

Table 1: One-Off Analysis Summary for the 100,000 Year Peak MOP Doses

Step	Data Description	Number of Realizations Remaining		Figures
		All Cases	Case A	
Step 1	Full data set from the “100,000-year” uncertainty analysis.	1000	250	Figure 1
Step 2	Remove data points representing doses in the Gordon Aquifer.	570	142	Figure 1 to Figure 2
Step 3	Remove data points representing doses wherein technetium within Oxidized Region II was 3.0E-13 mol/L.	286	78	Figure 2 to Figure 3
Step 4	Remove data points representing doses wherein plutonium within Oxidized Region II was not 4.0E-14 mol/L.	148	43	Figure 3 to Figure 4
Step 5	Remove data points representing doses wherein plutonium K_d values in sandy soil were less than 195 mL/g.	74	18	Figure 4 to Figure 5

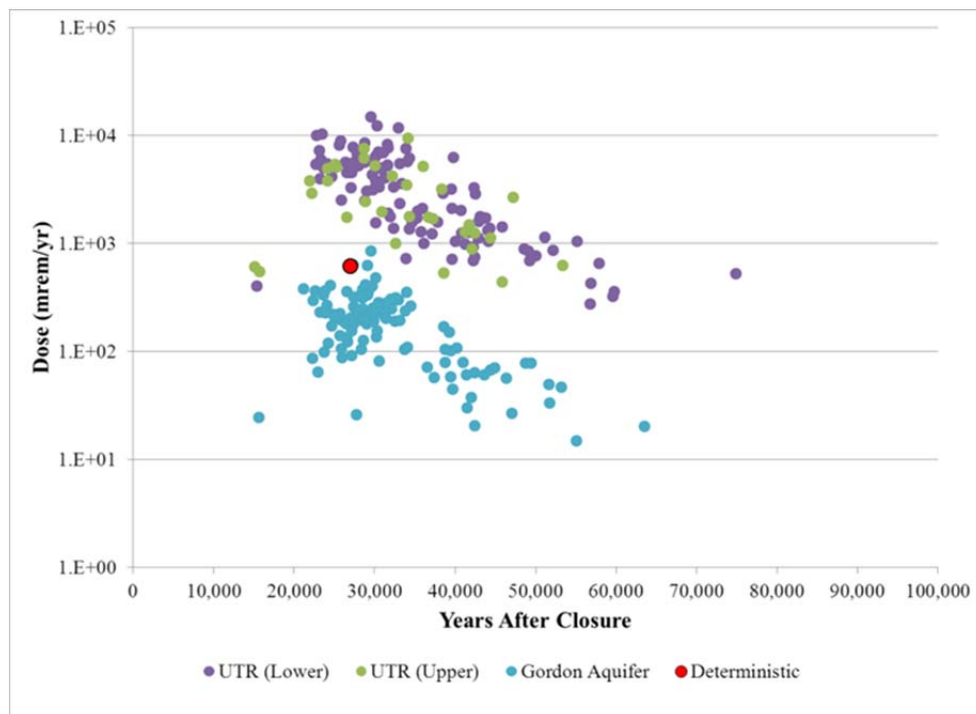
Figure 6 represents the same run parameters as Figure CC-UA-3.9 in SRR-CWDA-2011-00054 Rev. 1 but with a refined Tc-99 inventory estimation for the Type I tanks of 0.2 curies for Tank 5 and 1.0 curie for the remaining Type I tanks.

Figure 7 presents an overlay comparison of Figure 1(A) and Figure 6 to more clearly present the impact to the peak MOP dose due to refined Tc-99 Type I tank inventories.

Figure 1: 100,000-Year Peak MOP Doses at the Well of Maximum Concentration, Indicating Aquifer-Specific Well Depths

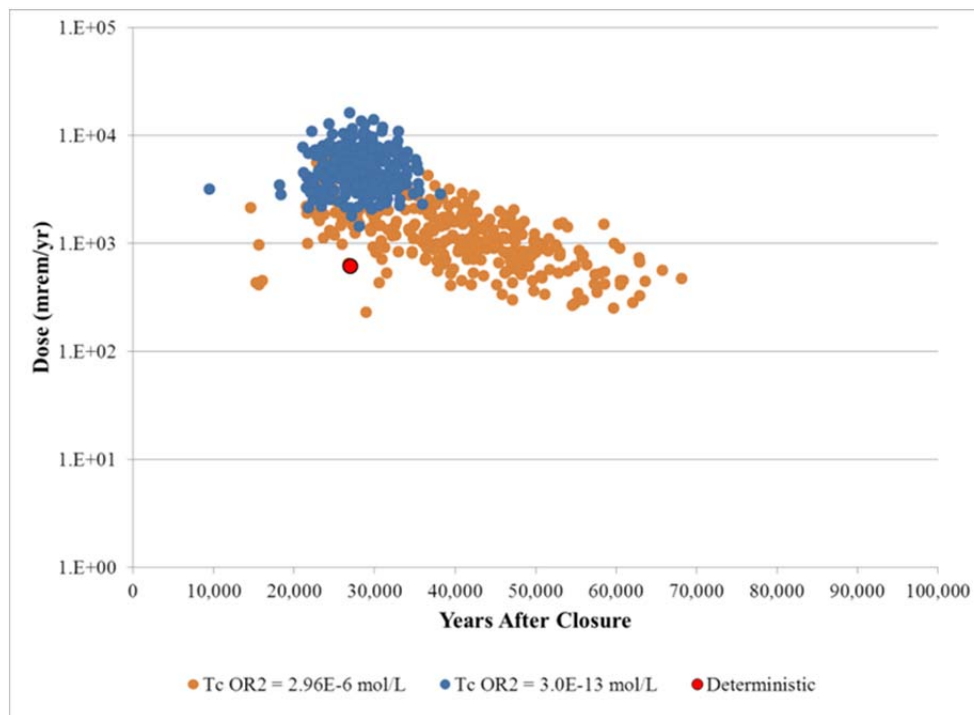


A) All Cases Configuration (1,000 realizations)

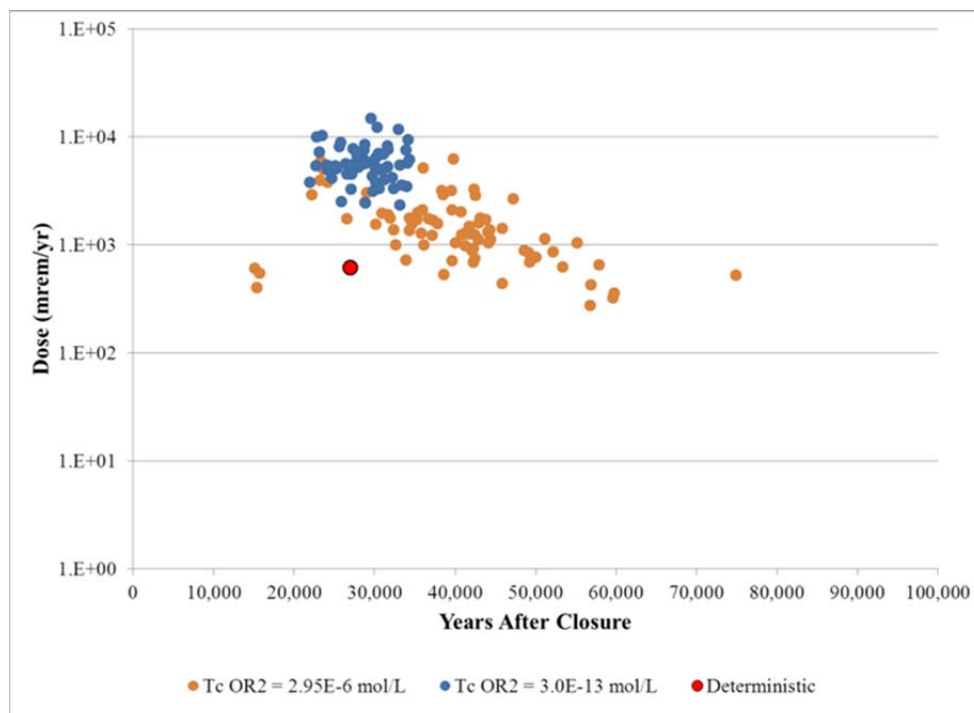


B) Case A Configuration (250 realizations)

Figure 2: 100,000-Year Peak MOP Doses at the Well of Maximum Concentration, Indicating Technetium Solubility Limits for Oxidized Region II Cements (Less Gordon Aquifer Well Depths)

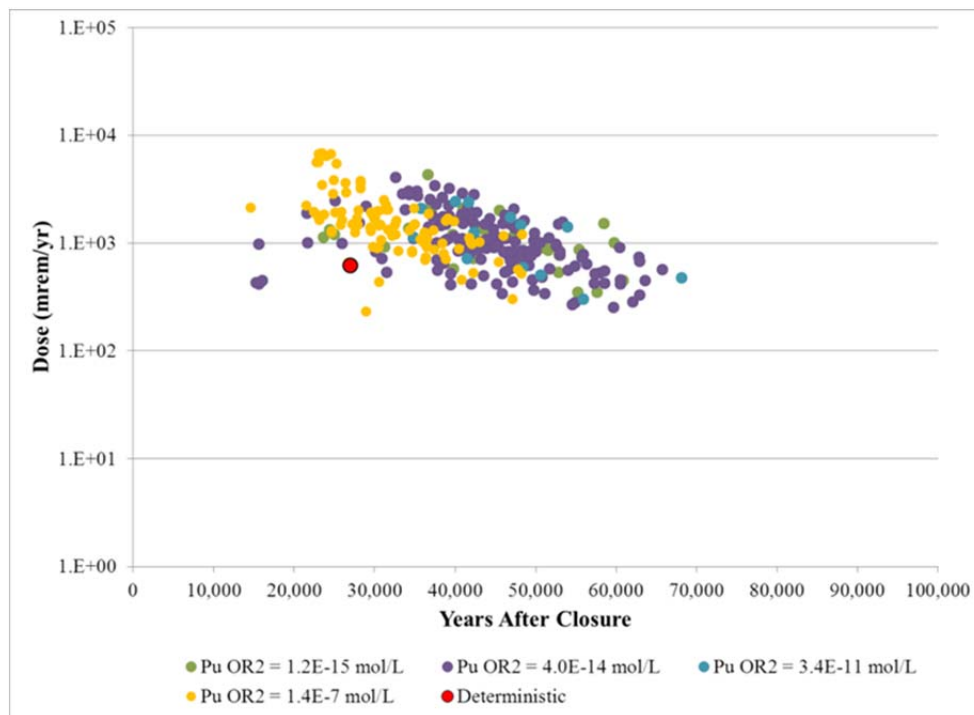


A) All Cases Configuration (1,000 – 430 = 570 realizations)

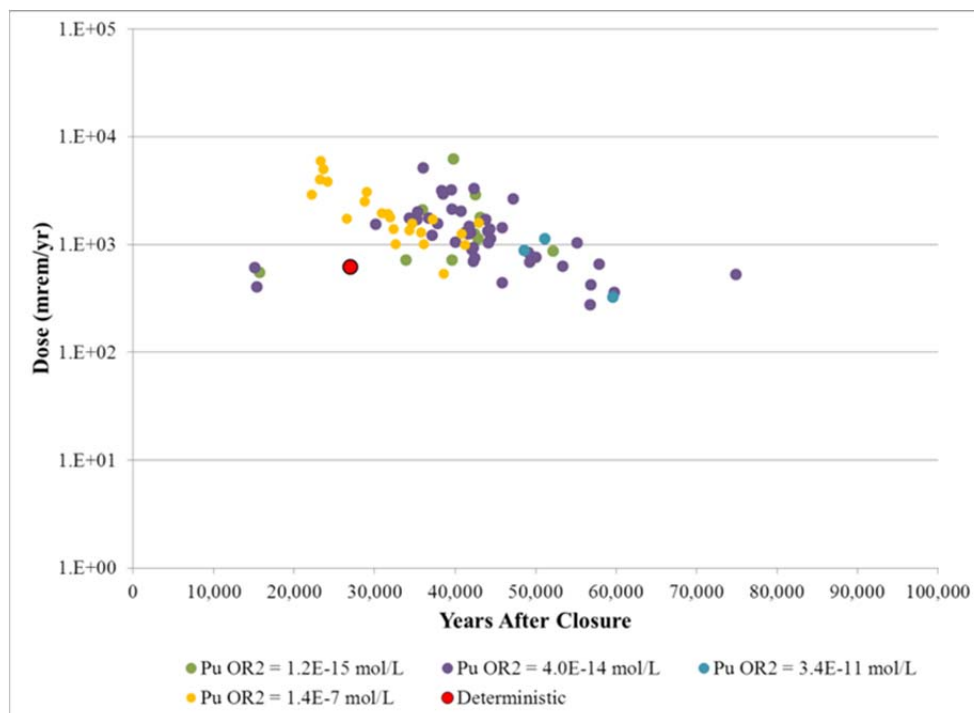


B) Case A Configuration (250 – 158 = 142 realizations)

Figure 3: 100,000-Year Peak MOP Doses at the Well of Maximum Concentration, Indicating Plutonium Solubility Limits for Oxidized Region II Cements (Less Gordon Aquifer Well Depths and Tc OxII Sol. Limits = $3.0\text{E-}13$)

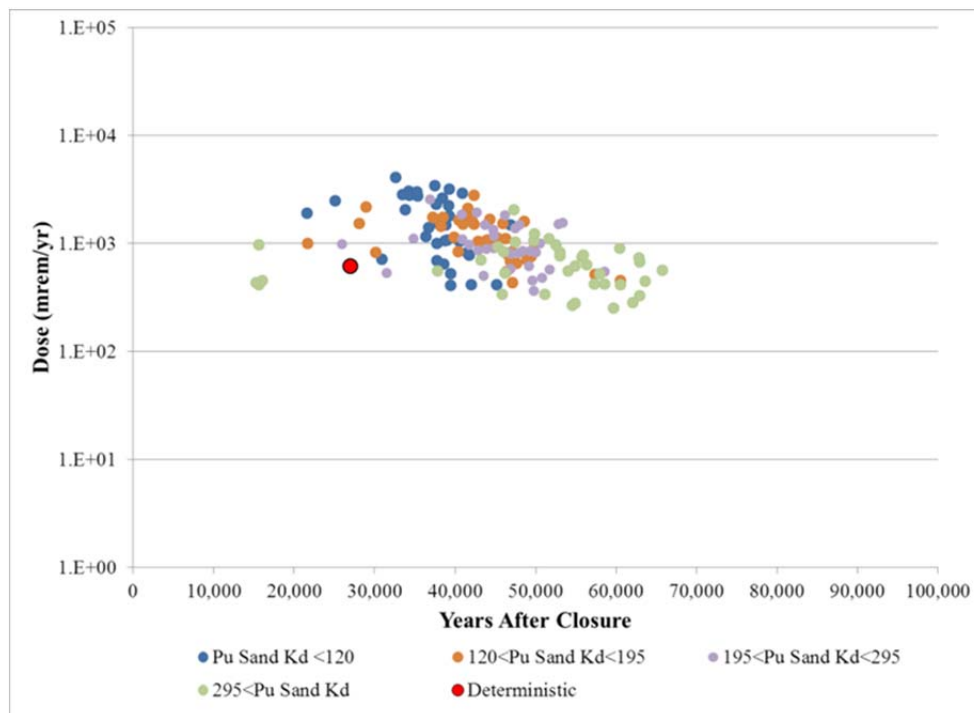


A) All Cases Configuration (570 – 284 = 286 realizations)

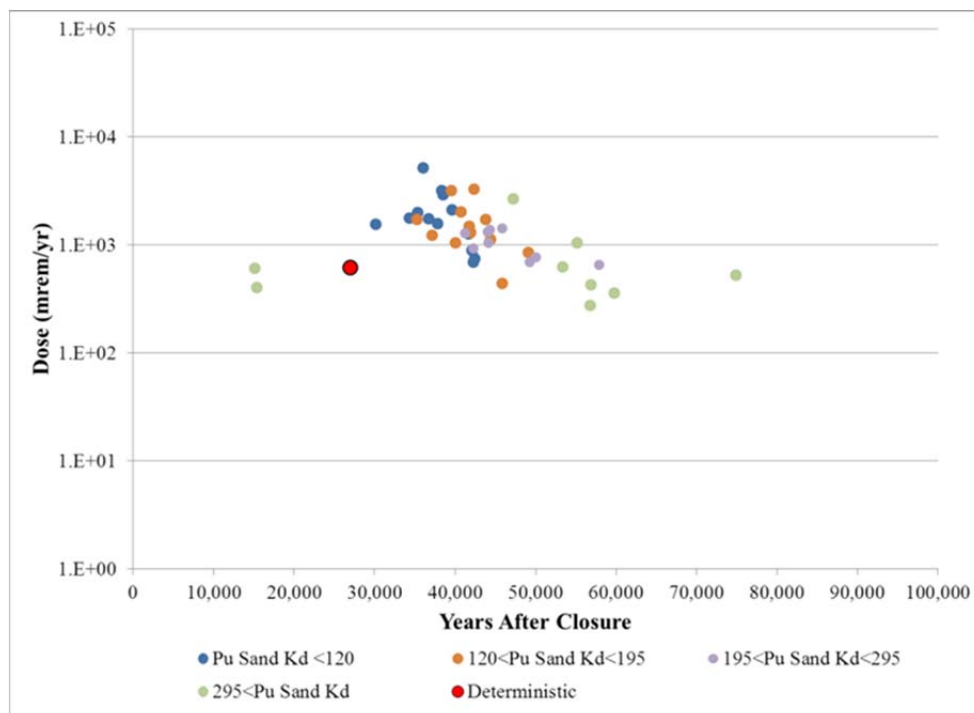


B) Case A Configuration (142 – 64 = 78 realizations)

Figure 4: 100,000-Year Peak MOP Doses at the Well of Maximum Concentration, Indicating Plutonium K_d Values for Sandy Soil (Less Gordon Aquifer Well Depths, Tc OxII Sol. Limits = $3.0\text{E-}13$, and Pu OxII Sol. Limits $\neq 4.0\text{E-}14$)

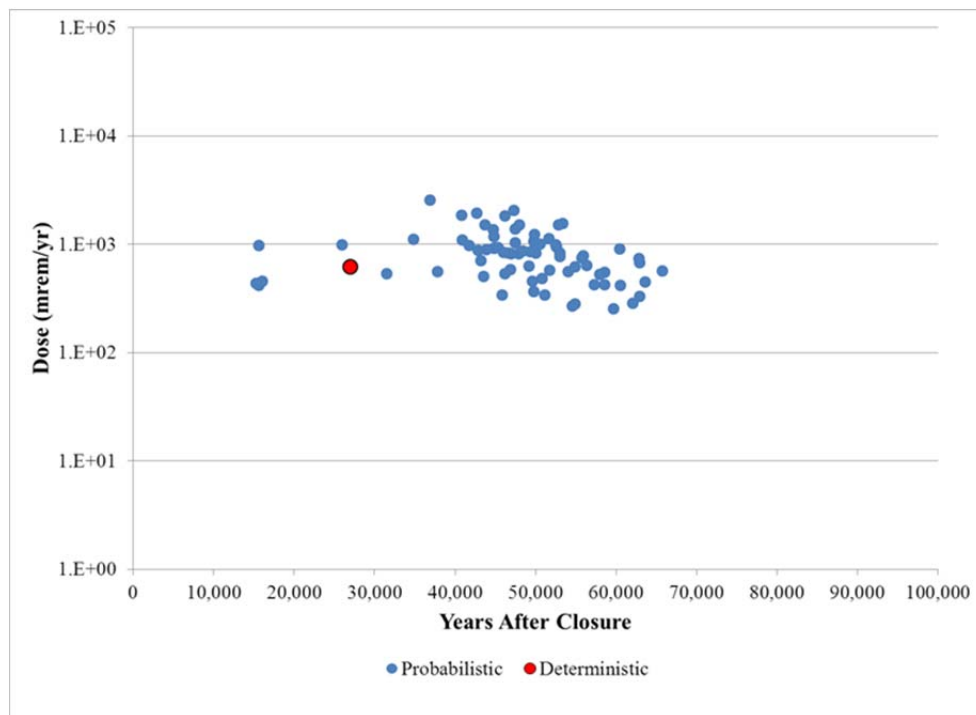


A) All Cases Configuration (286 – 138 = 148 realizations)

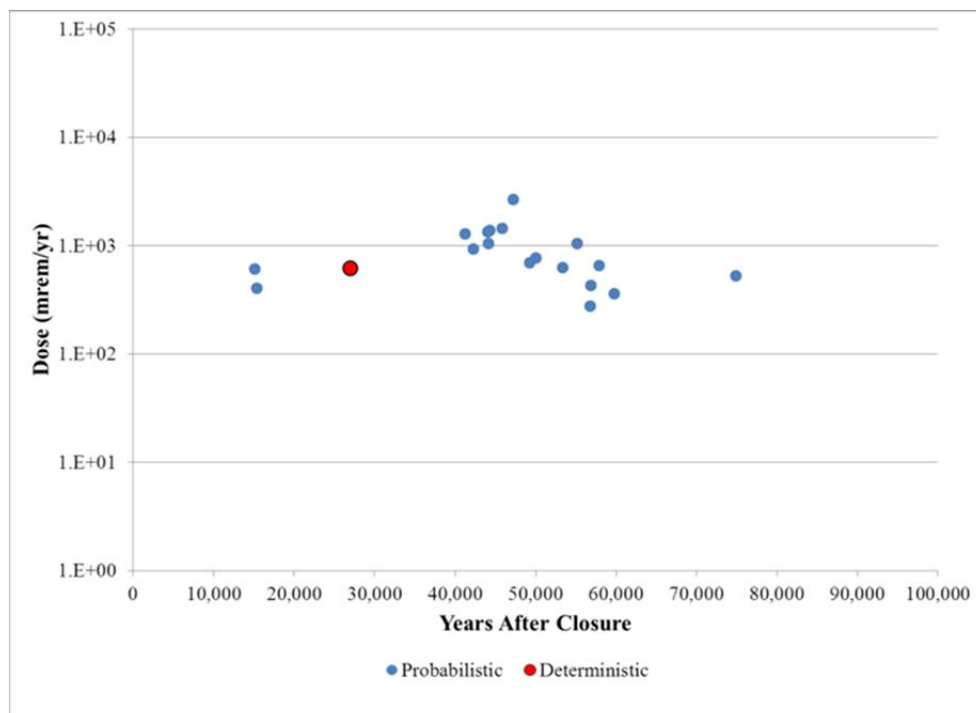


B) Case A Configuration (78 – 35 = 43 realizations)

Figure 5: 100,000-Year Peak MOP Doses at the Well of Maximum Concentration (Less Gordon Aquifer Well Depths, Tc OxII Sol. Limits = $3.0\text{E-}13$, Pu OxII Sol. Limits $\neq 4.0\text{E-}14$, and Plutonium K_d Values for Sandy Soil < 195)



A) All Cases Configuration ($148 - 74 = 74$ realizations)



B) Case A Configuration ($43 - 25 = 18$ realizations)

Figure 6: 100,000-Year Peak MOP Doses at the Well of Maximum Concentration from All Cases Model Configuration with Updated Tc-99 Inventory for Type I Tanks

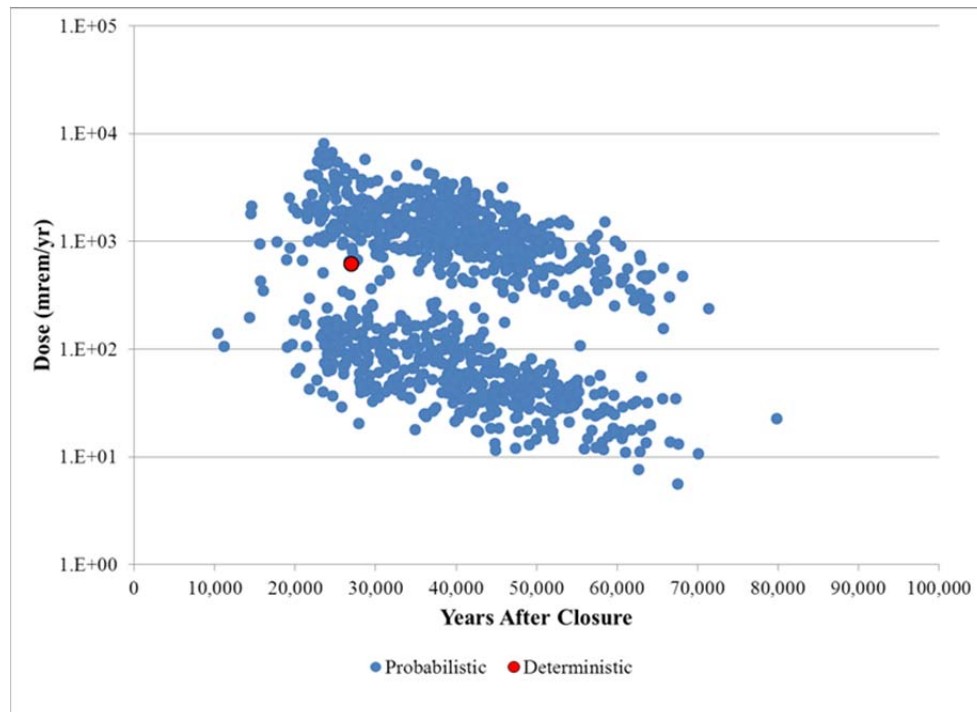


Figure 7: 100,000-Year Peak MOP Doses at the Well of Maximum Concentration from All Cases Model Configuration, PA Doses versus Updated Tc-99 Doses

