by IDC 480. The three containers in inventory were generated in Buildings 771, 776, and 777 in November 1984.

IDC 484 was assigned to classified non-nuclear material scrap metal shapes made primarily of stainless steel and aluminum. Prior to 1987, IDC 484 included beryllium shapes. These items were generated in Buildings 777 and 779 during disassembly operations of site-return units. Buildings 444, 707, and 883 generated rejected parts. Containers in inventory were generated from February 1983 to May 1991.

IDC 485 was assigned to scrap D-38 classified metal shapes. Generation of this material occurred in Building 777 during disassembly of site-return units. Building 444 generated rejected parts. Containers in inventory were generated from July 1987 to August 1992.

IDC 486 was assigned to classified tooling for disposal. Generation of these tools occurred in Buildings 707 and 777. The material consists primarily of obsolete tooling including pot chucks and inspection gauges. Containers in inventory were generated from October 1982 to December 1992.

IDC 489 was assigned to scrap D-38 classified metal shapes generated in Buildings 777 and 779 during disassembly of site-return units. containers in inventory were generated from February 1986 to September 1990.

IDC 824 is assigned to transuranic light metals generated in Buildings 371, 559, 707, and 771 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

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Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W120	Handling	CH	Stream Name	Filters & media/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Filter	Waste Matrix Code	S5410

EPA Codes	Waste Material Parameters (kg/m3)			
As-Generated	Material Parameter	Average	Lower	Upper
N/A	Iron-Base Metal/Alloys	8.09	0.48	12.77
	Aluminum-Base Metal/Alloys	18.33	4.77	49.17
	Other Metal/Alloys	10.86	11.24	11.24
	Other Inorganic Materials	11.80	1.62	139.38
	Cellulosics	4.55	4.31	12.89
	Rubber	12.94	0.77	49.17
	Plastics	6.81	2.68	25.78
	Solidified, Inorganic Matrix	3.85	3.84	4.30
	Cement (Solidified)	0.00	0.00	0.00
	Vitrified	0.00	0.00	0.00
	Solidified, Organic Matrix	0.00	0.00	0.00
	Soils	42.54	44.06	44.06
	Packaging Material, Steel	152.24		
	Packaging Material, Plastic	3.35		
	Packaging Material, Lead	0.00		
	Packaging Material, Steel Plug	0.00		

Final Waste Form Descriptors	TRUCON Codes
Category: Defense TRU Waste	119
Residues: No	
Asbestos: No	
PCBs: No	
Source: Facility/Equipment Operation and Maintenance Waste	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	1.41E-01
Np-237	1.53E-06
Pu-238	7.17E-02
Pu-239	1.55E+00
Pu-240	3.55E-01
Pu-241	8.48E+00
Pu-242	4.23E-05
U-234	5.94E-06
U-235	3.96E-07
U-238	3.50E-05

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0490

As-Generated Volumes						
ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036	
Box / Metal	3.2	0.0	0.0	0.0	0.0	3.2
Box / Wood	34.9	0.0	0.0	0.0	0.0	34.9
Drum / 55 gallon	7.3	0.0	0.0	0.0	0.0	7.3
Standard Waste Box	83.6	81.7	0.0	0.0	0.0	165.3
As-Generated	Stored	128.9	Projected	81.7	Total	210.6

Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036	
55 Gallon Drum	7.3	0.0	0.0	0.0	0.0	7.3
Standard Waste Box	122.8	0.0	0.0	0.0	0.0	204.1
Final Form	Stored	130.1	Projected	81.3	Total	211.4

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Plenum HEPA filters.

Waste Stream Source Description Item Description Code 338-Filter Media

The material in this IDC is either the filter media portion of HEPA filters or surface-water filter. HEPA filters are used on gloveboxes and in large filter plenums. Sock filters were used to prefilter operable unit 2 (OU-2) surface water prior to activated carbon treatment.

IDC 338 filter media in this backlog population was derived from HEPA filters from Buildings 371, 374, 559, 707, 771, 776, and from surface-water filters used in OU-2. The HEPA filters could have originally been assigned IDCs 335, 342, 490, 491, or 492. Filter media from building 374 could have been generated from HEPA filters used in saltcrete processing; therefore, they could be contaminated with RCRA metals and F-listed solvents and sludges. Filter media from Building 771 could have been used to filter nitric acid vapors. Analytical data on the OU-2 surface waters indicates the sock filters are contaminated with F-Listed constituents carbon tetrachloride, trichloroethylene, and tetrachloroethylene. Chloroform, 1,1-dichloroethene, and vinyl chloride were also detected in the influent water analysis.

Item Description Code-331 Ful-Flo filters Not From Incinerator

These Ful-Flo filters are in-line cartridge filters used throughout Rocky Flats to remove particulates from fluid streams and typically filter down to 5, 1, and 0.5 micron-sized particulates. Ful-Flo filters are used in various liquid systems that include nitric- and chloride-acid systems, such as those found in plutonium recovery operations; caustic systems, such as those found in utilities scrubbing; solvent systems using carbon tetrachloride in machining operations; water systems, such as steam cleaning; and condensate collection. These filters are also used in lubricant oil filtration.

Ful-Flo filters are poly-fiber-wound cartridges, about 10" long by 3.5" in diameter. Other fiber filters, such as R-6 pads, may be included in this IDC. R-6 pads are cloth filters, about sixteen inches in diameter, used to filter solids from nitric acid solutions. Therefore, backlog material in this IDC cannot be considered homogeneous. Filter elements are produced by combining a media blanket and spirally wound matrix yarn on an inner core. The filter elements might have a polypropylene cap on one end. Both the media blanket and matrix yarn can be cotton or polypropylene. The inner core material can be constructed of polypropylene, tinned steel, or stainless steel. Warehouse data from Rocky Flats indicate that the inner-core material is polypropylene.

During normal process operations, IDC 331 Ful-Flo filters in this backlog population were used to filter particulates from liquid waste streams in Buildings 371, 707, 771, 776, 777, and 779. These waste streams were primarily from filtration of caustic solutions in Building 371, the carbon tetrachloride system and oil systems, and from filtration of water and developer in Building 707. In Building 771, the primary waste streams filtered were anion column feed, potassium hydroxide, nitrate feed, spent nitric acid and hydrofluoric acid from the scrubber, eluate and effluent exiting the ion-exchange columns, floor pick-up solution, steam condensate, and miscellaneous aqueous solutions. Hydraulic oil and floor pick-up solution were filtered in Building 776. In Buildings 777 and 779, Ful-Flo filters were used in the carbon tetrachloride system for purification of Freon TF and for filtration of incoming waters.

Typically, Ful-Flo filters were placed on drying racks pending bag-out of a glovebox. Filters were not always dried before removal from the glovebox. Filters were then "bagged out" of the glovebox and placed in a second layer of plastic. Next, the filters were placed in a "Poly Bottle" or "Clam Shell" (hard plastic container), then placed in a double-lined drum.

These Ful-Flo filters may be contaminated with acids, bases, carbon tetrachloride, chromium, Freon, and oil. They may contain relatively small amounts of free liquids.

Item Description Code 335-HEPA Glovebox Filters, Not Acid Contaminated

The material in this IDC is High Efficiency Particulate Air (HEPA) filters used in ventilation systems at Rocky Flats. HEPA filters have been and are used in all of the buildings which contain plutonium processing activities. HEPA filters are used on gloveboxes and in large filter plenums that filter the room air.

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Used filters were removed from their position in the ventilation system and packaged for further processing. The filters used on gloveboxes (nominal 8" x 8" x 5") were identified as IDC 335 if they were not acid contaminated.

Item Description Code 342-HEPA Glovebox Filters, Acid Contaminated

HEPA filters are used on all gloveboxes to remove particulates from the atmosphere exiting the glovebox to the plenum exhaust system. The filters in IDC 342 are from gloveboxes with atmospheres that could cause the filters to be contaminated with acids or bases used in chemical processing.

Item Description Code 491-Plenum Prefilters

The material in this IDC is a variety of plenum prefilters used in the ventilation systems at Rocky Flats. Plenum prefilters have been and are used in all of the buildings that contain plutonium processing activities. These prefilters are used in large plenums that filter the room and glovebox air. Used prefilters were removed from their position in the ventilation system and packaged for further processing.

IDC 491 plenum prefilters range from furnace-type filters to pleated fiberglass filters and can be as large as 24" x 24" x 12". The filter medium consists of fiberglass packing or paper which may be more or less dense, depending on filtering needs. Wire mesh can be used to hold the media in place. The frame material for these prefilters is cardboard.

Item Description Code 490--HEPA Filters (24" x 24"), Not Acid Contaminated

The material in this IDC is HEPA filters used in the ventilation systems at the RFETS. HEPA filters are used in all of the buildings that contain plutonium processing activities. These HEPA filters are used in large filter plenums that filter the room and glovebox air.

Used filters were removed from their position in the ventilation system and packaged for further processing. The larger-sized filters used in filters plenums were identified and packaged as IDC 490 if not acid contaminated.

IDC 490 HEPA filters (24" x 24"), not acid contaminated, are large HEPA filters (nominal 24" x 24" x 5 or 24" x 12) that were used in filter plenum racks. These filters consist of filter media contained within a wooden or metal frame.

The filter medium is composed of glass fibers, with a small percentage percentage of asbestos. An organic binder, elastomeric adhesive, or polyurethane sealant was use during construction. The medium also contains corrugated aluminum foil. The newer HEPA media will consist of glass and aromatic polyamide fibers (Nomex) and aluminum alloy metal coated with a thermoset vinly or epoxy. Various sealants could be present. The material will not be homogenous because of the different materials used in the different sizes and by the different manufacturers of the filters. The material in IDC 490 has not been contaminated with acid.

The frame material will be either 3/4", fire-retareant, exterior-grade plywood or wood-particle board and 14-gauge cadmium-plated or chromized carbon steel. neoprene, closed-cell, expanded rubber, precoated with a rubber-based adhesive is present on each filter.

More information on HEPA filters can be obtained from RFETS Standard SMU-401 (EG&G 1991).

The IDC 490 HEPA filters in this backlog population consist of filters from Buildings 374, 771, 774, 776, and 777. The majority of these filtes do not contain hazardous consitutents, although evaporated solvents may have been contacted. HEPA filters from Plenums 104A and 104B in Building 374 have contacted hazardous constituents from the Saltcrete Process.

Current Container Comments N/A

EPA Comments N/A

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Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W120	Handling	CH	Stream Name	Filters & media/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Filter	Waste Matrix Code	S5410

EPA Codes	Waste Material Parameters (kg/m3)			
As-Generated	Material Parameter	Average	Lower	Upper
N/A	Iron-Base Metal/Alloys	9.55	9.55	9.55
	Aluminum-Base Metal/Alloys	13.46	4.77	25.78
	Other Metal/Alloys	3.34	3.34	3.34
	Other Inorganic Materials	16.57	2.86	46.30
	Cellulosics	12.89	12.89	12.89
	Rubber	0.96	0.48	1.43
	Plastics	20.80	10.98	34.37
	Solidified, Inorganic Matrix	0.00	0.00	0.00
	Cement (Solidified)	0.00	0.00	0.00
	Vitrified	0.00	0.00	0.00
	Solidified, Organic Matrix	0.00	0.00	0.00
	Soils	0.00	0.00	0.00
	Packaging Material, Steel	142.50		
	Packaging Material, Plastic	18.18		
	Packaging Material, Lead	0.00		
	Packaging Material, Steel Plug	0.00		

Final Waste Form Descriptors	TRUCON Codes
Category: Defense TRU Waste	119
Residues: No	
Asbestos: No	
PCBs: No	
Source: Facility/Equipment Operation and Maintenance Waste	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	6.13E-02
Np-237	5.04E-07
Pu-238	9.89E-03
Pu-239	2.12E-01
Pu-240	4.85E-02
Pu-241	1.20E+00
Pu-242	5.98E-06
U-234	3.22E-06
U-235	2.73E-07
U-238	9.18E-10

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0491													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Box / Misc.	6.3	0.0	0.0	0.0	0.0	6.3	55 Gallon Drum	15.8	0.0	0.0	0.0	0.0	18.8
Box / Wood	6.3	0.0	0.0	0.0	0.0	6.3	Standard Waste Box	7.6	0.0	0.0	0.0	0.0	7.6
Drum / 55 gallon	15.8	2.9	0.0	0.0	0.0	18.7							
As-Generated	Stored	28.5	Projected	2.9	Total	31.4	Final Form	Stored	23.4	Projected	2.9	Total	26.3

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Plenum prefilters.

Waste Stream Source Description Item Description Code 338-Filter Media

The material in this IDC is either the filter media portion of HEPA filters or surface-water filter. HEPA filters are used on gloveboxes and in large filter plenums. Sock filters were used to prefilter operable unit 2 (OU-2) surface water prior to activated carbon treatment.

IDC 338 filter media in this backlog population was derived from HEPA filters from Buildings 371, 374, 559, 707, 771, 776, and from surface-water filters used in OU-2. The HEPA filters could have originally been assigned IDCs 335, 342, 490, 491, or 492. Filter media from building 374 could have been generated from HEPA filters used in saltcrete processing; therefore, they could be contaminated with RCRA metals and F-listed solvents and sludges. Filter media from Building 771 could have been used to filter nitric acid vapors. Analytical data on the OU-2 surface waters indicates the sock filters are contaminated with F-Listed constituents carbon tetrachloride, trichloroethylene, and tetrachloroethylene. Chloroform, 1,1-dichloroethene, and vinyl chloride were also detected in the influent water analysis.

Item Description Code-331 Ful-Flo filters Not From Incinerator

These Ful-Flo filters are in-line cartridge filters used throughout Rocky Flats to remove particulates from fluid streams and typically filter down to 5, 1, and 0.5 micron-sized particulates. Ful-Flo filters are used in various liquid systems that include nitric- and chloride-acid systems, such as those found in plutonium recovery operations; caustic systems, such as those found in utilities scrubbing; solvent systems using carbon tetrachloride in machining operations; water systems, such as steam cleaning; and condensate collection. These filters are also used in lubricant oil filtration.

Ful-Flo filters are poly-fiber-wound cartridges, about 10" long by 3.5" in diameter. Other fiber filters, such as R-6 pads, may be included in this IDC. R-6 pads are cloth filters, about sixteen inches in diameter, used to filter solids from nitric acid solutions. Therefore, backlog material in this IDC cannot be considered homogeneous. Filter elements are produced by combining a media blanket and spirally wound matrix yarn on an inner core. The filter elements might have a polypropylene cap on one end. Both the media blanket and matrix yarn can be cotton or polypropylene. The inner core material can be constructed of polypropylene, tinned steel, or stainless steel. Warehouse data from Rocky Flats indicate that the inner-core material is polypropylene.

During normal process operations, IDC 331 Ful-Flo filters in this backlog population were used to filter particulates from liquid waste streams in Buildings 371, 707, 771, 776, 777, and 779. These waste streams were primarily from filtration of caustic solutions in Building 371, the carbon tetrachloride system and oil systems, and from filtration of water and developer in Building 707. In Building 771, the primary waste streams filtered were anion column feed, potassium hydroxide, nitrate feed, spent nitric acid and hydrofluoric acid from the scrubber, eluate and effluent exiting the ion-exchange columns, floor pick-up solution, steam condensate, and miscellaneous aqueous solutions. Hydraulic oil and floor pick-up solution were filtered in Building 776. In Buildings 777 and 779, Ful-Flo filters were used in the carbon tetrachloride system for purification of Freon TF and for filtration of incoming waters.

Typically, Ful-Flo filters were placed on drying racks pending bag-out of a glovebox. Filters were not always dried before removal from the glovebox. Filters were then "bagged out" of the glovebox and placed in a second layer of plastic. Next, the filters were placed in a "Poly Bottle" or "Clam Shell" (hard plastic container), then placed in a double-lined drum.

These Ful-Flo filters may be contaminated with acids, bases, carbon tetrachloride, chromium, Freon, and oil. They may contain relatively small amounts of free liquids.

Item Description Code 335-HEPA Glovebox Filters, Not Acid Contaminated

The material in this IDC is High Efficiency Particulate Air (HEPA) filters used in ventilation systems at Rocky Flats. HEPA filters have been and are used in all of the buildings which contain plutonium processing activities. HEPA filters are used on gloveboxes and in large filter plenums that filter the room air.

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Used filters were removed from their position in the ventilation system and packaged for further processing. The filters used on gloveboxes (nominal 8" x 8" x 5") were identified as IDC 335 if they were not acid contaminated.

Item Description Code 342-HEPA Glovebox Filters, Acid Contaminated

HEPA filters are used on all gloveboxes to remove particulates from the atmosphere exiting the glovebox to the plenum exhaust system. The filters in IDC 342 are from gloveboxes with atmospheres that could cause the filters to be contaminated with acids or bases used in chemical processing.

Item Description Code 491-Plenum Prefilters

The material in this IDC is a variety of plenum prefilters used in the ventilation systems at Rocky Flats. Plenum prefilters have been and are used in all of the buildings that contain plutonium processing activities. These prefilters are used in large plenums that filter the room and glovebox air. Used prefilters were removed from their position in the ventilation system and packaged for further processing.

IDC 491 plenum prefilters range from furnace-type filters to pleated fiberglass filters and can be as large as 24" x 24" x 12". The filter medium consists of fiberglass packing or paper which may be more or less dense, depending on filtering needs. Wire mesh can be used to hold the media in place. The frame material for these prefilters is cardboard.

Item Description Code 490--HEPA Filters (24" x 24"), Not Acid Contaminated

The material in this IDC is HEPA filters used in the ventilation systems at the RFETS. HEPA filters are used in all of the buildings that contain plutonium processing activities. These HEPA filters are used in large filter plenums that filter the room and glovebox air.

Used filters were removed from their position in the ventilation system and packaged for further processing. The larger-sized filters used in filters plenums were identified and packaged as IDC 490 if not acid contaminated.

IDC 490 HEPA filters (24" x 24"), not acid contaminated, are large HEPA filters (nominal 24" x 24" x 5 or 24" x 12) that were used in filter plenum racks. These filters consist of filter media contained within a wooden or metal frame.

The filter medium is composed of glass fibers, with a small percentage percentage of asbestos. An organic binder, elastomeric adhesive, or polyurethane sealant was use during construction. The medium also contains corrugated aluminum foil. The newer HEPA media will consist of glass and aromatic polyamide fibers (Nomex) and aluminum alloy metal coated with a thermoset vinly or epoxy. Various sealants could be present. The material will not be homogenous because of the different materials used in the different sizes and by the different manufacturers of the filters. The material in IDC 490 has not been contaminated with acid.

The frame material will be either 3/4", fire-retareant, exterior-grade plywood or wood-particle board and 14-gauge cadmium-plated or chromized carbon steel. neoprene, closed-cell, expanded rubber, precoated with a rubber-based adhesive is present on each filter.

More information on HEPA filters can be obtained from RFETS Standard SMU-401 (EG&G 1991).

The IDC 490 HEPA filters in this backlog population consist of filters from Buildings 374, 771, 774, 776, and 777. The majority of these filtes do not contain hazardous consitutents, although evaporated solvents may have been contacted. HEPA filters from Plenums 104A and 104B in Building 374 have contacted hazardous constituents from the Saltcrete Process.

Current Container Comments N/A

EPA Comments N/A

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Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0492

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W120	Handling	CH	Stream Name	Filters and Media/TRU			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Filter	Waste Matrix Code	S5410

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	119	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	0.00	0.00	0.00	Residues:	N/A		Am-241	1.65E-01
	Aluminum-Base Metal/Alloys	56.12	56.12	56.12	Asbestos:	Y		Np-237	1.73E-06
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	N		Pu-238	8.71E-02
	Other Inorganic Materials	18.65	18.65	18.65	Source:	Multiple		Pu-239	1.85E+00
	Cellulosics	4.31	4.31	4.31				Pu-240	4.25E-01
	Rubber	56.12	56.12	56.12				Pu-241	1.09E+01
	Plastics	0.00	0.00	0.00				Pu-242	5.37E-05
	Solidified, Inorganic Matrix	0.00	0.00	0.00					
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	152.90							
	Packaging Material, Plastic	2.21							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0492													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Standard Waste Box	1.9	0.0	0.0	0.0	0.0	1.9	Standard Waste Box	1.9	0.0	0.0	0.0	0.0	1.9
As-Generated	Stored 1.9	Projected 0.0	Total 1.9			Final Form	Stored 1.9	Projected 0.0	Total 1.9				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "HEPA filters (24 x 24), acid contaminated, are large HEPA filters used in the filter plenums of buildings that contain gloveboxes with atmospheres that could cause the filters to be contaminated with acids or bases used in chemical processing. The materials of construction consist of a filter medium contained within a wood frame. Older medium consisted of glass fiber with a small percentage of asbestos and a corrugated aluminum foil. Newer medium is constructed of glass and aromatic polyamide fibers (Nomex) and aluminum alloy metal. Wood filter frames are constructed of 3/4-inch fire retardant exterior grade plywood, or particle board."

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments Waste Stream currently exists in the TWBIR as a mixed waste or residue, (i.e., RF-MRXXXX or RF-MTXXXX), but is being re-characterized as non-mixed waste.

Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W107	Handling	CH	Stream Name	Soil and Cleanup Debris/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Organics		Waste Matrix Code	S3219

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	121	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	36.82	8.59	150.41	Residues:	N/A		Am-241	2.75E+00
	Aluminum-Base Metal/Alloys	6.86	0.91	10.41	Asbestos:	N		Np-237	1.82E-05
	Other Metal/Alloys	12.60	2.58	21.24	PCBs:	N		Pu-238	4.54E-01
	Other Inorganic Materials	21.10	8.50	44.39	Source:	Decontamination and Decommissioning		Pu-239	9.69E+00
	Cellulosics	0.00	0.00	0.00				Pu-240	2.22E+00
	Rubber	1.53	1.53	1.53				Pu-241	5.64E+01
	Plastics	30.65	19.52	55.37				Pu-242	2.80E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	2.37E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	3.25E-05
	Vitrified	0.00	0.00	0.00				U-238	3.78E-05
	Solidified, Organic Matrix	18.40	0.96	40.24					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.56							
	Packaging Material, Plastic	32.46							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0523A													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	1.5	0.0	0.0	0.0	0.0	1.5	55 Gallon Drum	1.5	0.0	0.0	0.0	0.0	1.5
As-Generated	Stored 1.5	Projected 0.0	Total 1.5			Final Form	Stored 1.5	Projected 0.0	Total 1.5				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	Miscellaneous non-hazardous organic solids including excess sample containers. This output contains greater than 50% by volume organic particulates.
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	New Waste Stream being added to TWBIR
Acceptance Comments	N/A
Final Form Comments	N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W107	Handling	CH	Stream Name	Soil and Cleanup Debris/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Organics		Waste Matrix Code	S3900

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	121	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	36.82	8.59	150.41	Residues:	N/A		Am-241	2.75E+00
	Aluminum-Base Metal/Alloys	6.86	0.91	10.41	Asbestos:	N		Np-237	1.82E-05
	Other Metal/Alloys	12.60	2.58	21.24	PCBs:	N		Pu-238	4.54E-01
	Other Inorganic Materials	21.10	8.50	44.39	Source:	Decontamination and Decommissioning		Pu-239	9.69E+00
	Cellulosics	0.00	0.00	0.00				Pu-240	2.22E+00
	Rubber	1.53	1.53	1.53				Pu-241	5.64E+01
	Plastics	30.65	19.52	55.37				Pu-242	2.80E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	2.37E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	3.25E-05
	Vitrified	0.00	0.00	0.00				U-238	3.78E-05
	Solidified, Organic Matrix	18.40	0.96	40.24					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.56							
	Packaging Material, Plastic	32.46							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0523B													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	1.5	0.0	0.0	0.0	0.0	1.5	55 Gallon Drum	1.5	0.0	0.0	0.0	0.0	1.5
As-Generated	Stored 1.5	Projected 0.0	Total 1.5			Final Form	Stored 1.5	Projected 0.0	Total 1.5				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	Miscellaneous non-hazardous organic solids including excess sample containers. This output contains greater than 50% by volume homogeneous solids.
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	New Waste Stream being added to TWBIR
Acceptance Comments	N/A
Final Form Comments	N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W107	Handling	CH	Stream Name	Soil and Cleanup Debris/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Heterogeneous Debris		Waste Matrix Code	S5420

EPA Codes	Waste Material Parameters (kg/m3)			
As-Generated	Material Parameter	Average	Lower	Upper
N/A	Iron-Base Metal/Alloys	36.82	8.59	150.41
	Aluminum-Base Metal/Alloys	6.86	0.91	10.41
	Other Metal/Alloys	12.60	2.58	21.24
	Other Inorganic Materials	21.10	8.50	44.39
	Cellulosics	0.00	0.00	0.00
	Rubber	1.53	1.53	1.53
	Plastics	30.65	19.52	55.37
	Solidified, Inorganic Matrix	0.00	0.00	0.00
	Cement (Solidified)	0.00	0.00	0.00
	Vitrified	0.00	0.00	0.00
	Solidified, Organic Matrix	18.40	0.96	40.24
	Soils	0.00	0.00	0.00
	Packaging Material, Steel	138.56		
	Packaging Material, Plastic	32.46		
	Packaging Material, Lead	0.00		
	Packaging Material, Steel Plug	0.00		

Final Waste Form Descriptors	TRUCON Codes
Category: Defense TRU Waste	121
Residues: N/A	
Asbestos: Y	
PCBs: N	
Source: Decontamination and Decommissioning	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	2.75E+00
Np-237	1.82E-05
Pu-238	4.54E-01
Pu-239	9.69E+00
Pu-240	2.22E+00
Pu-241	5.64E+01
Pu-242	2.80E-04
U-234	2.37E-05
U-235	3.25E-05
U-238	3.78E-05

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0523C													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	1.5	0.0	0.0	0.0	0.0	1.5	55 Gallon Drum	1.5	0.0	0.0	0.0	0.0	1.5
As-Generated	Stored 1.5	Projected 0.0	Total 1.5			Final Form	Stored 1.5	Projected 0.0	Total 1.5				

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TWBIR ID: RF-TT0523C

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "Miscellaneous non-hazardous organic solids including granular activated carbon and charcoal from filter plenums, strippable coating with non-hazardous fixative, and excess sample containers. This output contains greater than 50% by volume inorganic debris. "

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W107	Handling	CH	Stream Name	Soil and Cleanup Debris/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Heterogeneous Debris		Waste Matrix Code	S5440

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	121	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	36.82	8.59	150.41	Residues:	N/A		Am-241	2.75E+00
	Aluminum-Base Metal/Alloys	6.86	0.91	10.41	Asbestos:	Y		Np-237	1.82E-05
	Other Metal/Alloys	12.60	2.58	21.24	PCBs:	N		Pu-238	4.54E-01
	Other Inorganic Materials	21.10	8.50	44.39	Source:	Decontamination and Decommissioning		Pu-239	9.69E+00
	Cellulosics	0.00	0.00	0.00				Pu-240	2.22E+00
	Rubber	1.53	1.53	1.53				Pu-241	5.64E+01
	Plastics	30.65	19.52	55.37				Pu-242	2.80E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	2.37E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	3.25E-05
	Vitrified	0.00	0.00	0.00				U-238	3.78E-05
	Solidified, Organic Matrix	18.40	0.96	40.24					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.56							
	Packaging Material, Plastic	32.46							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0523D													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	1.5	0.0	0.0	0.0	0.0	1.5	55 Gallon Drum	1.5	0.0	0.0	0.0	0.0	1.5
As-Generated	Stored 1.5	Projected 0.0	Total 1.5			Final Form	Stored 1.5	Projected 0.0	Total 1.5				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	"Miscellaneous non-hazardous organic solids including granular activated carbon and charcoal from filter plenums, strippable coating with non-hazardous fixative, and excess sample containers. This output contains greater than 50% by volume organic debris. "
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	New Waste Stream being added to TWBIR
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0523E

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W107	Handling	CH	Stream Name	Soil and Cleanup Debris/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Heterogeneous Debris		Waste Matrix Code	S5490

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	121	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	36.82	8.59	150.41	Residues:	N/A		Am-241	2.75E+00
	Aluminum-Base Metal/Alloys	6.86	0.91	10.41	Asbestos:	Y		Np-237	1.82E-05
	Other Metal/Alloys	12.60	2.58	21.24	PCBs:	N		Pu-238	4.54E-01
	Other Inorganic Materials	21.10	8.50	44.39	Source:	Decontamination and Decommissioning		Pu-239	9.69E+00
	Cellulosics	0.00	0.00	0.00				Pu-240	2.22E+00
	Rubber	1.53	1.53	1.53				Pu-241	5.64E+01
	Plastics	30.65	19.52	55.37				Pu-242	2.80E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	2.37E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	3.25E-05
	Vitrified	0.00	0.00	0.00				U-238	3.78E-05
	Solidified, Organic Matrix	18.40	0.96	40.24					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.56							
	Packaging Material, Plastic	32.46							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0523E													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	1.5	0.0	0.0	0.0	0.0	1.5	55 Gallon Drum	1.5	0.0	0.0	0.0	0.0	1.5
As-Generated	Stored 1.5	Projected 0.0	Total 1.5			Final Form	Stored 1.5	Projected 0.0	Total 1.5				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "Miscellaneous non-hazardous organic solids including granular activated carbon and charcoal from filter plenums, strippable coating with non-hazardous fixative, and excess sample containers. This output contains at least 50% by volume debris waste. "

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W107	Handling	CH	Stream Name	Soil and Cleanup Debris/TRU			Inventory Date	9/30/2002	
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3119

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	122, 130	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	19.44	0.96	42.96	Residues:	N/A		Am-241	7.50E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	Y		Np-237	1.87E-04
	Other Metal/Alloys	23.87	23.87	23.87	PCBs:	N		Pu-238	6.73E-01
	Other Inorganic Materials	92.37	1.43	493.57	Source:	Decontamination and Decommissioning		Pu-239	1.47E+01
	Cellulosics	12.89	12.89	12.89				Pu-240	3.35E+00
	Rubber	0.00	0.00	0.00				Pu-241	8.33E+01
	Plastics	15.87	2.20	41.05				Pu-242	4.88E-04
	Solidified, Inorganic Matrix	80.40	0.48	339.39				U-234	7.08E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	2.61E-06
	Vitrified	0.00	0.00	0.00				U-238	4.60E-05
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.51							
	Packaging Material, Plastic	29.39							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0532A													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
8801 Can	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	14.8	0.0	0.0	0.0	0.0	15.6
8802 Can	0.0	0.0	0.0	0.0	0.0	0.0							
Drum / 55 gallon	14.1	0.8	0.0	0.0	0.0	15.0	Final Form	Stored	14.8	Projected	0.8	Total	15.6
As-Generated	Stored	14.2	Projected	0.8	Total	15.0							

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	Miscellaneous non-hazardous inorganic solids including excess sample containers. This output contains greater than 50% by volume inorganic particulates.
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	New Waste Stream being added to TWBIR
Acceptance Comments	N/A
Final Form Comments	N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W107	Handling	CH	Stream Name	Soil and Cleanup Debris/TRU			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5129

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	122, 130	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	19.44	0.96	42.96	Residues:	N/A		Am-241	7.50E+00
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	Y		Np-237	1.87E-04
	Other Metal/Alloys	23.87	23.87	23.87	PCBs:	N		Pu-238	6.73E-01
	Other Inorganic Materials	92.37	1.43	493.57	Source:	Decontamination and Decommissioning		Pu-239	1.47E+01
	Cellulosics	12.89	12.89	12.89				Pu-240	3.35E+00
	Rubber	0.00	0.00	0.00				Pu-241	8.33E+01
	Plastics	15.87	2.20	41.05				Pu-242	4.88E-04
	Solidified, Inorganic Matrix	80.40	0.48	339.39				U-234	7.08E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	2.61E-06
	Vitrified	0.00	0.00	0.00				U-238	4.60E-05
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.51							
	Packaging Material, Plastic	29.39							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0532B													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
8801 Can	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	14.8	0.0	0.0	0.0	0.0	15.6
8802 Can	0.0	0.0	0.0	0.0	0.0	0.0							
Drum / 55 gallon	14.1	0.8	0.0	0.0	0.0	15.0							
As-Generated	Stored	14.2	Projected	0.8	Total	15.0	Final Form	Stored	14.8	Projected	0.8	Total	15.6

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "Miscellaneous non-hazardous inorganic solids including desiccants, molecular sieves, salts, sand, gravel, zeolites, kaolin, etc."

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W118	Handling	CH	Stream Name	Miscellaneous Liquids/TRU			Inventory Date	9/30/2002	
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3129

EPA Codes	Waste Material Parameters (kg/m3)			
As-Generated	Material Parameter	Average	Lower	Upper
N/A	Iron-Base Metal/Alloys	7.16	7.16	7.16
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00
	Other Metal/Alloys	0.00	0.00	0.00
	Other Inorganic Materials	0.00	0.00	0.00
	Cellulosics	0.00	0.00	0.00
	Rubber	0.00	0.00	0.00
	Plastics	8.59	8.59	8.59
	Solidified, Inorganic Matrix	10.50	10.50	10.50
	Cement (Solidified)	0.00	0.00	0.00
	Vitrified	0.00	0.00	0.00
	Solidified, Organic Matrix	0.00	0.00	0.00
	Soils	0.00	0.00	0.00
	Packaging Material, Steel	138.43		
	Packaging Material, Plastic	23.87		
	Packaging Material, Lead	0.00		
	Packaging Material, Steel Plug	0.00		

Final Waste Form Descriptors	TRUCON Codes
Category: Defense TRU Waste	N/A
Residues: No	
Asbestos: No	
PCBs: No	
Source: Facility/Equipment Operation and Maintenance Waste	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Pu-238	3.17E-01
Pu-239	6.75E+00
Pu-240	1.55E+00
Pu-241	3.95E+01
Pu-242	1.96E-04

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0541													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
8804 Can	0.0	0.0	0.0	0.0	0.0	0.0	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.0	Projected 0.0	Total 0.0			Final Form	Stored 0.2	Projected 0.0	Total 0.2				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description As result of the shutdown of plutonium operations at RFP in November, 1989, several hundred plastic bottles and several tanks of process liquids remained in storage.

Waste Stream Source Description The miscellaneous liquids waste form includes uranium solutions from criticality laboratories (IDC 504).

Item Description Code 508

IDC 508 is hydrochloric acid (HCl) containing plutonium generated by various process operations and glovebox-cleaning operations using HCl. Process operations and glovebox-cleaning operations were defined based on preliminary analytical results.

IDC 508 was generated in Cation Exchange in Building 771 from washing residual impurities from the resin with dilute nitric acid.

Chemical Technology in Building 771 generated miscellaneous chloride acid solutions from Batch Chloride Dissolution. This process dissolved plutonium oxide with hydrochloric acid.

Dicesium hexachloroplutonate (DCHP) preparation in Building 371 also generated IDC 508. This process produced DCHP, a salt used to remove americium from nonspecification and impure plutonium oxide. The oxide was dissolved in hydrochloric acid and filtered. The filtrate was then precipitated using cesium chloride and sodium nitrite in hydrochloric acid and then filtered again. Plutonium was recovered from the DCHP precipitation filtrate through chloride anion exchange. This was achieved by processing the solution through ion columns, and the plutonium loaded onto the anion exchange resin while most of the impurities stayed in the solution. This solution then left the column as effluent (IDC 501). The ion column was later washed to release the chloride eluate (IDC 508).

Peroxide Precipitation in Building 779 reacted ion exchange effluent with hydrogen peroxide to produce plutonium peroxide, which was then calcined to produce plutonium oxide. The plutonium peroxide precipitate was filtered and washed.

Residue Recovery Extraction in Building 779 recovered actinides using aqueous leaching techniques. Hydrofluoric acid solutions containing aluminium fluoride, cesium chloride, calcium fluoride, and sodium nitrate were generated.

IDC 508 is mixed residue only.

Item Description Code 527

IDC 527 is caustic waste solutions consisting of sodium hydroxide or potassium hydroxide. Low-Level Dissolution in Building 771 used potassium hydroxide for flushing the condenser when dissolving incinerator ash. H-4 Support Vacuum Systems used potassium hydroxide in an aqueous solution as a seal liquid. Vacuum Systems also used a seal liquid made up of water only.

IDC 527 is mixed residue only.

Item Description Code 541

Building 371

The Building 371 analytical laboratory receives liquid and solid samples from the entire plant site. Samples that are destined for Building 881 are analyzed in Building 371 to screen out those with high levels of radioactivity. Sludge and aqueous samples from Building 374 are analyzed for total alpha activity and plutonium, uranium, and americium content. Prior to analysis, the sludges are dissolved in nitric acid, hydrogen fluoride, or hydrochloric acid. Reagents are also used in sample preparation. Unused portions or excess prepared sample are placed in 4-liter plastic bottles.

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Building 559

The Building 559 analytical laboratory also receives liquid and solid samples from the entire plant site. Samples are analyzed for various ions, iron, silicon, isotopic composition, and americium, gallium, neptunium, plutonium, uranium, and other metals (Resource Conservation and Recovery Act [RCRA]-regulated and nonregulated). Solid samples are dissolved in a variety of acids, including nitric and hydrochloric. Other chemicals used in the laboratory include methanol, chloroform, and other organic solvents; titanium trichloride; ceric ammonium nitrate; sodium hydroxide; silver chloride; silver nitrate; and various metals standards. Unused portions or excess prepared samples are placed in 4-liter plastic bottles. Metal standards are also placed in the bottles.

Building 771

The Building 771 analytical laboratory also receives liquid and solid samples from the entire plant site. Samples are analyzed for various metals and ions, pH, and radioactivity. The principal chemicals used in the lab include sodium hydroxide, hydrochloric acid, nitric acid, cyclohexane, trioctyl phosphine oxide, yttrium, and various metal standards. Unused portions or excess prepared samples are placed in 4-liter plastic bottles. Metal standards are also placed in the bottles.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0545

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W112	Handling	CH	Stream Name	Solidified Lab Waste/TRU			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S3160

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	N/A	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	0.96	0.96	0.96	Residues:	N/A		Pu-238	3.53E-02
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Pu-239	7.51E-01
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	N		Pu-240	1.72E-01
	Other Inorganic Materials	23.87	23.87	23.87	Source:	Decontamination and Decommissioning		Pu-241	4.40E+00
	Cellulosics	0.00	0.00	0.00				Pu-242	2.18E-05
	Rubber	0.00	0.00	0.00					
	Plastics	17.18	17.18	17.18					
	Solidified, Inorganic Matrix	413.85	413.85	413.85					
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.43							
	Packaging Material, Plastic	23.87							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0545													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.4	0.0	0.0	0.0	0.0	0.4	55 Gallon Drum	0.4	0.0	0.0	0.0	0.0	0.4
As-Generated	Stored 0.4	Projected 0.0	Total 0.4			Final Form	Stored 0.4	Projected 0.0	Total 0.4				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description Non-hazardous solid excess chemicals contaminated with plutonium to TRU concentrations. Chemicals are expired or off-specification in some manner and are therefore not useable.

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0601

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-TT0601	Handling	CH	Stream Name	N/A			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Inorganic Non-Metal	Waste Matrix Code	S5123

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	6.70	1.91	19.09	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	90.70	90.70	90.70	
Other Inorganic Materials	113.57	1.91	654.91	
Cellulosics	102.83	12.89	167.07	
Rubber	0.00	0.00	0.00	
Plastics	36.16	7.35	90.69	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.00	0.00	0.00	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	525.22			
Packaging Material, Plastic	23.87			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	118
Residues:	N/A	
Asbestos:	N/A	
PCBs:	N/A	
Source:	N/A	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	4.33E+00
Np-237	5.49E-05
Pu-238	9.37E-01
Pu-239	2.08E+01
Pu-240	4.83E+00
Pu-241	1.10E+02
Pu-242	5.71E-04
U-234	1.01E-05
U-235	3.26E-07
U-238	2.89E-09

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0601													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
POC / 55 gallon	2.7	0.0	0.0	0.0	0.0	2.7	55 Gallon POCs	2.7	0.0	0.0	0.0	0.0	2.7
As-Generated	Stored 2.7	Projected 0.0	Total 2.7			Final Form	Stored 2.7	Projected 0.0	Total 2.7				

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TWBIR ID: RF-TT0601

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description	N/A
Waste Stream Source Description	N/A
Current Container Comments	N/A
EPA Comments	N/A
Management Comments	Waste Stream currently exists in the TWBIR as a residue, (i.e., RF-TRXXXX), but is being revised to transuranic, (i.e., RF-TTXXXX).
Acceptance Comments	N/A
Final Form Comments	N/A

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TWBIR ID: RF-TT0802

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W112	Handling	CH	Stream Name	Solidified Lab Waste/TRU			Inventory Date	9/30/2002	
Local ID	IDC 802	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3190

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	113	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	0.00	0.00	0.00	Residues:	No		Am-241	2.74E+01
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	No		Pu-238	3.65E+00
	Other Metal/Alloys	0.00	0.00	0.00	PCBs:	No		Pu-239	7.82E+01
	Other Inorganic Materials	1235.99	1168.05	1311.26	Source:	Pollution Control or Waste Treatment Process		Pu-240	1.78E+01
	Cellulosics	0.00	0.00	0.00				Pu-241	4.55E+02
	Rubber	0.00	0.00	0.00				Pu-242	2.25E-03
	Plastics	17.18	17.18	17.18				U-235	9.68E-04
	Solidified, Inorganic Matrix	1205.29	1120.32	1291.68				U-238	4.18E-06
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	137.36							
	Packaging Material, Plastic	23.94							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0802													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	53.5	1.0	0.0	0.0	0.0	54.5	55 Gallon Drum	53.6	0.0	0.0	0.0	0.0	54.6
Drum / 85 gallon	1.3	0.0	0.0	0.0	0.0	1.3	85 Gallon Drum	1.3	0.0	0.0	0.0	0.0	1.3
As-Generated	Stored	54.7	Projected	1.0	Total	55.8	Final Form	Stored	54.9	Projected	1.0	Total	55.9

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description IDC 802 is a cemented final waste form.

Waste Stream Source Description IDC No. 802. This waste stream is liquid waste solidified with Portland Cement. This waste consists of waste liquids from the analytical labs, research and development laboratories, and maintenance shops which are packaged and sent to Building 774 for immobilization with Portland cement and absorbent cement. These are wastes which are incompatible with the process collection system and the liquid waste treatment plant. Acidic wastes are neutralized before immobilization. Immobilization is done in 55-gallon drums. Approximately 21 gallons of waste are added to each drum prior to storage. This waste stream is newly identified since the Storage and Inventory Report.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0809

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W122	Handling	CH	Stream Name	Organic Resins/TRU			Inventory Date	9/30/2002	
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Organics		Waste Matrix Code	S3190

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	2.27	1.43	4.77	
Aluminum-Base Metal/Alloys	0.00	0.00	0.00	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	4.77	4.77	4.77	
Cellulosics	0.00	0.00	0.00	
Rubber	0.00	0.00	0.00	
Plastics	25.99	6.68	62.53	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	121.07	47.73	265.40	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	138.45			
Packaging Material, Plastic	25.89			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	126
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Materials Production/Recovery Effluents	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	2.74E+01
Pu-238	3.65E+00
Pu-239	7.82E+01
Pu-240	1.78E+01
Pu-241	4.55E+02
Pu-242	2.25E-03
U-235	9.68E-04
U-238	4.18E-06

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0809													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	2.5	1.0	0.0	0.0	0.0	3.5	55 Gallon Drum	2.5	0.0	0.0	0.0	0.0	3.5
As-Generated	Stored 2.5	Projected 1.0				Total 3.5	Final Form	Stored 2.5	Projected 1.0				Total 3.5

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TWBIR ID: RF-TT0809

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description It consists of unleached resin (IDC 430) and leached resin (IDC 431).

Waste Stream Source Description Organic residues were generated at RFETS by process treatments in Buildings 371 and 771 and encompass IDCs 430 and 431. The purification processes generated unleached resin, IDC 430. There are about eight drums of this IDC in storage. The approximate dates of generation for this IDC began on October 24, 1986. The IDC 431, leached resin, was also generated by the cation exchange and anion exchange processes in Buildings 371 and 771. There are about one hundred and thirty containers of IDC 431 material in storage. The approximate dates of generation for this IDC began on July 31, 1987. Additional information specific to the ion-exchange resins were important to the plutonium purification processes at RFETS. Plutonium-contaminated materials were often dissolved in nitric acid and processed through ion exchange. The ion-exchange resin contained in an ion-exchange column was charged with highly concentrated nitric acids by trickling this solution through the columns. A plutonium-contaminated solution was then trickled through the column. The charged resin beads attracted the plutonium from the contaminated solution to the surface of the resin bead. The loaded resin beads were then leached by trickling another nitric acid solution through the tube. This final nitric solution drew the plutonium from the beads into solution and allowed for purification of the plutonium. The resin was periodically replaced when this process had depleted the efficiency of the resin. The ion exchange resins in use at Rocky Flats were generally small plastic (polystyrene) beads in which long-chain organic compounds with an activated group are imbedded (such as Dowex 1 x 2).

Item Description Code 430--Resin, Unleached

Unleached resin, IDC 430, was produced when the resin in ion exchange columns was replaced. Though this IDC is titled "unleached" resin, the generators of resins confirm that all resins were rinsed with, at least, weak acid before the resins were removed from the columns.

Item Description Code 431--Resin, Leached

Leached resin, IDC 431, was produced when the resin in ion exchange columns were replaced. The resin leached (rinsed) with water before the resin was removed from the columns.

Item Description Code 809-Cemented Resins

IDC 430 and 431 are cemented into waste forms IDC 809 due to being fine particulate nature. The solid waste form will be looked at to make sure it meets the WIPP WAC criteria.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0821

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W101	Handling	CH	Stream Name	Combustibles/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5390

EPA Codes
As-Generated
N/A

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	1.01	0.32	38.19	
Aluminum-Base Metal/Alloys	1.35	0.33	15.71	
Other Metal/Alloys	0.00	0.00	0.00	
Other Inorganic Materials	1.90	0.37	40.57	
Cellulosics	6.10	4.31	12.89	
Rubber	8.60	0.42	143.15	
Plastics	5.30	0.84	57.28	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	1.91	8.26	8.26	
Soils	0.00	0.00	0.00	
Packaging Material, Steel	149.37			
Packaging Material, Plastic	8.05			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	116
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Other/Multiple Sources	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	8.79E-01
Np-237	6.43E-06
Pu-238	2.52E-01
Pu-239	5.81E+00
Pu-240	1.33E+00
Pu-241	2.57E+01
Pu-242	1.36E-04
U-234	6.80E-04
U-235	2.32E-05
U-238	6.04E-07

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0821													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	Total
1/2 Wood Box	23.9	0.0	0.0	0.0	0.0	23.9	55 Gallon Drum	50.7	0.0	0.0	0.0	0.0	52.7
Box / Wood	123.6	0.0	0.0	0.0	0.0	123.6	Standard Waste Box	160.6	0.0	0.0	0.0	0.0	175.8
Drum / 55 gallon	50.5	2.1	0.0	0.0	0.0	52.6							
Standard Waste Box	11.4	15.2	0.0	0.0	0.0	26.6							
As-Generated	Stored	209.4	Projected	17.3	Total	226.7	Final Form	Stored	211.3	Projected	17.2	Total	228.5

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TWBIR ID: RF-TT0821

Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills.

Waste Stream Source Description IDC 302 includes Benelex and Plexiglas. Benelex is a very dense organic material used for radiation shielding around gloveboxes and tanks. In some cases, Benelex is laminated with lead. However, none of the containers identified here have lead lamination. The Benelex used by RFETS is usually 2 inches thick, although occasionally two 2-inch thick pieces were bolted together to increase shield thickness. Plexiglas is a trade name used to describe a family of polycarbonate materials used for radiation shielding in glovebox windows and equipment enclosures. Plexiglas glovebox windows are generally 2- to 4-inches thick and can be in various sizes and shapes.

Benelex and Plexiglas in the inventory were generated in Buildings 371, 707, 771, and 776. The IDC was generated as waste during replacement of shielding or stripout of unnecessary shielding during the installation of new gloveboxes or tanks.

IDC 330 is dry combustibles such as cloth, paper, and wood. This IDC changes to 821, 831, 851, or 861 at the point of assay, depending upon radiological content

IDC 336, wet combustibles, are materials such as, paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent an accumulation of free liquid. This IDC changes to 822, 832, 833, or 862 at the point of assay.

IDC 337 is PVC sheeting, poly bottles, supplied-air suits, polyethylene, and other plastics. This IDC changes to 825, 833, 853, or 863 at the point of assay.

IDC 487 is classified plastic shapes used in handling and shipping. If TRU, shapes must be declassified prior to shipment. If LLW, IDC must be authorized by NTS prior to shipment. Classified Waste drums must be stenciled and handled according to Safeguards and Security procedures.

IDC 821 is dry combustibles such as paper, cloth, and wood.

IDC 822 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

ICD 825 is PVC sheeting, poly bottles, supplied-air suits, and other plastic.

IDC 831 is dry combustibles such as paper, cloth, and wood.

IDC 832 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

IDC 833 is PVC sheeting, poly bottles, supplied-air suits, and other plastics.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Final Form Comments N/A

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Annex J

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W101	Handling	CH	Stream Name	Combustibles/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5390

EPA Codes	
As-Generated	
N/A	

Waste Material Parameters (kg/m3)				
Material Parameter	Average	Lower	Upper	
Iron-Base Metal/Alloys	2.43	0.05	23.87	
Aluminum-Base Metal/Alloys	1.05	0.91	2.39	
Other Metal/Alloys	1.06	1.43	1.43	
Other Inorganic Materials	33.40	0.29	197.62	
Cellulosics	10.68	4.31	12.89	
Rubber	10.05	0.32	46.68	
Plastics	20.23	0.95	193.32	
Solidified, Inorganic Matrix	0.00	0.00	0.00	
Cement (Solidified)	0.00	0.00	0.00	
Vitrified	0.00	0.00	0.00	
Solidified, Organic Matrix	0.21	0.29	0.29	
Soils	10.21	13.75	13.75	
Packaging Material, Steel	142.06			
Packaging Material, Plastic	21.73			
Packaging Material, Lead	0.00			
Packaging Material, Steel Plug	0.00			

Final Waste Form Descriptors		TRUCON Codes
Category:	Defense TRU Waste	116
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Other/Multiple Sources	

Final Form Radionuclides	
Isotope	Typical Concentration (Ci/m3)
Am-241	1.11E+00
Np-237	9.49E-06
Pu-238	1.87E-01
Pu-239	4.16E+00
Pu-240	9.47E-01
Pu-241	2.18E+01
Pu-242	1.18E-04
U-234	7.02E-04
U-235	2.26E-05
U-238	2.27E-06

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0822													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	Total
Box / Wood	12.7	0.0	0.0	0.0	0.0	12.7	55 Gallon Drum	100.9	0.0	0.0	0.0	0.0	141.7
Drum / 55 gallon	100.7	40.8	0.0	0.0	0.0	141.4	85 Gallon Drum	0.3	0.0	0.0	0.0	0.0	0.3
Drum / 85 gallon	0.3	0.0	0.0	0.0	0.0	0.3	Standard Waste Box	28.4	0.0	0.0	0.0	0.0	49.1
Standard Waste Box	20.9	20.9	0.0	0.0	0.0	41.8							
As-Generated	Stored	134.6	Projected	61.7	Total	196.2	Final Form	Stored	129.6	Projected	61.6	Total	191.2

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills.

Waste Stream Source Description IDC 302 includes Benelex and Plexiglas. Benelex is a very dense organic material used for radiation shielding around gloveboxes and tanks. In some cases, Benelex is laminated with lead. However, none of the containers identified here have lead lamination. The Benelex used by RFETS is usually 2 inches thick, although occasionally two 2-inch thick pieces were bolted together to increase shield thickness. Plexiglas is a trade name used to describe a family of polycarbonate materials used for radiation shielding in glovebox windows and equipment enclosures. Plexiglas glovebox windows are generally 2- to 4-inches thick and can be in various sizes and shapes.

Benelex and Plexiglas in the inventory were generated in Buildings 371, 707, 771, and 776. The IDC was generated as waste during replacement of shielding or stripout of unnecessary shielding during the installation of new gloveboxes or tanks.

IDC 330 is dry combustibles such as cloth, paper, and wood. This IDC changes to 821, 831, 851, or 861 at the point of assay, depending upon radiological content

IDC 336, wet combustibles, are materials such as, paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent an accumulation of free liquid. This IDC changes to 822, 832, 833, or 862 at the point of assay.

IDC 337 is PVC sheeting, poly bottles, supplied-air suits, polyethylene, and other plastics. This IDC changes to 825, 833, 853, or 863 at the point of assay.

IDC 487 is classified plastic shapes used in handling and shipping. If TRU, shapes must be declassified prior to shipment. If LLW, IDC must be authorized by NTS prior to shipment. Classified Waste drums must be stenciled and handled according to Safeguards and Security procedures.

IDC 821 is dry combustibles such as paper, cloth, and wood.

IDC 822 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

ICD 825 is PVC sheeting, poly bottles, supplied-air suits, and other plastic.

IDC 831 is dry combustibles such as paper, cloth, and wood.

IDC 832 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

IDC 833 is PVC sheeting, poly bottles, supplied-air suits, and other plastics.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W100	Handling	CH	Stream Name	Cemented Sludge/TRU			Inventory Date	9/30/2002	
Local ID	IDC 823	Waste Type	TRU	Generator Site	RF	Final Waste Form	Solidified Inorganics		Waste Matrix Code	S3900

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	116	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	36.82	8.59	150.41	Residues:	No		Am-241	2.75E+00
	Aluminum-Base Metal/Alloys	6.86	0.91	10.41	Asbestos:	No		Np-237	1.82E-05
	Other Metal/Alloys	12.60	2.58	21.24	PCBs:	No		Pu-238	4.54E-01
	Other Inorganic Materials	21.10	8.50	44.39	Source:	Pollution Control or Waste Treatment Process		Pu-239	9.69E+00
	Cellulosics	0.00	0.00	0.00				Pu-240	2.22E+00
	Rubber	1.53	1.53	1.53				Pu-241	5.64E+01
	Plastics	30.65	19.52	55.37				Pu-242	2.80E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	2.37E-05
	Cement (Solidified)	0.00	0.00	0.00				U-235	3.25E-05
	Vitrified	0.00	0.00	0.00				U-238	3.78E-05
	Solidified, Organic Matrix	18.40	0.96	40.24					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.56							
	Packaging Material, Plastic	32.46							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0823													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.2	0.0	0.0	0.0	0.0	0.2	55 Gallon Drum	0.2	0.0	0.0	0.0	0.0	0.2
As-Generated	Stored 0.2	Projected 0.0	Total 0.2			Final Form	Stored 0.2	Projected 0.0	Total 0.2				

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TWBIR ID: RF-TT0823

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste consists of cemented miscellaneous sludge (IDC 823)

Waste Stream Source Description IDC 823, cemented miscellaneous sludge, was generated when sludge designated as inorganic particulate and sludgy material that was below the economic discard limit (EDL) was placed in 1-gallon paint cans and covered with Portland cement or mixed with cement into a block. The first scenario was conducted in Building 771 and the second in Building 371. This could have included IDCs 290-299 and was done to meet the Waste Isolation Pilot Plant (WIPP) waste acceptance criteria. The material came primarily from Nash pumps in Building 771 and included vacuum grease and oily sludge. One drum of the material was apparently generated when the pit in front of Building 707 was cleaned out. However, the contents of the pit sludge could not be ascertained. One drum was generated in the Size Reduction Vault in Building 776. Six drums were generated in Bulding 774 and stored in Building 371.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TWBIR ID: RF-TT0824

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	METAL/TRU			Inventory Date	9/30/2002	
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal			
EPA Codes		Waste Material Parameters (kg/m3)			Final Waste Form Descriptors		TRUCON Codes		Final Form Radionuclides	

As-Generated
N/A

Material Parameter	Average	Lower	Upper
Iron-Base Metal/Alloys	278.52	12.70	1492.26
Aluminum-Base Metal/Alloys	36.18	0.31	222.36
Other Metal/Alloys	14.74	0.14	95.59
Other Inorganic Materials	5.18	0.15	36.99
Cellulosics	6.74	4.31	25.78
Rubber	4.09	0.05	29.64
Plastics	11.63	1.29	73.51
Solidified, Inorganic Matrix	0.00	0.00	0.00
Cement (Solidified)	0.00	0.00	0.00
Vitrified	0.00	0.00	0.00
Solidified, Organic Matrix	5.89	2.01	7.88
Soils	0.00	0.00	0.00
Packaging Material, Steel	148.67		
Packaging Material, Plastic	11.54		
Packaging Material, Lead	0.00		
Packaging Material, Steel Plug	0.00		

Category:	Defense TRU Waste	117
Residues:	No	
Asbestos:	No	
PCBs:	No	
Source:	Other/Multiple Sources	

Isotope	Typical Concentration (Ci/m3)
Am-241	3.69E-01
Np-237	3.65E-06
Pu-238	1.08E-01
Pu-239	2.35E+00
Pu-240	5.39E-01
Pu-241	1.30E+01
Pu-242	6.50E-05
U-234	5.06E-05
U-235	2.38E-06
U-238	3.43E-06

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0824

ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036	
1/2 Wood Box	8.0	0.0	0.0	0.0	0.0	8.0
Box / Metal	6.3	0.0	0.0	0.0	0.0	6.3
Box / Wood	6.3	0.0	0.0	0.0	0.0	6.3
Drum / 55 gallon	163.1	76.1	0.0	0.0	0.0	239.2
Standard Waste Box	323.0	273.6	0.0	0.0	0.0	596.6

ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036	
55 Gallon Drum	163.4	0.0	0.0	0.0	0.0	239.7
Standard Waste Box	338.3	0.0	0.0	0.0	0.0	610.5

Final Form	Stored	501.7	Projected	348.5	Total	850.2
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As-Generated	Stored	506.7	Projected	349.7	Total	856.4
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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste includes items such as gloveboxes and machinery, and empty containers. Items that are difficult to reduce to a size that would fit in a 55-gal. drum are placed in DOT 7A, Type A metal boxes. These drums are lined with a rigid polyethylene liner, fiberboard liner and several bag liners. The boxes are lined with a fiberboard and PVC liner.

Waste Stream Source Description IDC 479 is assigned to empty reusable cans generated in Building 559, 707, and 771 (containers currently in WEMS from these buildings). Stainless-steel cans were used to handle plutonium-contaminated material. Primary generation was through the use of these cans to manually transfer materials between gloveboxes. Cans that were introduced to the process were typically recycled and reused. There were no generation process descriptions in WSRIC for this waste in Buildings 559, 707, and 771. In Building 371, the Dicesium Hexachloroplutonate (DCHP) Process often used the cans for transferring materials into the stacker.

IDC 480 is assigned to line- and nonline-generated light metals generated in Building 371, 374, 444, 559, 707, 774, 776, 777, 779, 865, and 991 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance operation was inextricably linked with the generation of the material that created this IDC. The maintenance-generated materials were generated throughout the entire facility. Backlog containers of this IDC may contain a matrix of all light metals listed above.

IDC 481 was assigned to light, nonspecial source metals. This material consisted primarily of stainless-steel and aluminum equipment used throughout the plant; this equipment was rinsed to remove plutonium contamination. This IDC is no longer active and has been replaced by IDC 480. The three containers in inventory were generated in Buildings 771, 776, and 777 in November 1984.

IDC 484 was assigned to classified non-nuclear material scrap metal shapes made primarily of stainless steel and aluminum. Prior to 1987, IDC 484 included beryllium shapes. These items were generated in Buildings 777 and 779 during disassembly operations of site-return units. Buildings 444, 707, and 883 generated rejected parts. Containers in inventory were generated from February 1983 to May 1991.

IDC 485 was assigned to scrap D-38 classified metal shapes. Generation of this material occurred in Building 777 during disassembly of site-return units. Building 444 generated rejected parts. Containers in inventory were generated from July 1987 to August 1992.

IDC 486 was assigned to classified tooling for disposal. Generation of these tools occurred in Buildings 707 and 777. The material consists primarily of obsolete tooling including pot chucks and inspection gauges. Containers in inventory were generated from October 1982 to December 1992.

IDC 489 was assigned to scrap D-38 classified metal shapes generated in Buildings 777 and 779 during disassembly of site-return units. containers in inventory were generated from February 1986 to September 1990.

IDC 824 is assigned to transuranic light metals generated in Buildings 371, 559, 707, and 771 (containers currently in WEMS from these buildings). Light metals include aluminum, copper, iron, brass, bronze, galvanized metal, stainless steel, carbon steel, and other metal alloys contained in waste mechanical and electrical parts, tools, containers, scrap metals, piping, wire, cable, gauges, valves, foil, planchets, and a variety of other metal items.

Current Container Comments N/A

EPA Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Management Comments N/A

Acceptance Comments N/A

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W101	Handling	CH	Stream Name	Combustibles/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5390

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	116	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	2.31	0.05	105.49	Residues:	No		Am-241	7.44E-01
	Aluminum-Base Metal/Alloys	0.55	0.48	1.19	Asbestos:	No		Np-237	9.20E-06
	Other Metal/Alloys	2.00	0.10	12.32	PCBs:	No		Pu-238	1.52E-01
	Other Inorganic Materials	7.35	0.24	267.31	Source:	Other/Multiple Sources		Pu-239	3.46E+00
	Cellulosics	10.31	4.31	12.89				Pu-240	7.90E-01
	Rubber	30.57	0.14	214.95				Pu-241	1.68E+01
	Plastics	122.47	5.25	793.34				Pu-242	8.77E-05
	Solidified, Inorganic Matrix	1.95	2.77	2.77				U-234	1.28E-04
	Cement (Solidified)	0.00	0.00	0.00				U-235	4.15E-06
	Vitrified	0.00	0.00	0.00				U-238	2.79E-06
	Solidified, Organic Matrix	24.24	8.02	49.13					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	142.69							
	Packaging Material, Plastic	20.52							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0825													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
1/2 Wood Box	9.5	0.0	0.0	0.0	0.0	9.5	55 Gallon Drum	291.6	0.0	0.0	0.0	0.0	360.2
Box / Wood	63.4	0.0	0.0	0.0	0.0	63.4	Standard Waste Box	109.6	0.0	0.0	0.0	0.0	151.2
Drum / 55 gallon	291.0	68.4	0.0	0.0	0.0	359.4							
Standard Waste Box	36.1	41.8	0.0	0.0	0.0	77.9							
As-Generated	Stored	400.0	Projected	110.2	Total	510.3	Final Form	Stored	401.2	Projected	110.2	Total	511.4

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills.

Waste Stream Source Description IDC 302 includes Benelex and Plexiglas. Benelex is a very dense organic material used for radiation shielding around gloveboxes and tanks. In some cases, Benelex is laminated with lead. However, none of the containers identified here have lead lamination. The Benelex used by RFETS is usually 2 inches thick, although occasionally two 2-inch thick pieces were bolted together to increase shield thickness. Plexiglas is a trade name used to describe a family of polycarbonate materials used for radiation shielding in glovebox windows and equipment enclosures. Plexiglas glovebox windows are generally 2- to 4-inches thick and can be in various sizes and shapes.

Benelex and Plexiglas in the inventory were generated in Buildings 371, 707, 771, and 776. The IDC was generated as waste during replacement of shielding or stripout of unnecessary shielding during the installation of new gloveboxes or tanks.

IDC 330 is dry combustibles such as cloth, paper, and wood. This IDC changes to 821, 831, 851, or 861 at the point of assay, depending upon radiological content

IDC 336, wet combustibles, are materials such as, paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent an accumulation of free liquid. This IDC changes to 822, 832, 833, or 862 at the point of assay.

IDC 337 is PVC sheeting, poly bottles, supplied-air suits, polyethylene, and other plastics. This IDC changes to 825, 833, 853, or 863 at the point of assay.

IDC 487 is classified plastic shapes used in handling and shipping. If TRU, shapes must be declassified prior to shipment. If LLW, IDC must be authorized by NTS prior to shipment. Classified Waste drums must be stenciled and handled according to Safeguards and Security procedures.

IDC 821 is dry combustibles such as paper, cloth, and wood.

IDC 822 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

ICD 825 is PVC sheeting, poly bottles, supplied-air suits, and other plastic.

IDC 831 is dry combustibles such as paper, cloth, and wood.

IDC 832 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

IDC 833 is PVC sheeting, poly bottles, supplied-air suits, and other plastics.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Final Form Comments N/A

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W101	Handling	CH	Stream Name	Combustibles/TRU			Inventory Date	9/30/2002
Local ID	None	Waste Type	TRU	Generator Site	RF	Final Waste Form	Combustible	Waste Matrix Code	S5390

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	116	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	2.40	0.48	23.87	Residues:	No		Am-241	1.83E+00
	Aluminum-Base Metal/Alloys	2.14	0.86	2.82	Asbestos:	No		Np-237	1.18E-05
	Other Metal/Alloys	4.75	0.48	10.50	PCBs:	No		Pu-238	2.69E-01
	Other Inorganic Materials	78.92	0.48	301.01	Source:	Other/Multiple Sources		Pu-239	6.07E+00
	Cellulosics	12.85	10.98	12.89				Pu-240	1.38E+00
	Rubber	71.68	0.24	826.75				Pu-241	3.17E+01
	Plastics	23.43	1.43	186.16				Pu-242	1.69E-04
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-234	1.72E-04
	Cement (Solidified)	0.00	0.00	0.00				U-235	5.59E-06
	Vitrified	0.00	0.00	0.00				U-238	5.48E-06
	Solidified, Organic Matrix	253.04	253.04	253.04					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.51							
	Packaging Material, Plastic	30.84							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0832													
As-Generated Volumes						Final Form Volumes							
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.4	100.0	0.0	0.0	0.0	100.5	55 Gallon Drum	0.4	0.0	0.0	0.0	0.0	100.7
As-Generated	Stored 0.4	Projected 100.0	Total 100.5			Final Form	Stored 0.4	Projected 100.3	Total 100.7				

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description This waste consists mainly of cloth and paper products from cleanup of gloveboxes and spills.

Waste Stream Source Description IDC 302 includes Benelex and Plexiglas. Benelex is a very dense organic material used for radiation shielding around gloveboxes and tanks. In some cases, Benelex is laminated with lead. However, none of the containers identified here have lead lamination. The Benelex used by RFETS is usually 2 inches thick, although occasionally two 2-inch thick pieces were bolted together to increase shield thickness. Plexiglas is a trade name used to describe a family of polycarbonate materials used for radiation shielding in glovebox windows and equipment enclosures. Plexiglas glovebox windows are generally 2- to 4-inches thick and can be in various sizes and shapes.

Benelex and Plexiglas in the inventory were generated in Buildings 371, 707, 771, and 776. The IDC was generated as waste during replacement of shielding or stripout of unnecessary shielding during the installation of new gloveboxes or tanks.

IDC 330 is dry combustibles such as cloth, paper, and wood. This IDC changes to 821, 831, 851, or 861 at the point of assay, depending upon radiological content

IDC 336, wet combustibles, are materials such as, paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent an accumulation of free liquid. This IDC changes to 822, 832, 833, or 862 at the point of assay.

IDC 337 is PVC sheeting, poly bottles, supplied-air suits, polyethylene, and other plastics. This IDC changes to 825, 833, 853, or 863 at the point of assay.

IDC 487 is classified plastic shapes used in handling and shipping. If TRU, shapes must be declassified prior to shipment. If LLW, IDC must be authorized by NTS prior to shipment. Classified Waste drums must be stenciled and handled according to Safeguards and Security procedures.

IDC 821 is dry combustibles such as paper, cloth, and wood.

IDC 822 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

ICD 825 is PVC sheeting, poly bottles, supplied-air suits, and other plastic.

IDC 831 is dry combustibles such as paper, cloth, and wood.

IDC 832 is wet combustibles such as paper, cloth, and wood, which contain a discernible amount of moisture. Must be drained or wrung out prior to packaging to prevent accumulation of free liquid.

IDC 833 is PVC sheeting, poly bottles, supplied-air suits, and other plastics.

Current Container Comments N/A

EPA Comments N/A

Management Comments N/A

Acceptance Comments N/A

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Final Form Comments N/A

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TWBIR ID: RF-TT0854

TRU WASTE BASELINE INVENTORY WASTE PROFILE

HQ ID	RF-W109	Handling	CH	Stream Name	Metal/TRU			Inventory Date	9/30/2002
Local ID	N/A	Waste Type	TRU	Generator Site	RF	Final Waste Form	Uncategorized Metal		
Waste Matrix Code		S5111							

EPA Codes	Waste Material Parameters (kg/m3)				Final Waste Form Descriptors		TRUCON Codes	Final Form Radionuclides	
As-Generated	Material Parameter	Average	Lower	Upper	Category:	Defense TRU Waste	117	Isotope	Typical Concentration (Ci/m3)
N/A	Iron-Base Metal/Alloys	0.00	0.00	0.00	Residues:	N/A		Pu-238	1.84E-02
	Aluminum-Base Metal/Alloys	0.00	0.00	0.00	Asbestos:	N		Pu-239	3.92E-01
	Other Metal/Alloys	412.90	412.90	412.90	PCBs:	N		Pu-240	8.99E-02
	Other Inorganic Materials	0.00	0.00	0.00	Source:	Decontamination and Decommissioning		Pu-241	2.30E+00
	Cellulosics	12.89	12.89	12.89				Pu-242	1.14E-05
	Rubber	0.00	0.00	0.00				U-234	2.65E-04
	Plastics	0.00	0.00	0.00				U-235	3.06E-05
	Solidified, Inorganic Matrix	0.00	0.00	0.00				U-238	2.38E-03
	Cement (Solidified)	0.00	0.00	0.00					
	Vitrified	0.00	0.00	0.00					
	Solidified, Organic Matrix	0.00	0.00	0.00					
	Soils	0.00	0.00	0.00					
	Packaging Material, Steel	138.57							
	Packaging Material, Plastic	32.46							
	Packaging Material, Lead	0.00							
	Packaging Material, Steel Plug	0.00							

Waste Volume Detail (Cubic meters) for TWBIR ID : RF-TT0854													
As-Generated Volumes							Final Form Volumes						
ContainerType	Stored End of CY 2001	Projected				Total	ContainerType	Stored End of CY 2001	Projected				Total
		2002-2006	2007-2016	2017-2026	2027-2036				2002-2006	2007-2016	2017-2026	2027-2036	
Drum / 55 gallon	0.6	1.0	0.0	0.0	0.0	1.7	55 Gallon Drum	0.6	0.0	0.0	0.0	0.0	1.7
As-Generated	Stored 0.6	Projected 1.0	Total 1.7				Final Form	Stored 0.6	Projected 1.0	Total 1.7			

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TRU WASTE BASELINE INVENTORY WASTE PROFILE

Waste Stream Description "Unclassified beryllium metal consists of scrap beryllium metal pieces, chips and turnings from repackaging and decontamination and decommissioning operations."

Waste Stream Source Description N/A

Current Container Comments N/A

EPA Comments N/A

Management Comments New Waste Stream being added to TWBIR

Acceptance Comments N/A

Final Form Comments N/A
