UNIFORM RADIOACTIVE WASTE ACCEPTANCE CRITERIA SUPPLEMENT

PROFILE#_____

A. GENERATOR INFORMATION		**B. DISPOSAL SITE**
1. Generator:		☐ US Ecology Idaho (complete Pgs 1 and 2)
2. Common Name of Material:		☐ US Ecology Nevada (Complete Pg 1 only)
3. Material Description:		☐ US Ecology Texas (Complete Pg 1 only)

C. Generally Exempt Unimportant Quantities of Source Material Uniformly Dispersed in Soil or other Media (< 0.05% by weight)

1. Complete this Section if waste is being profiled as generally exempt source material. Does the material contain? (check all that apply)

☐ Natural, Refined, or Depleted Uranium ☐ Thorium (Th-232) ☐ Both Uranium and Thorium

2. Source Material Sum of Fractions (SOF) Formulas:

Natural Uranium + Thorium	Refined Uranium + Thorium	Depleted Uranium + Thorium
$\frac{Conc_{U\text{-}238}}{167 pCi/g} + \frac{Conc_{Th\text{-}232}}{55 pCi/g} \leq 1$	$\frac{Conc_{U\text{-}Total}}{333 pCi/g} + \frac{Conc_{Th\text{-}Total}}{110 pCi/g} \leq 1$	$\frac{Conc_{U\text{-}238}}{169 pCi/g} + \frac{Conc_{Th\text{-}232}}{55 pCi/g} \leq 1$

Notes:
1. *Unless otherwise noted, use parent nuclide in equations*
2. *Th-232 will routinely be considered to be in equilibrium with all progeny.*
3. *Total Uranium = U-234 + U-235 + U-238.*
4. *Total Thorium = Th-232 + Th-228*
5. *Refined Uranium refers to chemical forms where the equilibrium state of the uranium decay chain has been disrupted.*
6. *Depleted Uranium contains U-235 at < 0.71% by weight*

***3.* Use this space to perform source material SOF calculations:** *(if waste only contains U or Th, enter zero for other nuclide)*

D. NORM other than Uranium and Thorium Uniformly Dispersed in Soil or Other Media

1. Does the waste contain:		☐ **Ra-226 / Ra-228**	☐ **Pb-210**	☐ **K-40**	☐ **Other(s)**
2. Waste Concentration (pCi/g):					
Site Limits:	*USEI*	*500 / 1500*[1]	*1500*	*818*[4]	*See Site WAC or State Exemption regulations*
(all in pCi/g)	*USEN*	*5*[2]	*N/A*	*818*[4]	
	USET	*30*[3]	*150*	*818*[4]	

Notes(s):
1. Limits are for Ra-226+Ra-228 combined. 500 pCi/g is for bulk loads, up to 1500 pCi/g requires sealed IP-1 package.
2. USEN limit is for Ra-226 only.
3. Limits are for Ra-226 or Ra-228. See TCEQ regulations for other NORM exemptions.
4. K-40 may not be enriched beyond its natural concentration.

E. NRC or Agreement State Exempted Products, Devices, or Items

1. Type of exempt item(s) or product(s) _____ No. of Items: _____ ☐ Check if additional inventory information is attached.
2. The items are exempt under:
(cite regulatory reference, i.e. 10CFR30.14) _____

Notes:
1. Material must be transported in accordance with DOT Rules and Regulations.
2. The generator must provide an estimated inventory of activity, by isotope, for each container.
3. Individual packages may bear White I or Yellow II Labels as long as the maximum surface does rate on any package does not exceed 10 mrem/hr.
4. **Am-241 based smoke detectors are prohibited from disposal at USEN.**

F. CERTIFICATION STATEMENT:

I certify that the contents of the package(s) being shipped to Choose One are not licensed or regulated at the point of generation by the US Nuclear Regulatory Commission or an Agreement State, in accordance with _____ *(cite regulation or other document that confirms materials are not licensed by the NRC or an agreement state).*

_____
Name / Title (please print)

_____ _____
Signature Date

US ecology

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PROFILE#_____

ADDITIONAL RAD SUPPLEMENT QUESTIONS FOR SHIPMENTS TO US ECOLOGY IDAHO ONLY					
G. Particle Accelerator Produced Radioactive Material (NARM) (USEI WAC Table C.3)					
1.	Was the waste generated in a particle accelerator? ☐ YES ☐ NO				
2.	Estimated inventory of activity, by isotope, for each container: _____ Notes: • Dose rate may not exceed 10 mrem/hr at any point on the package surface. • Containers must be **at least 90% full**.				
H. Materials Specifically Exempted by the NRC or NRC Agreement State (USEI WAC Table C.4b)					
1.	Is the material approved for disposal in accordance with 20.2008(b) or equivalent Agreement State regulation? *If yes, provide a copy of the exemption.*	Yes	☐	No	☐
2.	Has the waste been approved by the NRC or an Agreement State for alternative disposal in accordance with 10CFR 20.2002 or an Agreement State equivalent regulation? *If yes, provide a copy of the approval request, NRC exemption, and applicable SER/FONSI.*	Yes	☐	No	☐
3.	Was the material approved for alternate disposal via a decommissioning plan or license amendment? *If yes, provide a copy of the license or plan.*	Yes	☐	No	☐
4.	Is the material acceptable under USEI Table C.4b as not licensed or regulated by the NRC or Agreement State under the Atomic Energy Act? *If yes, provide documentation that the radioactive material is unlicensed and refer to the applicable section(s) below (4a – 4c):*	Yes	☐	No	☐

	Exempt Material	**WAC Limit**
4a.	Byproduct Material (Exempt per 10CFR30.11 or equivalent)	Sum of all isotopes < 3,000 pCi/g
4b.	Source Material (Exempt per 10CFR40.14 or equivalent)	Sum of all isotopes < 3,000 pCi/g. If waste contains both uranium and thorium, a sum of fractions (SOF) must be calculated using the limits provided below: • **Natural Uranium (in equil)**: U-238 Limit = 214 pCi/g *(U-238 * 14 decay progeny < 3, 000 pCi/g)* • **Depleted Uranium**: U-238 Limit = 877 pCi/g *(Only contains U-238, Th-234, Pa-234m, U-235, and U-234)* • **Natural Thorium (in equil)**: Th-232 Limit = 272 pCi/g *(Th-232 * 11 decay progeny < 3, 000 pCi/g)* Use this space for SOF calculations:
4c.	Special Nuclear Material (Exempt per 10CFR 70.17)	Sum of all isotopes < 3,000 pCi/g

For US Ecology Idaho use only:	
Which of the USEI WAC Tables apply to this profile? (Check all that apply)	**Waste Type (check only one)**
☐ Table C.1 - Unimportant Quantities of Source Material Uniformly Dispersed in Soil or other Media ☐ Table C.2 - NORM other than Uranium and Thorium Uniformly Dispersed in Soil or Other Media ☐ Table C.3 - Particle Accelerator Produced Radioactive Material (NARM) ☐ Table C.4a - NRC Exempted Products, Devices, or Items ☐ Table C.4b - Materials Specifically Exempted by the US NRC or an NRC Agreement State	☐ FUSRAP ☐ RADIOACTIVE NON-FUSRAP ☐ RADIOACTIVE EXEMPT ACCEL