Table D8.30. Alternate Summary of Risk Characterization using KY ABS Values for SWMU 80, EU 1

Receptor	Total ELCR	COCs	% Total ELCR	Routes of Exposure	% Total ELCR	Total HI	COCs	% Total HI	Routes of Exposure	% Total HI
Current Industrial Worker (surface soil)	**2.2E-05**	PCB, Total	99%	Ingestion	10%	**<1**	*No COCs		Ingestion	
				Dermal	90%				Dermal	
				Inhalation	0%				Inhalation	
				External exposure	0%					
Future Industrial Worker (surface soil)	**4.0E-04**	Dioxins/Furans, Total	1%	Ingestion	10%	**<1**	*No COCs		Ingestion	
		PCB, Total	99%	Dermal	90%				Dermal	
				Inhalation	0%				Inhalation	
				External exposure	0%					
Outdoor Worker (surface soil)	**5.4E-04**	Dioxins/Furans, Total	3%	Ingestion	51%	**<1**	*No COCs		Ingestion	
		PCB, Total	97%	Dermal	49%				Dermal	
				Inhalation	0%				Inhalation	
				External exposure	0%					
Outdoor Worker (surface and subsurface soil)	**5.2E-04**	PCB, Total	100%	Ingestion	50%	**<1**	*No COCs		Ingestion	
				Dermal	50%				Dermal	
				Inhalation	0%				Inhalation	
				External exposure	0%					
Excavation Worker (surface and subsurface soil)	**1.1E-04**	PCB, Total	100%	Ingestion	50%	**<1**	*No COCs		Ingestion	
				Dermal	50%				Dermal	
				Inhalation	0%				Inhalation	
				External exposure	0%					
Future Adult Resident (surface soil)	**1.6E-03**	Dioxins/Furans, Total	2%	Ingestion	23%	**<1**	*No COCs		Ingestion	
		PCB, Total	98%	Dermal	77%				Dermal	
				Inhalation	0%				Inhalation	
				External exposure	0%					
Future Child Resident (surface soil)	See Future Adult Resident					**2.3**	Uranium	30%	Ingestion	88%
							Dioxins/Furans, Total	70%	Dermal	12%
									Inhalation	0%

Table D8.30. Alternate Summary of Risk Characterization using KY ABS Values for SWMU 80, EU 1 (Continued)

Receptor	Total ELCR	COCs	% Total ELCR	Routes of Exposure	% Total ELCR	Total HI	COCs	% Total HI	Routes of Exposure	% Total HI
Future Adult Recreational User (surface soil)	**7.1E-04**	Dioxins/Furans, Total PCB, Total	2% 98%	Ingestion Dermal Inhalation External exposure	21% 79% 0% 0%	**<1**	*No COCs		Ingestion Dermal Inhalation	
Future Teen Recreational User (surface soil)	See Future Adult Recreational User					**<1**	*No COCs		Ingestion Dermal Inhalation	
Future Child Recreational User (surface soil)	See Future Adult Recreational User					**<1**	*No COCs		Ingestion Dermal Inhalation	

Total ELCR and total HI represent total risk or hazard summed across all routes of exposure for all COPCs.

*No COCs = There are no COCs.

ELCR for Future Adult Resident and Future Child Resident are the combined lifetime scenario.

ELCR for Future Adult Recreational User, Future Teen Recreational User and Future Child Recreational User are the combined lifetime scenario.

Table D8.31. Alternate Summary of Risk Characterization using KY ABS Values for SWMU 80, EU 2

Receptor	Total ELCR	COCs	% Total ELCR	Routes of Exposure	% Total ELCR	Total HI	COCs	% Total HI	Routes of Exposure	% Total HI
Current Industrial Worker	**7.4E-05**	PCB, Total	3%	Ingestion	10%	**<1**	*No COCs		Ingestion	
(surface soil)		Uranium-235	6%	Dermal	3%				Dermal	
		Uranium-238	88%	Inhalation	0%				Inhalation	
				External exposure	86%					
Future Industrial Worker	**1.3E-03**	PAH, Total	1%	Ingestion	10%	**6.6**	Antimony	23%	Ingestion	15%
(surface soil)		PCB, Total	3%	Dermal	3%		Cobalt	2%	Dermal	84%
		Americium-241	<1%	Inhalation	0%		Molybdenum	3%	Inhalation	1%
		Cesium-137	1%	External exposure	86%		Nickel	2%		
		Neptunium-237	<1%				Uranium	56%		
		Uranium-234	1%				Vanadium	12%		
		Uranium-235	6%							
		Uranium-238	88%							
Outdoor Worker	**1.8E-03**	PAH, Total	1%	Ingestion	52%	**11.2**	Antimony	13%	Ingestion	63%
(surface soil)		PCB, Total	3%	Dermal	2%		Cobalt	2%	Dermal	37%
		Americium-241	<1%	Inhalation	0%		Iron	2%	Inhalation	0%
		Cesium-137	<1%	External exposure	46%		Molybdenum	4%		
		Neptunium-237	<1%				Nickel	1%		
		Uranium-234	4%				Uranium	71%		
		Uranium-235	4%				Vanadium	6%		
		Uranium-238	88%							

Table D8.31. Alternate Summary of Risk Characterization using KY ABS Values for SWMU 80, EU 2 (Continued)

Receptor	Total ELCR	COCs	% Total ELCR	Routes of Exposure	% Total ELCR	Total HI	COCs	% Total HI	Routes of Exposure	% Total HI
Outdoor Worker	**1.9E-03**	Arsenic	1%	Ingestion	53%	**13.3**	Antimony	15%	Ingestion	56%
(surface and subsurface		PAH, Total	1%	Dermal	2%		Arsenic	1%	Dermal	44%
soil)		PCB, Total	3%	Inhalation	0%		Cobalt	2%	Inhalation	0%
		Americium-241	<1%	External exposure	45%		Iron	2%		
		Cesium-137	<1%				Manganese	9%		
		Neptunium-237	<1%				Molybdenum	4%		
		Uranium-234	4%				Nickel	3%		
		Uranium-235	4%				Uranium	60%		
		Uranium-238	87%				Vanadium	5%		
Excavation Worker	**3.7E-04**	Arsenic	1%	Ingestion	53%	**13.3**	Antimony	15%	Ingestion	56%
(surface and subsurface		PAH, Total	1%	Dermal	2%		Arsenic	1%	Dermal	44%
soil)		PCB, Total	3%	Inhalation	0%		Cobalt	2%	Inhalation	0%
		Cesium-137	<1%	External exposure	45%		Iron	2%		
		Uranium-234	4%				Manganese	9%		
		Uranium-235	4%				Molybdenum	4%		
		Uranium-238	87%				Nickel	3%		
							Uranium	60%		
							Vanadium	5%		
Future Adult Resident	**4.4E-03**	PAH, Total	1%	Ingestion	12%	**16.5**	Antimony	22%	Ingestion	17%
(surface soil)		PCB, Total	4%	Dermal	3%		Cobalt	2%	Dermal	82%
		Americium-241	<1%	Inhalation	0%		Iron	1%	Inhalation	1%
		Cesium-137	1%	External exposure	85%		Molybdenum	3%		
		Neptunium-237	<1%				Nickel	2%		
		Uranium-234	1%				Uranium	57%		
		Uranium-235	6%				Vanadium	11%		
		Uranium-238	88%							

Table D8.31. Alternate Summary of Risk Characterization using KY ABS Values for SWMU 80, EU 2 (Continued)

Receptor	Total ELCR	COCs	% Total ELCR	Routes of Exposure	% Total ELCR	Total HI	COCs	% Total HI	Routes of Exposure	% Total HI
Future Child Resident (surface soil)	See Future Adult Resident					**61.9**	Antimony	16%	Ingestion	48%
							Barium	0%	Dermal	52%
							Cobalt	2%	Inhalation	0%
							Iron	2%		
							Mercury	0%		
							Molybdenum	4%		
							Nickel	1%		
							Uranium	66%		
							Vanadium	8%		
Future Adult Recreational User (surface soil)	**7.3E-04**	PAH, Total	2%	Ingestion	26%	**4.9**	Antimony	22%	Ingestion	17%
		PCB, Total	10%	Dermal	9%		Molybdenum	3%	Dermal	83%
		Cesium-137	<1%	Inhalation	0%		Nickel	2%	Inhalation	0%
		Uranium-234	2%	External exposure	64%		Uranium	56%		
		Uranium-235	5%				Vanadium	12%		
		Uranium-238	81%							
Future Teen Recreational User (surface soil)	See Future Adult Recreational User					**14.6**	Antimony	23%	Ingestion	14%
							Cobalt	2%	Dermal	86%
							Iron	1%	Inhalation	0%
							Molybdenum	3%		
							Nickel	2%		
							Uranium	55%		
							Vanadium	12%		
Future Child Recreational User (surface soil)	See Future Adult Recreational User					**24.7**	Antimony	16%	Ingestion	48%
							Cobalt	2%	Dermal	52%
							Iron	2%	Inhalation	0%
							Molybdenum	4%		
							Nickel	1%		
							Uranium	66%		
							Vanadium	8%		

Total ELCR and total HI represent total risk or hazard summed across all routes of exposure for all COPCs.

*No COCs = There are no COCs.

ELCR for Future Adult Resident and Future Child Resident are the combined lifetime scenario.

Table D8.31. Alternate Summary of Risk Characterization using KY ABS Values for SWMU 80, EU 2 (Continued)

Receptor	Total ELCR	COCs	% Total ELCR	Routes of Exposure	% Total ELCR	Total HI	COCs	% Total HI	Routes of Exposure	% Total HI

ELCR for Future Adult Recreational User, Future Teen Recreational User and Future Child Recreational User are the combined lifetime scenario.

Table D8.32. Alternate Summary of Risk Characterization using KY ABS Values for SWMU 80, EU 3

Receptor	Total ELCR	COCs	% Total ELCR	Routes of Exposure	% Total ELCR	Total HI	COCs	% Total HI	Routes of Exposure	% Total HI
Current Industrial Worker	**1.0E-04**	PCB, Total	100%	Ingestion	9%	**<1**	*No COCs		Ingestion	
(surface soil)				Dermal	91%				Dermal	
				Inhalation	0%				Inhalation	
				External exposure	0%					
Future Industrial Worker	**1.9E-03**	PCB, Total	100%	Ingestion	9%	**2.2**	Manganese	54%	Ingestion	4%
(surface soil)				Dermal	91%		Molybdenum	7%	Dermal	96%
				Inhalation	0%		Vanadium	33%	Inhalation	0%
				External exposure	0%					
Outdoor Worker	**2.5E-03**	PCB, Total	>99%	Ingestion	50%	**2.2**	Iron	8%	Ingestion	29%
(surface soil)		Uranium-238	<1%	Dermal	50%		Manganese	45%	Dermal	71%
				Inhalation	0%		Molybdenum	15%	Inhalation	0%
				External exposure	0%		Uranium	5%		
							Vanadium	27%		
Outdoor Worker	**2.5E-03**	Arsenic	<1%	Ingestion	50%	**10.5**	Antimony	25%	Ingestion	24%
(surface and subsurface		PAH, Total	<1%	Dermal	50%		Arsenic	1%	Dermal	76%
soil)		PCB, Total	99%	Inhalation	0%		Iron	2%	Inhalation	0%
		Uranium-238	<1%	External exposure	0%		Manganese	10%		
							Mercury	48%		
							Molybdenum	5%		
							Nickel	2%		
							Uranium	1%		
							Vanadium	6%		
Excavation Worker	**5.0E-04**	Arsenic	<1%	Ingestion	50%	**10.5**	Antimony	25%	Ingestion	24%
(surface and subsurface		PAH, Total	<1%	Dermal	50%		Arsenic	1%	Dermal	76%
soil)		PCB, Total	99%	Inhalation	0%		Iron	2%	Inhalation	0%
				External exposure	0%		Manganese	10%		
							Mercury	48%		
							Molybdenum	5%		
							Nickel	2%		
							Uranium	1%		
							Vanadium	6%		

Table D8.32. Alternate Summary of Risk Characterization using KY ABS Values for SWMU 80, EU 3 (Continued)

Receptor	Total ELCR	COCs	% Total ELCR	Routes of Exposure	% Total ELCR	Total HI	COCs	% Total HI	Routes of Exposure	% Total HI
Future Adult Resident (surface soil)	**7.2E-03**	PCB, Total	>99%	Ingestion	22%	**5.4**	Iron	4%	Ingestion	5%
		Uranium-238	<1%	Dermal	77%		Manganese	54%	Dermal	95%
				Inhalation	0%		Molybdenum	7%	Inhalation	0%
				External exposure	0%		Uranium	2%		
							Vanadium	32%		
Future Child Resident (surface soil)	See Future Adult Resident					**15.0**	Barium	1%	Ingestion	269%
							Iron	6%	Dermal	1229%
							Manganese	49%	Inhalation	2%
							Molybdenum	11%		
							Uranium	3%		
							Vanadium	30%		
Future Adult Recreational User (surface soil)	**3.3E-03**	PCB, Total	100%	Ingestion	21%	**1.6**	Manganese	53%	Ingestion	5%
				Dermal	79%		Molybdenum	7%	Dermal	95%
				Inhalation	0%		Vanadium	32%	Inhalation	0%
				External exposure	0%					
Future Teen Recreational User (surface soil)	See Future Adult Recreational User					**5.0**	Iron	4%	Ingestion	4%
							Manganese	54%	Dermal	96%
							Molybdenum	7%	Inhalation	0%
							Uranium	2%		
							Vanadium	33%		
Future Child Recreational User (surface soil)	See Future Adult Recreational User					**6.0**	Iron	6%	Ingestion	18%
							Manganese	49%	Dermal	82%
							Molybdenum	11%	Inhalation	0%
							Uranium	3%		
							Vanadium	30%		

Total ELCR and total HI represent total risk or hazard summed across all routes of exposure for all COPCs.

*No COCs = There are no COCs.

ELCR for Future Adult Resident and Future Child Resident are the combined lifetime scenario.

ELCR for Future Adult Recreational User, Future Teen Recreational User and Future Child Recreational User are the combined lifetime scenario.