APPENDIX C

APPENDIX C

TWBIR

DATA REQUIREMENTS

REVISION 8

APRIL 14, 1995

1.1.1 DOE Site Name: _____

2.1.1 Unique HQ WS ID: _____

2.1.2 Site WS ID: _____

2.1.3 Waste Stream Name: _____

2.1.4 PSTP WS ID: _____

2.3 Waste Stream Source

2.3.1 Waste Stream Source Description:

_____

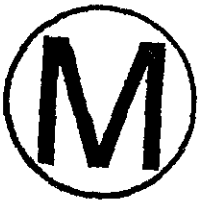
_____

_____

_____

2.3.2 Source Category (choose only one)

- o Pollution Control or Waste Treatment Process
- o Materials Production/Recovery Effluents
- o Facility/Equipment Operation and Maintenance Waste
- o Discarding Excess/Expired Materials
- o Analytical Laboratory Waste
- o R&D/R&D Laboratory Waste
- o Remediation/D&D Waste
- o Spill Clean-ups/Emergency Response Actions
- o Other/Multiple Sources
- o Source Information Not Compiled
- o Source Unknown



2.3.3 Name of the site(s) that generated this waste stream: _____

3.1 Waste Stream Description:

_____

_____

_____

_____

_____

3.2.1 Waste Type: o HLW o MTRU o TRU o MLLW o M11e(2)

3.2.2 Contact Handled or Remote Handled: o CH o RH

3.2.6 Radionuclides

Radionuclide	Concentration			Basis
	Typical	Range	Units	(S, P, B or U)

3.4.3 EPA/State Regulated Contaminant List

EPA/ STATE CODE	LDR CODE	CONTAMINANT NAME	CONCENTRATION (Typical or Range)	UNIT	BASIS S/P/B/U	Total or Extract

S = Sampling; P = Process Knowledge; B = Both; U = Unknown

3.4.4 Does this waste stream contain PCB's?
o Yes o No o Unknown

3.4.4.1 Is this waste stream subject to TSCA regulations for PCB's?
o Yes o No o Unknown

3.4.4.2 If yes, indicate the PCB concentration range (ppm):
o <50 o 50≤PCB's<500 o ≥500 o Unknown

3.4.6 Does this waste stream contain asbestos?
o Yes o No o Unknown

3.4.6.1 Is this waste stream subject to TSCA or CAA regulations for asbestos?
o Yes o No o Unknown

3.4.6.2 If asbestos is known, or believed, to be present, provide details on the condition of the asbestos:

8. WIPP Transuranic Waste Baseline Inventory Report (WTWBIR) Data Requirements

8.1 Provide the WTWBIR WS ID numbers that apply to this MWIR WS:

8.1.1 _____
8.1.2 _____
8.1.3 _____
8.1.4 _____

8.2 WTWBIR Level of Information (Repeat this section for each WTWBIR WS ID listed in section 8.1)

8.2.1 WTWBIR WS ID: _____ WTWBIR Waste Stream Name: _____

8.2.2 Unique HQ WS ID: _____ MWIR Waste Stream Name: _____

Waste Stream Difference Comments: _____

_____

_____

8.2.3 Final Waste Form Group (Select the one that best represents the overall waste stream):

___ Combustible
___ Filter
___ Graphite
___ Heterogeneous
___ Inorganic Non-Metal
___ Lead/Cadmium Metal Waste
___ Salt Waste
___ Soils
___ Solidified Inorganics
___ Solidified Organics
___ Uncategorized Metal
___ Unknown

8.2.4 Does this WTWBIR waste stream contain residues?

___ Yes
___ No

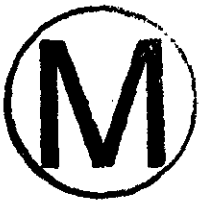
8.2.5 What best describes the source of this WTWBIR waste stream (Check only one)?

___ Commercial TRU Waste
___ Defense TRU Waste
___ Non-Defense TRU Waste
___ Unknown

8.2.6 What is the No Migration Variance Petition (NMVP) ID for this WTWBIR waste stream? _____

8.2.7 What TRUCON codes apply to this WTWBIR waste stream?

_____
_____
_____
_____



8.2.8 What final waste form IDC's apply to this WTWBIR waste stream?

_____
_____
_____
_____

8.2.9 Is the information for this WTWBIR waste stream the same as provided for the MWIR waste stream for section 2.3?

____ Yes
____ No

If Yes, go to section 8.2.10
If No, continue

8.2.9.1 Waste Stream Source Description

_____
_____
_____
_____

8.2.9.2 Source Category (choose only one)

____ Pollution Control or Waste Treatment Process
____ Materials Production/Recovery Effluents
____ Facility/Equipment Operation and Maintenance Waste
____ Discarding Excess/Expired Materials
____ Analytical Laboratory Waste
____ R&D/R&D Laboratory Waste
____ Remediation/D&D Waste
____ Spill Clean-ups/Emergency Response Actions
____ Other/Multiple Sources
____ Source Information Not Compiled
____ Source Unknown

8.2.10 Is the information for this WTWBIR waste stream the same as provided for the MWIR waste stream in section 3.4.3?

____ Yes
____ No

If Yes, go to section 8.2.11
If No, continue

8.2.10.1 EPA/State Regulated Contaminant List						
EPA/ STATE CODE	LDR CODE	CONTAMINANT NAME	CONCENTRATION (Typical or Range)	UNIT	BASIS S/M/E/U	Total or Extract

S = Sampling; P = Process Knowledge; E = Both; U = Unknown

8.2.11 Does this WTWBIR waste stream contain the following in concentrations greater than 1 wt%?		
Component	Y/N	Estimated Concentration (wt%)
Nitrates		
Sulfates		
Phosphate		

8.2.12 List the container types and sizes that are used/have been used/will be used to store this WTWBIR waste stream (e.g., Drum/55 gal; Box/4 x 4 x 7 ft; box/112 ft3; SWB):		
Current Container Type/Size:	Radionuclides same as 3.2.6? (Y/N)	Comments:

M

8.2.13 Select the container types that will be used to ship the final forms of this WTWBIR waste stream to WIPP (indicate all that apply):		
Container:	(Y/N)	Radionuclides same as 3.2.6? (Y/N)
55 Gallon Drum		
Standard Waste Box		
SWB used to overpack 55 gallon drums		
RH Canister		
RH Canister used to overpack 55 gallon drums		
RH Canister used to overpack 30 gallon drums		

8.2.14 Current Container Information for this WTWBIR waste stream:

8.2.14.1 Current Container Type/Size: _____

8.2.14.1.1 Material of Construction (Check all that apply)?

___ Cement
___ Plastic
___ Steel, Carbon
___ Steel, Galvanized
___ Steel, Stainless
___ Wood
___ Other: _____

8.2.14.1.2 Liner Types (check all that apply):

___ Bag
___ Drum
___ Rigid liner
___ Shielding
___ None

8.2.14.1.3 Liner Material (check all that apply):

___ Cement
___ Fiberboard
___ HDPE
___ Lead
___ None
___ Plastic
___ Steel
___ Wood
___ Other: _____

M

8.2.14.1.4 Internal Volume (payload volume) per container (M3): ____

NOTE: If the current container type includes several sizes, use the average internal volume of all the sizes (e.g., 55 gal + 30 gal + 70 gal = 52 gal X 0.0038 M3/gal = 0.20 M3).

8.2.14.1.5 Estimated % containers less than 350 lb/container (required only for drums):

____

8.2.14.1.6 Estimated % containers between 350 and 500 lbs/container (required only for drums): ____

8.2.14.1.7 Estimated % of containers with less than 23 Pu-239 Fissile Gram Equivalents (required only for drums): _____

8.2.14.1.8 Estimated % of containers with between 23 and 200 Pu-239 Fissile Gram Equivalents (required only for drums): _____

8.2.14.1.9 Number Currently in storage: _____

8.2.14.1.10 Date of this inventory: _____

8.2.14.1.11 Total Number of these containers projected from date of inventory to end of 2022 (Do not include the current inventory): _____

8.2.14.1.12 Estimated TRU Waste Generation by number of containers:		
WTWBIR WS ID:		
Container Type/Size:		
Year	**Number of Containers Projected**	**Comments**
1993	(*)	
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		

2008		
2009		
2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		

(*) Indicate 0 if the entire calendar year is included in the "Number Currently in Storage".

8.2.14.1.13 WAC Revision 3 Certifiability

8.2.14.1.13.1 Is all of this current container type/size certifiable to WIPP WAC Revision 3?

____ Yes (100% of the containers are certifiable)
____ No

If Yes, go to section 8.2.14.1.14
If No, continue

8.2.14.1.13.2 What % of these containers are non-certifiable? _____

8.2.14.1.13.3 For containers not certifiable to WIPP WAC Revision 3, is it due to:

8.2.14.1.13.3.1 Repackaging Required?

____ No (repackaging is not required)
____ Yes (repackaging is required)

If No, go to section 8.2.14.1.13.3.2
If Yes, continue

8.2.14.1.13.3.1.1 What % of the non-certifiable containers require repackaging?

____

8.2.14.1.13.3.1.2 WAC repackaging requirement table

Repackaging Cause:	Y/N	% of Containers affected (0 - 100)
Particulates		
Pu Equivalent		
Nonapproved Container		
Curies/Vol (RH)		
Dose Rates		
Liquids		
Explosives/Pyrophorics		
Surface Contamination		
Other: _____		

8.2.14.1.13.3.2 Treatment Required

____ No (treatment is not required)
____ Yes (treatment is required)

If No, go to section 8.2.14.1.14
If Yes, continue

8.2.14.1.13.3.2.1 What % of the non-certifiable containers require treatment?

____

8.2.14.1.13.3.2.2 WAC treatment requirements table		
Treatment Cause:	Y/N	% of Containers affected (0 - 100)
PCBs		
Corrosives		
Reactives		
Ignitables		
Liquids		
Particulates		
Other: _____		

8.2.14.1.14 TRAMPAC Certifiability

8.2.14.1.14.1 Is all of this current container type/size certifiable to TRAMPAC (shipment to WIPP via TRUPACT-II)?

____ Yes (100% of the containers are certifiable)
____ No

If Yes, go to section 8.2.14.2 or 8.2.15 (as applicable)
If No, continue

8.2.14.1.14.2 What % of these containers are non-certifiable? _____

8.2.14.1.14.3 For containers not certifiable to TRAMPAC (shipment to WIPP via TRUPACT-II) is it due to:

8.2.14.1.14.3.1 Filters/liner vents?

____ No (filters/liner vents not required)
____ Yes (filters/liner vents are required)

If No, go to section 8.2.14.1.14.3.2
If Yes, continue

8.2.14.1.14.3.1.1 What % of the non-certifiable containers require filters/liner vents? ____

8.2.14.1.14.3.2 Repackaging Required?

____ No (repackaging is not required)
____ Yes (repackaging is required)

If No, go to section 8.2.14.1.14.3.3
If Yes, continue

8.2.14.1.14.3.2.1 What % of the non-certifiable containers require repackaging? _____

8.2.14.1.14.3.2.2 TRAMPAC repackaging requirements table

Repackaging Cause:	Y/N	% of Containers affected (0 - 100)
Watt Limit		
Chemical Compatibility		
Liquids		
Packaging Configuration (*)		
Explosives/Pyrophorics		
Corrosives		
Compressed gases		
VOCs (flammable - 500 ppm limit)		
Dose Rate		
Shielding		
Not in TRUCON		
Nonapproved Container		
Other: _____		

(*) Sealed containers, layers of packaging per TRUCON, etc.

8.2.14.1.14.3.3 Treatment required?

_____ No (treatment is not required)
_____ Yes (treatment is required)

If No, go to section 8.2.14.2 or 8.2.15 (as applicable)
If Yes, continue

8.2.14.1.14.3.3.1 What % of the non-certifiable containers require treatment?

_____

8.2.14.1.14.3.3.2 TRAMPAC treatment requirements table		
Treatment Cause:	Y/N	% of Containers affected (0 - 100)
PCBs		
Corrosives		
Reactives		
Ignitables		
Liquids		
Particulates		
Other: _____		

8.2.14.1.14.3.4 Current Container comments:

_____

_____

_____

8.2.15 Final Waste Form Container information for this WTWBIR waste stream

8.2.15.1 Container Type: The final waste form is or will be packaged in WIPP acceptable 55 Gallon Drums?

____ No (Go to 8.2.15.2)
____ Yes, continue

8.2.15.1.1 Container Material (Check all that apply):

____ Steel, Carbon
____ Steel, Galvanized
____ Steel, Stainless
____ Other: _____

8.2.15.1.2 Liner Type (Check all that apply):

____ Bag
____ Drum
____ Rigid liner
____ Shielding
____ None

8.2.15.1.3 Liner Material (Check all that apply):

____ Cement
____ Fiberboard
____ HDPE
____ Lead
____ None
____ Plastic
____ Steel
____ Wood
____ Other: _____

8.2.15.1.4 Internal Volume (payload volume) per Container (M3): 0.208

8.2.15.1.5 Estimated % containers less than 350 lbs/container: ____

8.2.15.1.6 Estimated % containers between 350 and 500 lbs/container: ____

8.2.15.1.7 Estimated % of containers with less than 23 Pu-239 Fissile Gram Equivalents: ____

8.2.15.1.8 Estimated % of containers with between 23 and 200 Pu-239 Fissile Gram Equivalents: ____

8.2.15.1.9 Number Currently in storage: _____

8.2.15.1.10 Date of this inventory: _____

8.2.15.1.11 Total Number of these containers projected from date of inventory to the end of 2022 (Do not include the current inventory): _____

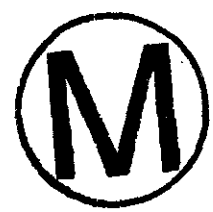
8.2.15.1.12 Comments (55 Gallon Drum):

_____

_____

8.2.15.1.13 Estimated Rates of TRU Waste Generation (Number of Containers)		
WTWBIR WS ID:		
Container Type: 55 Gallon Drum		
Year	Projected Number of Container Type	Comments
1993	(*)	
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		

2007		
2008		
2009		
2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		



NOTE: (*) Indicate 0 if the entire calendar year is included in the "Number Currently in Storage".

8.2.15.1.14 Typical Waste Material Weights for Final Waste Form (Kg/M3)				
WTWBIR WS ID:				
Container Type: 55 Gallon Drum				
Material Parameters	Average	Lower Limit	Upper Limit	Comment
Iron-Based Metal				
Aluminum-Based Metal				
Other Metal				

Other Inorganic Materials				
Cellulosics				
Rubber				
Plastics				
Solidified, Inorganic Matrix				
Solidified, Organic Matrix				
Soils				
Packaging Material, Steel	131	0	0	
Packaging Material, Plastic	37	0	0	

8.2.15.2 Container Type: The final waste form is or will be packaged in WIPP acceptable Standard Waste Boxes?

____ No (Go to 8.2.15.3)
____ Yes, continue

8.2.15.2.1 Container Material (Check all that apply):

XXXX Steel, Carbon
____ Steel, Galvanized
____ Steel, Stainless
____ Other: _____

8.2.15.2.2 Liner Type (Check all that apply):

____ Bag
____ Drum
____ Rigid liner
____ Shielding
____ None

8.2.15.2.3 Liner Material (Check all that apply):

____ Cement
____ Fiberboard
____ HDPE
____ Lead
____ None
____ Plastic
____ Steel
____ Wood
____ Other: _____

8.2.15.2.4 Internal Volume (payload volume) per Container (M3): 1.89

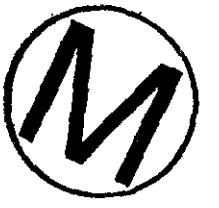
8.2.15.2.5 Number Currently in storage: _____

8.2.15.2.6 Date of this inventory: _____

8.2.15.2.7 Total Number of these containers projected from date of inventory to the end of 2022 (Do not include the current inventory): _____

8.2.15.2.8 Ccomments (Standard Waste Box):

8.2.15.2.9 Estimated Rates of TRU Waste Generation (Number of Containers)		
WTWBIR WS ID:		
Container Type: Standard Waste Box		
Year	Projected Number of Container Type	Comments
1993	(*)	
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		
2008		
2009		



2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		

(*) Indicate 0 if the entire calendar year is included in the "Number Currently in Storage".

8.2.15.2.10 Typical Waste Material Weights for Final Waste Form (Kg/M3)				
WTWBIR WS ID:				
Container Type: Standard Waste Box				
Material Parameters	Average	Lower Limit	Upper Limit	Comment
Iron-Based Metal				
Aluminum-Based Metal				
Other Metal				
Other Inorganic Materials				
Cellulosics				
Rubber				

Plastics				
Solidified, Inorganic Matrix				
Solidified, Organic Matrix				
Soils				
Packaging Material, Steel	154	0	0	
Packaging Material, Plastic	1.2	0	0	

8.2.15.3 Container Type: The final waste form is or will be packaged in WIPP acceptable Standard Waste Boxes (SWB) used to overpack 55 gallon drums?

____ No (Go to 8.2.15.4)
____ Yes, continue

8.2.15.3.1 Container Material (Check all that apply):

XXXX Steel, Carbon
____ Steel, Galvanized
____ Steel, Stainless
____ Other: _____

8.2.15.3.2 Liner Type (Check all that apply):

____ Bag
____ Drum
____ Rigid liner
____ Shielding
____ None

8.2.15.3.3 Liner Material (Check all that apply):

____ Cement
____ Fiberboard
____ HDPE
____ Lead
____ None
____ Plastic
____ Steel
____ Wood
____ Other: _____

8.2.15.3.4 Internal Volume (payload volume) per Container (M3): 1.89

8.2.15.3.5 Number Currently in storage: _____

8.2.15.3.6 Date of this inventory: _____

8.2.15.3.7 Total Number of these containers projected from the date of inventory to the end of 2022 (Do not include the current inventory):

_____

8.2.15.3.8 Comments (SWB used to overpack 55 gallon drums):

_____

_____

_____

_____

8.2.15.3.9 Estimated Rates of TRU Waste Generation (Number of Containers)		
WTWBIR WS ID:		
Container Type: SWB used to overpack 55 gallon drums		
Year	Projected Number of Container Type	Comments
1993	(*)	
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		
2008		

2009		
2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		

(*) Indicate 0 if the entire calendar year is included in the "Number Currently in Storage".

8.2.15.3.10 Typical Waste Material Weights for Final Waste Form (Kg/M3)				
WTWBIR WS ID:				
Container Type: SWB used to overpack 55 gallon drums				
Material Parameters	**Average**	**Lower Limit**	**Upper Limit**	**Comment**
Iron-Based Metal				
Aluminum-Based Metal				
Other Metal				
Other Inorganic Materials				
Cellulosics				

Rubber				
Plastics				
Solidified. Inorganic Matrix				
Solidified. Organic Matrix				
Soils				
Packaging Material. Steel	212	0	0	
Packaging Material. Plastic	17.5	0	0	

8.2.15.4 Container Type: The final waste form is or will be packaged in WIPP acceptable RH Canisters?

____ No (Go to 8.2.15.5)
____ Yes. continue

8.2.15.4.1 Container Material (Check all that apply):

XXXX Steel, Carbon
____ Steel, Galvanized
____ Steel, Stainless
____ Other: _____

8.2.15.4.2 Liner Type (Check all that apply):

____ Bag
____ Drum
____ Rigid liner
____ Shielding
____ None

8.2.15.4.3 Liner Material (Check all that apply):

____ Cement
____ Fiberboard
____ HDPE
____ Lead
____ None
____ Plastic
____ Steel
____ Wood
____ Other: _____

M

8.2.15.4.4 Internal Volume (payload volume) per Container (M3): 0.89

8.2.15.4.5 Number Currently in storage: _____

8.2.15.4.6 Date of this inventory: _____

8.2.15.4.7 Total Number of these containers projected from date of inventory to the end of 2022 (Do not include the current inventory): _____

8.2.15.4.8 Comments (RH Canister):

8.2.15.4.9 Estimated Rates of TRU Waste Generation (Number of Containers)		
WTWBIR WS ID:		
Container Type: RH Canister		
Year	Projected Number of Container Type	Comments
1993	(*)	
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		
2008		
2009		

2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		

(*) Indicate 0 if the entire calendar year is included in the "Number Currently in Storage".

8.2.15.4.10 Typical Waste Material Weights for Final Waste Form (Kg/M3)				
WTWBIR WS ID:				
Container Type: RH Canister				
Material Parameters	Average	Lower Limit	Upper Limit	Comment
Iron-Based Metal				
Aluminum-Based Metal				
Other Metal				
Other Inorganic Materials				
Cellulosics				
Rubber				

Plastics				
Solidified, Inorganic Matrix				
Solidified, Organic Matrix				
Soils				
Packaging Material, Steel	435	0	0	
Packaging Material, Plastic	0	0	0	

8.2.15.5 Container Type: The final waste form is or will be packaged in WIPP acceptable RH Canisters used to overpack 55 gallon drums?

____ No (Go to 8.2.15.6)
____ Yes, continue

8.2.15.5.1 Container Material (Check all that apply):

XXXX Steel, Carbon
____ Steel, Galvanized
____ Steel, Stainless
____ Other: _____

8.2.15.5.2 Liner Type (Check all that apply):

____ Bag
____ Drum
____ Rigid liner
____ Shielding
____ None

8.2.15.5.3 Liner Material (Check all that apply):

____ Cement
____ Fiberboard
____ HDPE
____ Lead
____ None
____ Plastic
____ Steel
____ Wood
____ Other: _____

M

8.2.15.5.4 Internal Volume (payload volume) per Container (M3): 0.89

8.2.15.5.5 Number Currently in storage: _____

8.2.15.5.6 Date of this inventory: _____

8.2.15.5.7 Total Number of these containers projected from the date of inventory to the end of 2022 (Do not include the current inventory):

_____

8.2.15.5.8 Comments (RH Canisters used to overpack 55 gallon drums):

8.2.15.5.9 Estimated Rates of TRU Waste Generation (Number of Containers)		
WTWBIR WS ID:		
Container Type: RH Canister used to overpack 55 Gallon drums		
Year	Projected Number of Container Type	Comments
1993	(*)	
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		
2008		

2009		
2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		

(*) Indicate 0 if the entire calendar year is included in the "Number Currently in Storage".

8.2.15.5.10 Typical Waste Material Weights for Final Waste Form (Kg/M3)				
WTWBIR WS ID:				
Container Type: RH canister used to overpack 55 gallon drums				
Material Parameters	Average	Lower Limit	Upper Limit	Comment
Iron-Based Metal				
Aluminum-Based Metal				
Other Metal				
Other Inorganic Materials				
Cellulosics				

Rubber				
Plastics				
Solidified, Inorganic Matrix				
Solidified, Organic Matrix				
Soils				
Packaging Material, Steel	527	0	0	
Packaging Material, Plastic	26	0	0	

8.2.15.6 Container Type: The final waste form is or will be packaged in WIPP acceptable RH Canisters used to overpack 30 gallon drums?

____ No (Go to 8.3 if applicable)
____ Yes, continue

8.2.15.6.1 Container Material (Check all that apply):

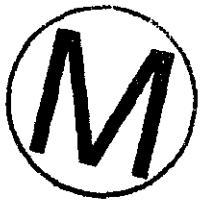
XXXX Steel, Carbon
____ Steel, Galvanized
____ Steel, Stainless
____ Other: _____

8.2.15.6.2 Liner Type (Check all that apply):

____ Bag
____ Drum
____ Rigid liner
____ Shielding
____ None

8.2.15.6.3 Liner Material (Check all that apply):

____ Cement
____ Fiberboard
____ HDPE
____ Lead
____ None
____ Plastic
____ Steel
____ Wood
____ Other: _____



8.2.15.6.4 Internal Volume (payload volume) per Container (M3): 0.89

8.2.15.6.5 Number Currently in storage: _____

8.2.15.6.6 Date of this inventory: _____

8.2.15.6.7 Total Number of these containers projected from date of inventory to the end of 2022 (Do not include the current inventory): _____

8.2.15.6.8 Comments (RH Canisters used to overpack 30 gallon drums):

_____

_____

_____

_____

8.2.15.6.9 Estimated Rates of TRU Waste Generation (Number of Containers)		
WTWBIR WS ID:		
Container Type: RH Canister used to overpack 30 gallon drums		
Year	Projected Number of Container Type	Comments
1993	(*)	
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		
2008		

2009		
2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		

(*) Indicate 0 if the entire calendar year is included in the "Number Currently in Storage".

8.2.15.6.10 Typical Waste Material Weights for Final Waste Form (Kg/M3)				
WTWBIR WS ID:				
Container Type: RH Canister used to overpack 30 gallon drums				
Material Parameters	Average	Lower Limit	Upper Limit	Comment
Iron-Based Metal				
Aluminum-Based Metal				
Other Metal				
Other Inorganic Materials				
Cellulosics				

Rubber				
Plastics				
Solidified, Inorganic Matrix				
Solidified, Organic Matrix				
Soils				
Packaging Material, Steel	485	0	0	
Packaging Material, Plastic	14	0	0	

3/13/95

WTWBIR DATA ENTRY
INSTRUCTIONS FOR SECTION 8:
MIXED AND NON MIXED TRU WASTE DATA

WTWBIR Data Entry Instructions

8. WIPP Transuranic Waste Baseline Inventory Report (WTWBIR) Data Requirements

General Instructions: This section should be completed for all mixed and non mixed TRU waste streams. If the site includes additional information in the comment entry for this section, list the question number in the section to which the comment applies in the comment section.

8. 1 Provide the WTWBIR WS ID numbers that apply to this MWIR WS:

Provide the applicable WTWBIR WS ID number for the waste stream. These should be the same numbers used in WTWBIR revision 1, unless the site has divided the streams to better comply with WIPP requirements or this is a stream not included in WTWBIR revision 1. There may be more than one WTWBIR stream for each MWIR stream and section 8.2 must be filled out for each WTWBIR stream. If a WTWBIR waste stream is deleted, please indicate the reason for the deletion in the data submittal.

8.2 WTWBIR Level of Information (Repeat this section for each WTWBIR WS ID listed in section 8.1)

8.2.1 Provide the WTWBIR WS ID for the waste stream data to be entered in the following sections.

8.2.2 Provide the applicable MWIR ID. The comment field should be used to describe the difference between the MWIR stream and the WTWBIR stream. If applicable, describe how the MWIR stream is subdivided.

8.2.3 Check the Final Waste Form Group that best describes the final form of this waste stream as it will arrive at WIPP. These groups are broad and it should be possible to check one of the groups other than "Unknown". Do not check "Unknown" unless it is justifiable. The choice for the Final Waste Form Group should be based on the new MWIR treatability guidance that was just published. A table showing a match between treatability groups and final waste form groups is attached to these instructions.

8.2.4 Check yes or no. residues are quantities of plutonium or plutonium contaminated material which are or have been previously defined as containing economically recoverable plutonium. Unless the materials are officially defined as residues, "No" should be checked.

8.2.5 Check one of the selections. If unknown is selected, provide additional information in the comments section. The additional information should describe why the source of the waste is unknown. Only on source can be checked. If the waste originates from more than one source, the waste stream must be divided into two or more waste streams.

8.2.6 List the NMVP ID. If this waste did not appear in the NMVP, leave blank.

8.2.7 List the applicable TRUCON codes. Only list TRUCON codes that have been officially assigned through the appropriate WIPP procedures and appear in revision 6 of TRUCON.

8.2.8 List the IDCs or other site identifiers for this waste stream that apply to the waste form as it will be received by the WIPP.

8.2.9 & 8.2.10 Complete these questions for this specific WTWBIR WS ID stream if it differs from that provided in the MWIR section of the report. The instructions for these questions are the same as provided for the referenced MWIR sections except for the following additions and clarifications.

The answer to 8.2.9.1 should describe the processes producing the waste, the inputs and outputs for the processes and the buildings or areas which generated the waste. This description should include all major inputs into the process, any reactions that changed materials in the process and any additions to the waste stream which resulted in the final waste form. Unless further treatment is planned before shipment to WIPP, The description should be consistent with the Final Waste Form Group in section 8.2.3 and the distribution of waste material parameters to be provided in section 8.2.15.3.10.

Information in addition to that requested in the MWIR section is being requested by WIPP for Table 8.2.10.1. List all the RCRA Appendix VIII contaminants which occur in this waste stream. These additional entries should be entered without an EPA code. Provide state codes, if applicable, for the Appendix VIII constituents.

8.2.11 Provide estimates for the specified components in the waste stream. If the answer in the Y/N column is Y, but no estimated concentration can be provided, describe the source of the component and the reason for the unknown estimated concentration.

8.2.12 List the container types/sizes in which the waste is currently stored or in which the waste will be stored as it is generated in the future. This table defines those containers for which additional information will be requested in section 8.2.14. List all waste containers whether in final form containers that comply with WIPP WAC revision 3 and the TRAMPAC or non compliant containers in this table. Final form containers are also to be indicated in section 8.2.13. This table should also include TRU wastes which are not planned to be sent to WIPP.

Indicate in the second column whether the radionuclide information for the container is the same as provided in section 3.2.6 for the MWIR. If the entry is "Y", WIPP will use the information provided in section 3.2.6. If the entry is "N", describe the difference in the comment field. If the isotopic distribution is the same but the concentration is different, provide the value by which to multiply the concentrations in section 3.2.6 to obtain the concentrations for this container in the comment field. If the isotopic distributions are different, so indicate in the comment field and provide a table, similar to the table in section 3.2.6, but in paper form, for the container type and WTWBIR WS ID.

8.2.13 Indicate in the Y/N column the container types/sizes in which this waste will arrive at WIPP. Only containers currently approved by WIPP are permitted. This table defines those containers for which additional information will be requested in section 8.2.15. All waste in this stream that is planned for disposition at WIPP should be included in this table and section 8.2.15. The site should estimate the number and type of containers required for the non WIPP compliant wastes listed in 8.2.12 that are destined for WIPP.

Indicate in the third column whether the radionuclide information for the container is the same as provided in section 3.2.6 for the MWIR. If the entry is "Y", WIPP will use the information provided in section 3.2.6. If the entry is "N", describe the difference in the comment fields in sections 8.2.15.1.12 or 8.2.15.2 - 6.8 where additional container data is requested. If the isotopic distribution is the same but the concentration is different, provide the value by which to multiply the concentrations in section 3.2.6 to obtain the concentrations for this container in the comment field. If the isotopic distributions are different, so indicate in the comment field and provide a table, similar to the table in section 3.2.6, but in paper form, for the container type and WTWBIR WS ID.

Sections 8.2.14 and 8.2.15 ask for information by container type. Non WIPP compliant and WIPP compliant waste is placed in section 8.2.14 and WIPP compliant wastes only are placed in 8.2.15. All waste planned for disposition at WIPP should be included in both sections 8.2.14 and 8.2.15. WIPP compliant is defined as compliance with WIPP WAC revision 3 and the TRAMPAC.

Information for sections 8.2.14 and 8.2.15 is to be provided for each container indicated in sections 8.2.12 and 8.2.13 respectively.

8.2.14 Current Container Information for this WTWBIR waste stream:

This section requests information for the waste in the current or planned packaging. The same waste which appears in this section will appear in 8.2.15 in WIPP compliant form and packaging based on site plans or estimates.

WIPP would prefer that a separate section 8.2.14.x (where x represents separate package type defined by 1, 2, etc.) be completed for each type and size of package. To accommodate situations where this is not appropriate, multiple answers are permitted for some questions.

8.2.14.1 Provide the standard descriptive title for the container used by the generator/storage site. For example, 55 gallon drum, steel box, 4X4X7 wooden box, etc.

8.2.14.1.1 Indicate all the materials used to construct the containers. Enter a material in the Other field, if a specific material is not listed.

8.2.14.1.2 Provide the internal volume of the container in cubic meters. This is the maximum amount of waste that will fit into the container. If this stream includes containers of different sizes enter an average volume and state that the volume is an average of the different containers in the comment entry for this section (8.2.14.x.14.3.4; x = 1, 2, 3, etc.). Generally enter the volume of the container, such as a drum, even if the drum is only partially full. In other circumstances, such as partially full tanks, enter the actual or average volume of the waste in the tanks. Describe these situations in the comment field.

WIPP will use this volume and the number of containers to calculate the volume of this waste stream. If there is some additional information that WIPP requires to do this accurately, provide the information in the comment field 8.2.14.x.14.3.4.

8.2.14.1.3 Check each liner type that is used in this waste stream. Check shielding, if internal shielding such as lead or concrete is used with these containers. If only some containers include internal shielding or liners, describe the approximate percent of containers which include internal shielding or liners in the comment section (8.2.14.x.14.3.4).

8.2.14.1.4 Check all the liner (or shielding materials) used in the containers. If a liner material is not listed, enter the liner material in the other field.

8.2.14.5 - 8.2.14.8 These questions are included to support WIPP transportation planning activities. These questions apply only to drums. The site should provide their best estimates for the answers to these questions. The comment section can be used to add qualifications or additional information, if desired.

8.2.14.1.9 Provide the number of containers that the site includes in storage. The date of this inventory should be provided in 8.2.14.1.10.

8.2.14.1.10 Provide the date for the inventory provided in 8.2.14.1.9. WIPP strongly prefers that all sites use 12/31/94 as the inventory date so that the inventory data can be legitimately rolled up between sites.

8.2.14.1.11 Provide the number of containers projected from the date in 8.2.14.1.10 through 2022.

8.2.14.1.12 Estimate the number of containers to be generated per year. The first few entries (for 1993, 1994, etc.) should not include containers included in section 8.2.14.1.9. The entries should be the projected number of containers to be generated that year. These entries should add up to the number provided in section 8.2.14.1.11. WIPP will use the volume provided in 8.2.14.1.2 and the number of containers provided here to calculate volumes. If WIPP needs additional information to do this accurately, please provide this information in the comment section 8.2.15.1.15.

The next sections ask about compliance with the WIPP WAC revision 3 and the TRAMPAC.

8.2.14.1.13 This section contains questions about the certifiability of the current containers based on WAC revision 3. The sites should provide their best estimates on a waste stream basis. Qualifications or additional information may be provided in the comments section. Additional instructions are provided only when deemed necessary. Those questions such as 8.2.14.1.13.1 and 8.2.14.1.13.3.1 which ask

whether the containers do not meet some WAC requirement should be answered yes if this is true for all or only a portion of the waste stream. Additional questions will request an estimate of the percent of containers affected.

8.2.14.1.14 This section contains questions about compliance with TRAMPAC. The same instructions provided above for 8.2.14.1.13 apply to this section.

8.2.14.1.14.3.4 Provide any comments or additional information in this field for this container type.

8.2.15 Final Waste Form Container information for this WTWBIR waste stream

This section requests information for all the waste in WIPP compliant form. If the wastes as listed in 8.2.14, do not comply with WIPP WAC revision 3 and the TRAMPAC, the waste should be entered here in site estimated WIPP compliant form and packaging. All wastes, planned for disposition at WIPP, should be placed in 8.2.15. WIPP will use the data in this section to estimate the eventual WIPP inventory.

A separate section is provided for each type of container currently acceptable at WIPP. Containers are not allowed to be mixed in this section. The different container sections are identified by number as 8.2.15.x, where x is 1, 2, 3, etc.

For waste reported in section 8.2.14 for which the site does not have plans or schedules for putting the waste in WIPP compliant form and WIPP acceptable containers, the site should estimate the WIPP compliant form and WIPP acceptable containers to be used and should place the waste in the same years used in sections 8.2.14.1.9 -12.

8.2.15.1 The container description requested is provided by the electronic form. Section 8.2.15.1 is the 55 gallon drum, section 8.2.15.2 is the Standard Waste Box, etc.

8.2.15.1.1 Indicate all the materials used to construct the containers. Enter a material in the "other" field, if a material is not listed.

8.2.15.1.2 The requested internal volume is provided by the electronic form.

8.2.15.1.3 Check each liner type that is used in this waste stream. Check shielding, if internal shielding such as lead or concrete is used with these containers. If only some containers include internal shielding or liners, describe the approximate percent of containers which include internal shielding or liners in the comment section (8.2.15.1.12).

8.2.15.1.4 Check all the liner (or shielding materials) used in the containers. If a liner material is not listed, enter the liner material in the other field.

8.2.15.1.5 - 8.2.15.1.8 These questions are included to support WIPP transportation planning activities. These questions apply only to drums. The site should provide their best estimates for the answers

to these questions. The comment section (8.2.15.1.12) can be used to add qualifications or additional information, if desired. These questions are not included in sections 8.2.15.2 - 6.

8.2.15.1.9 Provide the number of containers that the site includes in storage. The date of this inventory should be provided in section 8.2.15.1.10.

8.2.15.1.10 Provide the date for the inventory provided in section 8.2.15.1.9. WIPP strongly prefers that all sites use 12/31/94 as the inventory date so that the inventory data can be legitimately rolled up between sites.

8.2.15.1.11 Provide the number of containers projected from the date in 8.2.15.1.10 through 2022.

8.2.15.1.12 Provide any comments or additional information in this field.

8.2.15.1.13 Estimate the number of containers to be generated per year. The first few entries (for 1993, 1994, etc.) should not include containers included in section 8.2.15.1.9. The entries should be the projected number of containers to be generated that year. These entries should add up to the number provided in section 8.2.15.1.11. WIPP will use the volume provided in 8.2.15.1.2 and the number of containers provided here to calculate volumes. If WIPP needs additional information to do this accurately, please provide this information in the comment section 8.2.15.1.12.

8.2.15.1.14 Provide estimates of the physical materials in the waste. The information is requested for an average, a lower limit and an upper limit in kilograms per cubic meter for broad categories of materials. Comment space is provided for qualifications or additional information. Please provide a list of materials (in decreasing order of appearance, if possible) in the comment field for the materials Other Metal, Other Inorganic Materials, Solidified Inorganic Matrix and Solidified Organic Matrix. Note that the fields for iron based metal and plastic do not include the outer container and the rigid liner and or liner bags. For instance, they do not include the 55 gallon drum and the rigid and/or bag liners or the SWB and the plastic liner. The container and rigid and/or bag liner information is placed only in the fields for packaging material, steel and packaging material, plastic. Note that all data is requested in kilograms per cubic meter and not in weight per container. The volume to use for these calculations is the volume in 8.2.15.1.2.

Sections 8.2.15.2 - 6

These sections are slightly different from section 8.2.15.1 because they do not include sections 8.2.15.1.5 - 8. Otherwise the questions are the same. Section 8.2.15.2 instructions are provided below:

Sections 8.2.15.2.1 -4 instructions are the same as for sections 8.2.15.1.1-4. The comment field in sections 8.2.15.2-6 is in section 8.2.15.x.8 instead of 8.2.15.1.12.

The rest of the section 8.2.15.2 instructions are the same as equivalent section 8.2.15.1 questions but the numbering is different and the instructions are presented below:

8.2.15.2.5 Provide the number of containers that the site includes in storage. The date of this inventory should be provided in section 8.2.15.2.6.

8.2.15.2.6 Provide the date for the inventory provided in section 8.2.15.2.5. WIPP strongly prefers that all sites use 12/31/94 as the inventory date so that the inventory data can be legitimately rolled up between sites.

8.2.15.2.7 Provide the number of containers projected from the date in 8.2.15.2.6 through 2022.

8.2.15.2.8 Provide any comments or additional information in this field.

8.2.15.2.9 Estimate the number of containers to be generated per year. The first few entries (for 1993, 1994, etc.) should not include containers included in section 8.2.15.1.5. The entries should be the projected number of containers to be generated that year. These entries should add up to the number provided in section 8.2.15.1.7. WIPP will use the volume provided in 8.2.15.2.2 and the number of containers provided here to calculate volumes. If WIPP needs additional information to do this accurately, please provide this information in the comment section 8.2.15.1.8.

8.2.15.1.10 Provide estimates of the physical materials in the waste. The information is requested for an average, a lower limit and an upper limit in kilograms per cubic meter for broad categories of materials. Comment space is provided for qualifications or additional information. Please provide a list of materials (in decreasing order of appearance, if possible) in the comment field for the materials Other Metal, Other Inorganic Materials, Solidified Inorganic Matrix and Solidified Organic Matrix. Note that the fields for iron based

metal and plastic do not include the outer container and the rigid liner and or liner bags. For instance, they do not include the 55 gallon drum and the rigid and/or bag liners or the SWB and the plastic liner. The container and rigid and/or bag liner information is placed only in the fields for packaging material, steel and packaging material, plastic. Note that all data is requested in kilograms per cubic meter and not in weight per container. The volume to use for these calculations is the volume in 8.2.15.2.2.