



**NORM/TENORM WASTE ADDENDUM**

**PROFILE#** \_\_\_\_\_

A. GENERATOR INFORMATION		B. DISPOSAL SITE																		
1. Generator:		<input type="checkbox"/> Wayne Disposal Landfill																		
2. EPA ID No.:		<input type="checkbox"/> Michigan Disposal Treatment Plant																		
3. Common Name of Material:																				
4. Material Description:																				
<b>C. Generally Exempt Unimportant Quantities of Source Material Uniformly Dispersed in Soil or other Media</b>																				
<b>1. Complete this Section if waste is being profiled as <u>generally exempt</u> (&lt; 0.05% by weight). Does the material contain? (check all that apply)</b>																				
<input type="checkbox"/> Natural, Refined, or Depleted Uranium <input type="checkbox"/> Thorium (Th-232) <input type="checkbox"/> Both Uranium and Thorium																				
<b>2. Source Material Sum of Fractions (SOF) Formulas:</b>																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #cccccc;"> <th colspan="2">Natural Uranium + Thorium</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><math>\frac{Conc_{U-238}}{167 \text{ pCi/g}}</math></td> <td style="text-align: center;"><math>+</math></td> </tr> <tr> <td style="text-align: center;"><math>\frac{Conc_{Th-232}}{55 \text{ pCi/g}}</math></td> <td style="text-align: center;"><math>\leq 1</math></td> </tr> </tbody> </table>	Natural Uranium + Thorium		$\frac{Conc_{U-238}}{167 \text{ pCi/g}}$	$+$	$\frac{Conc_{Th-232}}{55 \text{ pCi/g}}$	$\leq 1$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #cccccc;"> <th colspan="2">Refined Uranium + Thorium</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><math>\frac{Conc_{U-Total}}{333 \text{ pCi/g}}</math></td> <td style="text-align: center;"><math>+</math></td> </tr> <tr> <td style="text-align: center;"><math>\frac{Conc_{Th-Total}}{110 \text{ pCi/g}}</math></td> <td style="text-align: center;"><math>\leq 1</math></td> </tr> </tbody> </table>	Refined Uranium + Thorium		$\frac{Conc_{U-Total}}{333 \text{ pCi/g}}$	$+$	$\frac{Conc_{Th-Total}}{110 \text{ pCi/g}}$	$\leq 1$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #cccccc;"> <th colspan="2">Depleted Uranium + Thorium</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><math>\frac{Conc_{U-238}}{169 \text{ pCi/g}}</math></td> <td style="text-align: center;"><math>+</math></td> </tr> <tr> <td style="text-align: center;"><math>\frac{Conc_{Th-232}}{55 \text{ pCi/g}}</math></td> <td style="text-align: center;"><math>\leq 1</math></td> </tr> </tbody> </table>	Depleted Uranium + Thorium		$\frac{Conc_{U-238}}{169 \text{ pCi/g}}$	$+$	$\frac{Conc_{Th-232}}{55 \text{ pCi/g}}$	$\leq 1$
Natural Uranium + Thorium																				
$\frac{Conc_{U-238}}{167 \text{ pCi/g}}$	$+$																			
$\frac{Conc_{Th-232}}{55 \text{ pCi/g}}$	$\leq 1$																			
Refined Uranium + Thorium																				
$\frac{Conc_{U-Total}}{333 \text{ pCi/g}}$	$+$																			
$\frac{Conc_{Th-Total}}{110 \text{ pCi/g}}$	$\leq 1$																			
Depleted Uranium + Thorium																				
$\frac{Conc_{U-238}}{169 \text{ pCi/g}}$	$+$																			
$\frac{Conc_{Th-232}}{55 \text{ pCi/g}}$	$\leq 1$																			
<p><u>Notes:</u></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>1. Unless otherwise noted, use parent nuclide in equations</p> <p>2. Th-232 will routinely be considered to be in equilibrium with all progeny.</p> <p>3. Total Uranium = U-234 + U-235 + U-238.</p> <p>4. Total Thorium = Th-232 + Th-228</p> </div> <div style="width: 48%;"> <p>5. Refined Uranium refers to chemical forms where the equilibrium state of the uranium decay chain has been disrupted.</p> <p>6. Depleted Uranium contains U-235 at &lt; 0.71% by weight</p> </div> </div>																				
<b>3. Use this space to perform source material SOF calculations: (if waste only contains U or Th, enter zero for other nuclide)</b>																				
<b>D. NORM/TENORM other than Source Material Dispersed in Soil or Other Media</b>																				
1. Does the waste contain:	<input type="checkbox"/> Ra-226	<input type="checkbox"/> Pb-210	<input type="checkbox"/> K-40																	
2. Waste Concentration (pCi/g):			<input type="checkbox"/> Other(s)																	
3. WDI Site Disposal Limits: (Note 1)	50	260	(Note 2)																	
<p><u>Notes:</u></p> <p>1. MDI may receive higher concentrations for treatment or blending. All treated waste intended for disposal at WDI must meet the limits shown in D.3.</p> <p>2. K-40 may not be enriched beyond its natural concentration.</p> <p>3. Contact WDI Waste Approvals.</p>																				
<b>E. NRC or Agreement State Exempted Products, Devices, or Items</b>																				
1. Type of exempt item(s) or product(s) _____ No. of Items: _____			<input type="checkbox"/> Check if additional inventory information is attached.																	
2. The items are exempt under: _____ (cite regulatory reference, i.e. 10CFR30.14)																				
<p><u>Notes:</u></p> <p>1. Material must be transported in accordance with DOT Rules and Regulations.</p> <p>2. The generator must provide an estimated inventory of activity, by isotope, for each container.</p> <p>3. Individual packages may bear White I or Yellow II Labels as long as the maximum surface dose rate on any package does not exceed 10 mrem/hr.</p>																				
<b>F. CERTIFICATION STATEMENT:</b>																				
I certify that the contents of the package(s) being shipped to WDI/MDI 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																		