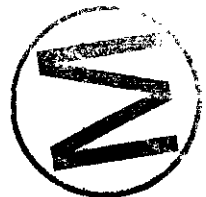


**APPENDIX C13**

**WIPP WASTE INFORMATION SYSTEM DATA DICTIONARY**

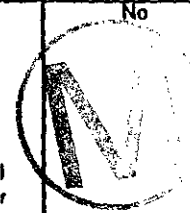


**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
I.	Aspiration Method	None	Method used for aspirating the container prior to shipment per Appendix 1.3.7 of the TRUPACT-II Safety Analysis Report. Method is to be identified as either Option 1, 2, or 3.	A1	Edit check of either 1, 2, or 3. No Blanks	No
II.	Aspiration Period	Days	Time that the container must be aspirated based on the aspiration method selected per Appendix 3.6.11 of the TRUPACT-II Safety Analysis Report	999	Look-up table of container aspiration periods	No
III.	Assay Characterization Method	None	Identifies the site-specific approved characterization method(s) or system(s) that was used to identify and quantify the radionuclide masses	A4	Look-up table listing approved methods	No
IV.	Assay Date	None	The date when the assay was completed at the certification site	Date	None	No
V.	Assembly Identification Number	None	A unique number assigned by the shipper to an assembly. The number consists of the 2-letter site identification code followed by the last two digits of the year and the 4-digit package assembly number.	AAYY9999	Unique number  Each container in an assembly (e.g. a seven pack) must be of the same shipping category	No
VI.	Bore Hole Number	None	Disposal location within the WIPP where a remote handled waste canister is disposed.	A6	None	No
VII.	Characterization Methods	None	Identifies the approved EPA characterization methods or systems that were used to obtain the waste characterization data.	A20	Look-up table of characterization techniques	No
VIII.	Column Height	None	The column height within a room/drift at the WIPP which designates the location within the height of the room/drift where the container is emplaced	9	None	No
IX.	Column Number	None	The column number within a room/drift at the WIPP which designates the location within the width of the room/drift where the container is emplaced	9	None	No
X.	Comments	None	Date field to be used to provide additional information	A200	None	No
XI.	Contact Dose Rate of Container (Beta/Gamma)	mrem/hr	Beta/gamma contact dose rate at the surface of the Type A container	9999999	≤ 200 mrem/hr for CH ≤ 1000 rem/hr for RH	No
XII.	Contact Dose Rate of Container (Neutron)	mrem/hr	Neutron contact dose rate at the surface of the Type A container	9999999	≤ 270 mrem/hr for RH	No
XIII.	Contact Dose Rate of Container (Total)	mrem/hr	Total contact dose rate at the surface of the Type A container	9999999	≤ 200 mrem/hr for CH ≤ 1000 rem/hr for RH	Yes

**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
XIV.	Contact Dose Rate of Package (Total at Surface)	mrem/hr	Total contact dose rate at the surface of the Type B packaging (TRUPACT-II and RH Cask)	9999999	≤ 200 mrem/hr	No
XV.	Contact Phone	None	Phone number of the shipper technical contact. Number to be listed is to include area code + prefix + number	A12	None	No
XVI.	Container Closure Date	None	Date the container was closed	Date	None	No
XVII.	Container Identification Number	None	A unique identification number assigned to each container	AA9999999999 99	Unique number	No
XVIII.	Container Liner Punctured	None	Identifies whether the container liner was punctured (if applicable)	Logical (yes/no)	If field 16 had identified the use of a liner, reject if "no"	No
XIX.	Container Liner Type	None	Identifies the type of container liner (if applicable)	A3	Look-up table of standard liners. Look-up table is also to contain the option of "no liner".	No
XX.	Container Type Code	None	A 3-digit container type code	A3	Look-up table of approved container type codes 001 55-gallon drum 002 SWB 003 TDOP 004 Pipe component (6") 006 Pipe component (12") 101 RH-TRU 72-B canister 102 RH-TRU drum canister	No
XXI.	Decay Heat	Watts	The rate of deposition of thermal energy within the container associated with the decay of radionuclides. The terms "decay heat" and "thermal power" are synonymous.	9.99E+99	None	Yes
XXII.	Decay Heat of Package	Watts	Sum of decay heats of containers within the package	9.99E+99	≤ 40 watts per TRUPACT-II package	Yes
XXIII.	Decay Heat Uncertainty	Watts	Uncertainty in the decay heat	9.99E+99	None	Yes
XXIV.	Decay Heat Uncertainty of Package	Watts	Square root of the sum of the squares of the container decay heat uncertainties	9.99E+99	None	Yes
XXV.	Decay Heat (Maximum)	Watts	Sum of the decay heat and decay heat uncertainty for a container	9.99E+99	Look-up table containing decay heat limits for each shipping category	Yes
XXVI.	Disposal Date	None	The date when the container is emplaced in the underground of the WIPP	Date	Date equal to or later than the shipment receipt date	No



**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
XXVII.	Dose Rate of Package at 1 Meter	mrem/hr	Total dose rate at 1 meter from the surface of the Type B packaging (required to assign a transport index)	9999999	None	No
XXVIII.	Dose Rate of Package at 2 Meters	mrem/hr	Total dose rate at 2 meters from the surface of the Type B packaging (TRUPACT-II and RH Cask)	,9999999	≤ 10 mrem/hr	No
XXIX.	DOT Description	None	U.S. Department of Transportation description for the Uniform Hazardous Waste Manifest	Memo	None	No
XXX.	Drift Number	None	The geotechnical location within the WIPP where a container is emplaced	A6	None	No
XXXI.	EPA ID	None	U.S. Environmental Protection Agency's number for the waste site having responsibility for shipment of the waste	A15	Look-up table containing the corresponding name and address of the generator	No
XXXII.	Filter Install Date	None	The date the filter was installed in the container	Date	None	No
XXXIII.	Filter Model	None	Vendor model number of the filter used to vent a container	A6	Look-up table listing approved filters	No
XXXIV.	Gas Generation Completion Date	None	The date of test completion for a container shipping category	Date	None	No
XXXV.	Gas Generation Rate - Measured H <sub>2</sub> + CH <sub>4</sub>	moles/s	Measured hydrogen and methane gas generation rate for a container shipping category	9.9E + 99	Look-up table containing hydrogen and methane gas generation rate limits as a function of packaging layers, content code, and radionuclide activity	No
XXXVI.	Gas Generation Rate - Measured Total	moles/s	Measured total gas generation rate for a container shipping category	9.9E + 99	Look-up table containing total gas generation rate limits as a function of packaging layers, content code, and radionuclide activity	No
XXXVII.	Hazardous ID Code	None	Hazardous waste EPA codes listed for the container. This is a multiple occurring field.	A4	Look-up table listing the codes	No
XXXVIII.	Headspace Gas Innermost Layer: Analyte Name	None	The element, ion, or compound an analysis seeks to determine; the element of interest	A20	Look-up table containing the 29 targeted analytes (this is a multiple occurring data field)	No
XXXIX.	Headspace Gas Innermost Layer: Characterization Method	None	Identifies the characterization method or system that was used to obtain the innermost layer gas data.	A30	Look-up table listing approved methods	No



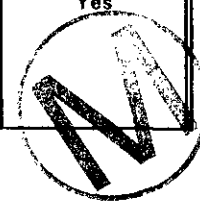
**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
XL.	Headspace Gas Innermost Layer: Date Analyzed	None	Date gas of innermost layer was analyzed	Date	≤ 34 days from date sampled	No
XLI.	Headspace Gas Innermost Layer: Date Sampled	None	Date gas of innermost layer was sampled	Date	None	No
XLII.	Headspace Gas Innermost Layer: Flammable Gas Concentrations	Volume Percent	Concentrations of flammable gases in the innermost layer including but not limited to H <sub>2</sub> and CH <sub>4</sub>	999	≤ 5% (H <sub>2</sub> + CH <sub>4</sub> )	No
XLIII.	Headspace Gas Innermost Layer: Identification	None	Innermost layers of confinement must be consecutively numbered and labeled starting with 1 as they are sampled and removed from the waste container during visual examination. The sample collected from each innermost layer of confinement must be referenced to that particular inner most layer of confinement and to the waste container.	99	None	No
XLIV.	Headspace Gas Innermost Layer: VOC Concentrations	ppmv	Concentrations of the 29 target VOCs in the innermost layer	999999	This is a multiple occurring data field	No
XLV.	Headspace Gas: Analyte Name	None	The element, ion, or compound an analysis seeks to determine; the element of interest. This is a multiple occurring field.	A20	Look-up table containing the 29 targeted VOC analytes	No
XLVI.	Headspace Gas: Characterization Method	None	Identifies the characterization method or system used to obtain the headspace gas data.	A30	Look-up table listing approved methods	No
XLVII.	Headspace Gas: Date Analyzed	None	Date headspace gas was analyzed	Date	≤ 34 days after sampling date	No
XLVIII.	Headspace Gas: Date Sampled	None	Date headspace gas was sampled	Date	None	No
XLIX.	Headspace Gas: Flammable Gas Concentrations	Volume Percent	Concentrations of H <sub>2</sub> plus CH <sub>4</sub> flammable gases in the headspace	A20	≤ 5% (H <sub>2</sub> + CH <sub>4</sub> )	No
L.	Headspace Gas: Total Flammable VOC Concentration	ppmv	Total concentration of target flammable VOCs in the headspace.	999999	≤ 500 ppm total flammable VOCs	Yes



**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
LI.	Headspace Gas: VOC Concentrations	ppmv	Concentrations of the 29 target VOCs in the headspace. This is a multiple occurring field.	999999	No limits for the target VOCs except for the following: carbon tetrachloride $\leq$ 7510 chloroform $\leq$ 6325 1,1-dichloroethene $\leq$ 28750 1,2-dichloroethane $\leq$ 9100 methylene chloride $\leq$ 368500	Yes
LII.	ICV Closure Date	None	The date when the inner containment vessel was closed	Date	None	No
LIII.	Item Description Code	None	A site specific numerical code applied to individual waste forms to identify their source	A4	Look-up table listing approved item description codes taken from the site's certification plan	No
LIV.	Layers of Packaging	None	Identifies the number of layers of plastic confinement within a container	9	None	No
LV.	Manifest Document Number	None	Identifies the manifest number assigned to the waste shipment	A5	None	No
LVI.	Nondestructive Examination	None	The radiometric examination of retrievably stored waste	Logical (yes/no)	100% sampling of retrievably stored waste	No
LVII.	Packaging Serial Number	None	The TRUPACT-II, cask, or other Type B shipping container number	A3	None	No
LVIII.	Panel Number	None	The panel number in which the container is disposed	A2	None	No
LIX.	PCB Concentration	ppm	The concentration of polychlorinated biphenyls (PCBs) in the container	9999	$\leq$ 50 ppm No blanks	No
LX.	Plutonium-239 Equivalent Activity	PE-Ci	The plutonium-239 equivalent activity per container	9.9E + 99	$\leq$ 80 PE-Ci per drum $\leq$ 130 PE-Ci per SWB $\leq$ 1000 PE-Ci per canister	Yes
LXI.	Plutonium-239 FGE per Type B RH-TRU 72-B Waste Shipping Package (Total)	FGE	The Plutonium-239 FGE plus the Plutonium-239 FGE uncertainty per RH-TRU 72-B waste shipping package	9.9E + 99	$\leq$ 325 FGE	Yes
LXII.	Plutonium-239 Fissile Gram Equivalent	FGE	The Plutonium-239 fissile gram equivalent per container	9.9E + 99	$\leq$ 200 FGE per drum $\leq$ 325 FGE per SWB $\leq$ 325 FGE per canister $\leq$ 200 FGE per pipe overpack package	Yes



**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
LXIII.	Plutonium-239 Fissile Gram Equivalent (Total)	FGE	The Plutonium-239 FGE plus twice the Plutonium-239 FGE uncertainty per container	9.9E+99	≤ 200 FGE per drum ≤ 325 FGE per SWB ≤ 325 FGE per canister ≤ 200 FGE per pipe overpack package	Yes
LXIV.	Plutonium-239 Fissile Gram Equivalent per Type B Package	FGE	Sum of the Plutonium-239 fissile gram equivalent per container per Type B package	9.9E+99	≤ 325 FGE ≤ 2800 FGE for pipe overpack packages	Yes
LXV.	Plutonium-239 Fissile Gram Equivalent per Type B Package for CH-TRU (Total)	FGE	The Plutonium-239 FGE plus twice the Plutonium-239 FGE uncertainty per Type B package for CH-TRU	9.9E+99	≤ 325 FGE ≤ 2800 FGE for pipe overpack packages	Yes
LXVI.	Plutonium-239 Fissile Gram Equivalent Uncertainty	FGE	The Plutonium-239 fissile gram equivalent uncertainty per container	9.9E+99	None	Yes
LXVII.	Plutonium-239 Fissile Gram Equivalent Uncertainty per Type B Package	FGE	Square root of the sum of the squares of the Plutonium-239 fissile gram equivalent uncertainties per container per Type B package	9.9E+99	None	Yes
LXVIII.	Radionuclide Activity	Curies	Activity of the individual radionuclides	9.9E+99	None	No
LXIX.	Radionuclide Activity Uncertainty	Curies	Uncertainty in the activity of the individual radionuclides	9.9E+99	None	No
LXX.	Radionuclide Activity Uncertainty (Total)	Curies	Uncertainty in the summation of activities of the individual radionuclides within a container	9.9E+99	None	Yes
LXXI.	Radionuclide Highway Route Controlled Quantity	None	A highway route controlled quantity is that quantity of normal form material in a type B package which exceeds 3000 times the A2 value of the radionuclides as specified in 49 CFR 173.443 or 30,000 curies, whichever is least	Logical (yes/no)	yes if > 1 no if ≤ 1	Yes
LXXII.	Radionuclide Mass	Grams	Mass of the individual radionuclides	9.9E+99	None	Yes
LXXIII.	Radionuclide Mass Uncertainty	Grams	Uncertainty in the mass of the individual radionuclides	9.9E+99	None	Yes
LXXIV.	Radionuclide Reportable Quantity	None	A reportable quantity is that quantity of material in a type B package which equals or exceeds the quantity listed in the Appendix to 49 CFR 172.101	Logical (yes/no)	None	Yes
LXXV.	Radionuclide Symbol	None	The radionuclide the analysis seeks to determine	A7	Look-up table containing the predominant radionuclides (this is a multiple occurring data field)	No





**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
LXXVI.	Reporting Flag	None	Designator which is used by the analytical laboratory to identify detection levels of the various analytes within a sample	A2	Coded to indicate appropriate flag per QAPP requirements	No
LXXVII.	Room Number	None	The room number within a panel in which the container is emplaced	A1	None	No
LXXVIII.	Row Number	None	The row number within a room/drift at the WIPP which designates the location within the length of the room/drift where the container is emplaced	A4	None	No
LXXIX.	Shipment Certification Date	None	The date when the shipment was certified for transport to the WIPP	Date	Shipment certification date $\geq$ WAC certification date	No
LXXX.	Shipment Number	None	Number assigned to the shipment	A12	Unique	No
LXXXI.	Shipment Receipt Date	None	The date the waste shipment was received at the WIPP	Date	Shipment receipt date $\geq$ shipment send date	No
LXXXII.	Shipment Send Date	None	The date the waste shipment left the shipper site (to be entered at the time of receipt at the WIPP using date on manifest)	Date	Shipment send date $\geq$ shipment certification date	No
LXXXIII.	Shipping Category	None	A category under which a content code is shipped	A8	All containers within a package must be of the same shipping category	No
LXXXIV.	Site Address	None	Address of the waste site having responsibility for shipment of the waste	A50	None	No
LXXXV.	Site Name	None	Name of the site which shipped the waste	A30	None	No
LXXXVI.	Solid Waste Metals: Analyte Name	None	The element, ion, or compound an analysis seeks to determine; the element of interest	A50	Look-up table of target solid waste metal analytes (this is a multiple occurring field)	No
LXXXVII.	Solid Waste Metals: Concentration	mg/kg	The concentration of the solid waste metal analytes the analysis seeks to determine	9.99E + 99	None	No
LXXXVIII.	Solid Waste Metals: Date Analyzed	None	The date solid waste metals were analyzed	Date	$\leq$ 180 days after sampling date $\leq$ 28 days for mercury	No
LXXXIX.	Solid Waste Metals: Date Sampled	None	The date solid waste metals were sampled	Date	None	No
XC.	Solid Waste Semi-VOC: Analyte Name	None	The element, ion, or compound an analysis seeks to determine; the element of interest	A50	Look-up table of target solid waste semi-VOC analytes (this is a multiple occurring field)	No
XCI.	Solid Waste Semi-VOC: Concentration	mg/kg	The concentration of the solid waste semi-VOC analytes the analysis seeks to determine	9.99E + 99	Look-up table of target solid waste semi-VOC analytes	No



**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
XCII.	Solid Waste Semi-VOC: Date Analyzed	None	The date solid waste semi-VOCs were analyzed	Date	≤ 180 days after sampling date	No
XCIII.	Solid Waste Semi-VOC: Date Sampled	None	The date solid waste semi-VOCs were sampled	Date	None	No
XCIV.	Solid Waste VOC: Analyte Name	None	The element, ion, or compound an analysis seeks to determine; the element of interest	A50	Look-up table of target solid waste VOC analytes (this is a multiple occurring field)	No
XCV.	Solid Waste VOC: Concentration	mg/kg	The concentration of the solid waste VOC analytes the analysis seeks to determine	9.99E+99	Look-up table of target solid waste VOC analytes	No
XCVI.	Solid Waste VOC: Date Analyzed	None	The date solid waste VOCs were analyzed	Date	≤ 54 days after sampling date	No
XCVII.	Solid Waste VOC: Date Sampled	None	The date solid waste VOCs were sampled	Date	None	No
XCVIII.	Surface Contamination of Container (Alpha)	dpm/cm <sup>2</sup>	The removable alpha emitting radionuclide surface contamination on waste containers	9.9E+99	≤ 20 dpm/100 cm <sup>2</sup> (alpha)	No
XCIX.	Surface Contamination of Container (Beta/Gamma)	dpm/cm <sup>2</sup>	The removable beta/gamma emitting radionuclide surface contamination on waste containers	9.99E+99	≤ 200 dpm/100 cm <sup>2</sup> (beta/gamma)	No
C.	Technical Contact	None	Name of the person at the shipper site who is the technical contact for the site. Information is to be recorded based on the last name, first name, and middle initial (if available)	A20	None	No
CI.	Tentatively Identified Compounds (TICs): Date Analyzed	None	The date the TICs were analyzed	Date	See limits in fields 36, 77, 80, and 83	No
CII.	Tentatively Identified Compounds (TICs): Date Sampled	None	The date the TICs were sampled	Date	None	No
CIII.	Tentatively Identified Compounds: Analyte Name	None	Compounds not initially anticipated to be in the waste stream but subsequently identified in either the headspace gas or solid waste analysis	A30	Look-up table of TICs identified in 40 CFR 264, Appendix IX	No
CIV.	Tentatively Identified Compounds: Concentration (mg/kg)	mg/kg	If applicable, the concentrations of compounds not initially anticipated to be in the waste stream but subsequently identified in either the headspace gas or solid waste analysis	9.99E+99	None	No
CV.	Tentatively Identified Compounds: Concentration (ppmv)	ppmv	If applicable, the concentrations of compounds not initially anticipated to be in the waste stream but subsequently identified in either the headspace gas or solid waste analysis	9.99E+99	None	No



**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

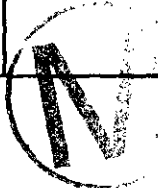
NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
CVI.	Thermal Power Density	Watts/ft <sup>3</sup>	The thermal power per unit volume of the container	9.9E+99	A flag is to be raised $\geq 0.1$ watt/ft <sup>3</sup> when averaged over the container	Yes
CVII.	Transporter EPA ID	None	U.S. Environmental Protection Agency identification number for the transporter of the waste shipment	A15	Look-up table containing the corresponding name and address of the transporter	No
CVIII.	Transporter Name	None	The name of the transporter of the waste shipment	A25	None	No
CIX.	TRU Alpha Activity	Curies	Summation of the alpha activities of the transuranic (TRU) isotopes within a container	9.9E+99	None	Yes
CX.	TRU Alpha Activity Concentration	Curies per gram	Summation of the alpha activities of the transuranic isotopes divided by the mass of the waste within a container (excluding the masses of the container, liner [if applicable], and shielding [if applicable])	9.9E+99	> 100 nCi/gram	Yes
CXI.	TRU Alpha Activity Concentration Uncertainty	Curies per gram	Uncertainty in the TRU waste alpha activity concentration	9.9E+99	None	
CXII.	TRU Alpha Activity Uncertainty	Curies	Uncertainty in the TRU waste alpha activity	9.9E+99	None	Yes
CXIII.	TRUCON Content Code	None	The TRUCON content code which describes the contents of the container based on the site Item Description Code.	A6	Look-up table of approved content codes	No
CXIV.	TRUPACT-II OCA Lid Number	None	The TRUPACT-II OCA lid number	A8	None	No
CXV.	Vehicle Type	None	The type of vehicle used to transport the waste.	A1	Look-up table containing either "R" for railcar or "T" for truck	No
CXVI.	Vent/Puncture Date	None	The date when the container was vented and, if applicable, the liner punctured	Date	None	No
CXVII.	Verification Date	None	The date when the radiography or visual inspection was completed at the certification site	Date	None	No
CXVIII.	Verification Method	None	Identifies if radiography or visual inspection was used to identify and quantify the radionuclide masses	A4	Radiography or Visual Inspection	No
CXIX.	Visual Examination of Container	None	A statistical sample of retrievably stored waste streams must be examined visually. This field serves to identify whether visual examination was performed.	Logical (yes/no)	None	No



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**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
CXX.	WAC Certification Date	None	The date when the certifying official signed the certification statement for the container	Date	None	No
CXXI.	WAC Certification Site	None	The site where the container was certified shall be identified by the 2-character site code as in Table B-3 of the WIPP WAC	A2	Look-up table of site identification codes	No
CXXII.	WAC Exception Number	None	A number granted to the shipper for an exception to the WAC. The number consists of a 2-character site code plus the last two numbers of the year the request was made plus a sequential number beginning with one each year.	AAYYXX	Look-up table containing approved WAC exception numbers	No
CXXIII.	WAC Revision Number	None	Revision number of the WIPP-WAC to which the waste was certified	A2	≥ Revision 4	No
CXXIV.	Waste Container Fill Factor	Percentage	Estimated percentage of the waste container volume occupied by the waste (zero percent is interpreted as dunnage)	999	Lower bound = 0 Upper bound = 100	No
CXXV.	Waste Handling Code	None	The code is "CH" for contact-handled TRU waste or "RH" for remote-handled TRU waste	A2	None	No
CXXVI.	Waste Material Parameters	None	Waste materials having the potential of impacting performance assessment	A40	Look-up table of waste material parameters	No
CXXVII.	Waste Matrix Code	None	Numerical codes used to classify mixed waste at DOE facilities	A4	Look-up table of waste matrix codes	No
CXXVIII.	Waste Matrix Code Date	None	The date the site Project review of the waste matrix code has been completed	Date	None	No
CXXIX.	Waste Matrix Code Group	None	The group identification taken from the Baseline Inventory Report	A2	None	No
CXXX.	Waste Stream MWIR ID	None	The waste stream MWIR identification number	A6	None	No
CXXXI.	Waste Stream Profile Form Number	None	The waste stream profile form number	9999	Look-up table of approved waste stream profile form numbers	No
CXXXII.	Waste Stream WIPP ID	None	The waste stream WIPP identification number	A6	None	No
CXXXIII.	Waste Type Code	None	The code is "TRU" for non-mixed waste and "MTRU" for mixed waste	A4	None	No
CXXXIV.	Weight (empty container, liner, and shielding)	kg	The weight of the empty container including liner & shielding if applicable	999999.9	None	No
CXXXV.	Weight (Gross)	kg	The gross weight of a container	999999.9	≤ 1000 lbs per drum ≤ 4000 lbs per SWB ≤ 6450 lbs per TDOP ≤ 8000 lbs per canister	No



**WWIS DATA DICTIONARY (DRAFT Version 0.1)**

NO	FIELD	UNITS	DEFINITION	FORMAT	LIMITS, EDITS, & RANGE CHECKS	CALCULATED
CXXXVI.	Weight of a TRUPACT-II Shipment	kg	The weight of the TRUPACT-II packages including their payloads per railcar or truck	999999.9	The sum of the weights of the TRUPACT-II packages (unique for each serial number) including their payloads per railcar or truck	Yes
CXXXVII.	Weight of Payload Assembly	kg	The weight of a seven pack payload assembly	999999.9	Equal to the sum of the gross weights of the seven drums contained in the payload assembly	Yes
CXXXVIII.	Weight of TRUPACT-II	kg	The weight of a TRUPACT-II package (unique per serial number) including its payload	999999.9	The sum of the weights of the TRUPACT-II (using a look-up table of TRUPACT-II weights per serial number) and the payload.	Yes
CXXXIX.	Weight of Waste	kg	The weight of the waste inside a container	999999.9	None	Yes
CXL.	Weight of Waste Material Parameters	kg	The estimated weight of the waste material parameters	999999.9	Sum of the estimated waste material parameter weights should equal the weight of the waste	Yes
CXLI.	Weight of Waste Uncertainty	kg	The uncertainty in the weight of the waste inside a container	999999.9	None	Yes
CXLII.	Weight Uncertainty (empty container, liner, and shielding)	kg	The uncertainty in the weight of the empty container including liner & shielding if applicable	999999.9	None	No
CXLIII.	Weight Uncertainty (Gross)	kg	The uncertainty in the gross weight of a container	999999.9	None	No



## WWIS DATA DICTIONARY (DRAFT Version 0.1)

### \* NOTES - FIELD SPECIFIC

- III. The method used for this designator is to be determined.
- IV. Data field will include a list of acronyms for the characterization equipment used.
- X. No more than 5% of the RH canisters received at the WIPP are allowed to have dose rates > 100 rem/hr. This requirement necessitates that a running calculation of the percentage be performed in the background. If the percentage exceeds 5%, a flag will be raised. Prior approval by the WIPP is required before RH canisters having dose rates > 100 rem/hr but ≤ 1000 rem/hr may be shipped to the WIPP.
- XVI. The look-up table used for this field will also include the internal volume of each container listed. This volume is required for the calculation of thermal power density (see field #90).
- XVIII. Reporting of thermal power per container will be made using the calculated value of the container's decay heat.
- XXIX. A unique generator name and address corresponds to each generator EPA ID.
- XXXVIa. The 11 flammable VOCs, a subset of the 29 target VOC analytes, need to be identified in order to calculate the total flammable VOC concentration required by field #39a.
- XXXIX. A flag will be raised if any of the VOC headspace gas concentration limits are exceeded. Based on a running average of these concentrations, a determination will be made whether to accept the container with the outlying VOC(s).
- XXXIXa. A flag will be raised if any of the flammable VOC headspace gas concentration limits are exceeded. Based on a running average of these concentrations, a determination will be made whether to accept the container with the outlying VOC(s).
- LXIV. A running total of RH activity needs to be performed. Total activity of RH waste cannot exceed 5,100,000 curies.
- XCI. A unique transporter name and address corresponds to each transporter EPA ID.
- CVII. A running total of TRU waste volume, in ft<sup>3</sup> and m<sup>3</sup>, needs to be performed. Total volume of TRU waste (CH & RH) cannot exceed 6.2E + 6 cubic feet.

### NOTES - GENERIC

- Since SI units will be used in all reports, conversion constants need to be identified for the purpose of implementing this requirement. This includes curies to becquerels, pounds to kilograms, grams to kilograms, feet to meters, centimeters to meters, etc.
- Approved project plans are required before waste characterization data will be accepted for waste certification. Interim QAPjPs will suffice.
- Data calculated by the sites will be verified in the background; i.e., the data (whether measured or calculated) is the property of the sites, any calculations performed by the WWIS are for purposes of verification only.

