8.0 Tables

Table 1.1 Selection of Exposure Pathways -- Current

Westinghouse Electric Co. Hematite Site

Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Complete/Incomplete	Rationale for Selection or Exclusion of Exposure Pathway
Groundwater	Groundwater	Tap Water/Shower	Resident	Adult/Child	Dermal	**Complete**	An on-site resident uses groundwater for domestic use.
		Outdoors			Dermal	Incomplete	Resident is not expected to come into contact with groundwater that is not obtained from a well.
		Tap Water			Ingestion	**Complete**	An on-site resident uses groundwater for domestic use.
	Indoor Air	Showerhead			Inhalation	**Complete**	An on-site resident uses groundwater for domestic use.
		Foundation Cracks			Inhalation	Incomplete	Groundwater impacts are at a great depth and not expected to reach building foundations.
	Outdoor Air	Outdoors			Inhalation	Incomplete	Groundwater impacts are at a great depth and not expected to reach the ground surface.
	Groundwater	Tap Water/ Shower	Construction Worker	Adult	Dermal	Incomplete	Construction work is limited to outdoor activities.
		Outdoors			Dermal	**Complete**	Construction worker may come in contact with impacted groundwater during excavation activities.
		Tap Water			Ingestion	Incomplete	Construction work evaluation is limited to construction activities.
	Indoor Air	Showerhead			Inhalation	Incomplete	Construction work evaluation is limited to construction activities.
		Foundation Cracks			Inhalation	Incomplete	Construction work evaluation is limited to construction activities. Construction workers not expected to perform work inside buildings.
	Outdoor Air	Outdoors			Inhalation	**Complete**	Construction worker may be exposed to volatile chemicals from groundwater during excavation activities to depth of construction.
	Groundwater	Tap Water/ Shower	Commercial/ Industrial	Adult	Dermal	Incomplete	Water is currently treated before use.
		Outdoors			Dermal	Incomplete	Commercial worker is not expected to come into contact with groundwater that is not obtained from a well.
		Tap Water			Ingestion	Incomplete	Water is currently treated before use. Site is currently in the process of being connected to the municipal water system.
	Indoor Air	Showerhead			Inhalation	Incomplete	Commercial workers are not expected to shower at their place of employment.
		Foundation Cracks			Inhalation	**Complete**	Commercial workers are expected to conduct indoor activities.
	Outdoor Air	Outdoors			Inhalation	**Complete**	Commercial workers are expected to conduct outdoor activities.
	Groundwater	Tap Water/Shower	Recreational	Adult/Child	Dermal	Incomplete	Recreational use is not currently allowed on the Site.
		Outdoors			Dermal	Incomplete	Recreational use is not currently allowed on the Site.
		Tap Water			Ingestion	Incomplete	Recreational use is not currently allowed on the Site.
	Indoor Air	Showerhead			Inhalation	Incomplete	Recreational use is not currently allowed on the Site.
		Foundation Cracks			Inhalation	Incomplete	Recreational use is not currently allowed on the Site.
	Outdoor Air	Outdoors			Inhalation	Incomplete	Recreational use is not currently allowed on the Site.
	Groundwater	Tap Water/ Shower	Visitor/Trespasser	Adult	Dermal	Incomplete	Trespasser is not expected to have access to indoor facilities.
		Outdoors			Dermal	Incomplete	Trespasser is not expected to have access to groundwater.
		Tap Water			Ingestion	Incomplete	Trespasser is not expected to have access to groundwater.
	Indoor Air	Showerhead			Inhalation	Incomplete	Trespasser is not expected to have access to indoor facilities.
		Foundation Cracks			Inhalation	Incomplete	Trespasser is not expected to have access to indoor facilities.
	Outdoor Air	Outdoors			Inhalation	**Complete**	Trespasser is expected to be exposed to outdoor air.
	Groundwater	Tap Water/ Shower	Agricultural Worker	Adult	Dermal	Incomplete	Evaluation of agricultural worker considers only farming activities. Agricultural worker is not expected to perform indoor activities.
		Outdoors			Dermal	Incomplete	Agricultural worker is not expected to come into contact with groundwater.
		Tap Water			Ingestion	Incomplete	Agricultural worker is not expected to come into contact with groundwater.
	Indoor Air	Showerhead			Inhalation	Incomplete	Evaluation of agricultural worker considers only farming activities. Agricultural worker is not expected to perform indoor activities.
		Foundation Cracks			Inhalation	Incomplete	Evaluation of agricultural worker considers only farming activities. Agricultural worker is not expected to perform indoor activities.
	Outdoor Air	Outdoors			Inhalation	**Complete**	Agricultural worker is expected to come into contact with outdoor air.

Table 1.1 Selection of Exposure Pathways -- Current

Westinghouse Electric Co. Hematite Site

Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Complete/Incomplete	Rationale for Selection or Exclusion of Exposure Pathway
Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Resident	Adult/Child	Dermal	**Complete**	Receptor may enter streams or ponds.
					Ingestion	**Complete**	Receptor may enter streams or ponds.
	Outdoor Air				Inhalation	**Complete**	Receptor may enter streams or ponds.
	Surface Water/Sediment	Stream or Pond	Construction Worker	Adult	Dermal	**Complete**	Construction worker may come in contact with surface water/sediment during construction related activities.
					Ingestion	**Complete**	Construction worker may come in contact with surface water/sediment during construction related activities.
	Outdoor Air				Inhalation	**Complete**	Construction worker may come in contact with surface water/sediment during construction related activities.
	Surface Water/Sediment	Stream or Pond	Commercial/ Industrial	Adult	Dermal	**Complete**	Receptor may conduct outdoor activities.
					Ingestion	**Complete**	Receptor may conduct outdoor activities.
	Outdoor Air				Inhalation	**Complete**	Receptor may conduct outdoor activities.
	Surface Water/Sediment	Stream or Pond	Recreational	Adult/Child	Dermal	Incomplete	Recreational use is not currently allowed on the Site.
					Ingestion	Incomplete	Recreational use is not currently allowed on the Site.
	Outdoor Air				Inhalation	Incomplete	Recreational use is not currently allowed on the Site.
	Surface Water/Sediment	Stream or Pond	Visitor/Trespasser	Adult	Dermal	**Complete**	Trespasser may enter streams or ponds.
					Ingestion	**Complete**	Trespasser may enter streams or ponds.
	Outdoor Air				Inhalation	**Complete**	Trespasser may enter streams or ponds.
	Surface Water/Sediment	Stream or Pond	Agricultural Worker	Adult	Dermal	**Complete**	Receptor may conduct outdoor activities.
					Ingestion	**Complete**	Receptor may conduct outdoor activities.
	Outdoor Air				Inhalation	**Complete**	Receptor may conduct outdoor activities.

Table 1.1 Selection of Exposure Pathways -- Current

Westinghouse Electric Co. Hematite Site

Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Complete/Incomplete	Rationale for Selection or Exclusion of Exposure Pathway
Surface Soil	Surface Soil	Outdoors	Resident	Adult/Child	Dermal	**Complete**	Resident may come into contact with surface soil during outdoor activities.
					Ingestion	**Complete**	Resident may come into contact with surface soil during outdoor activities.
	Outdoor Air				Inhalation	**Complete**	Resident may come into contact with surface soil during outdoor activities.
	Particulates				Inhalation	**Complete**	Resident may come into contact with surface soil during outdoor activities.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Current residence is not built on impacted soil.
	Surface Soil	Outdoors	Construction Worker	Adult	Dermal	**Complete**	Construction worker may come in contact with surface soils during construction related activities.
					Ingestion	**Complete**	Construction worker may come in contact with surface soils during construction related activities.
	Outdoor Air				Inhalation	**Complete**	Construction worker may come in contact with surface soils during construction related activities.
	Particulates				Inhalation	**Complete**	Construction worker may come in contact with surface soils during construction related activities.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Construction work evaluation is limited to outdoor construction activities.
	Surface Soil	Outdoors	Commercial/ Industrial	Adult	Dermal	**Complete**	Commercial worker may conduct outdoor activities.
					Ingestion	**Complete**	Commercial worker may conduct outdoor activities.
	Outdoor Air				Inhalation	**Complete**	Commercial worker may conduct outdoor activities.
	Particulate				Inhalation	**Complete**	Commercial worker may conduct outdoor activities.
	Indoor Air	Foundation Cracks			Inhalation	**Complete**	Site buildings are on top of contaminated surface soils.
	Surface Soil	Outdoors	Recreational	Adult/Child	Dermal	Incomplete	Recreational use is not currently allowed on the Site.
					Ingestion	Incomplete	Recreational use is not currently allowed on the Site.
	Outdoor Air				Inhalation	Incomplete	Recreational use is not currently allowed on the Site.
	Particulates				Inhalation	Incomplete	Recreational use is not currently allowed on the Site.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Recreational use is not currently allowed on the Site.
	Surface Soil	Outdoors	Visitor/Trespasser	Adult	Dermal	**Complete**	Trespasser may have contact with surface soil.
					Ingestion	**Complete**	Trespasser may have contact with surface soil.
	Outdoor Air				Inhalation	**Complete**	Trespasser may have contact with surface soil.
	Particulates				Inhalation	**Complete**	Trespasser may have contact with surface soil.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Trespasser is not expected to have access to indoor facilities.
	Surface Soil	Outdoors	Agricultural Worker	Adult	Dermal	**Complete**	Agricultural worker is expected to come into contact with surface soils during farming activities.
					Ingestion	**Complete**	Agricultural worker is expected to come into contact with surface soils during farming activities.
	Outdoor Air				Inhalation	**Complete**	Agricultural worker is expected to come into contact with outdoor air.
	Particulates				Inhalation	**Complete**	Agricultural worker is expected to come into contact with outdoor air.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Agricultural worker is not expected to perform indoor activities.

Table 1.1 Selection of Exposure Pathways -- Current

Westinghouse Electric Co. Hematite Site

Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Complete/Incomplete	Rationale for Selection or Exclusion of Exposure Pathway
Subsurface Soil	Subsurface Soil	Outdoors	Resident	Adult/Child	Dermal	Incomplete	Resident is not expected to come into contact with subsurface soils.
					Ingestion	Incomplete	Resident is not expected to come into contact with subsurface soils.
	Outdoor Air				Inhalation	**Complete**	Resident may conduct outdoor activities.
	Particulates				Inhalation	Incomplete	Resident is not expected to come into contact with subsurface soils.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Current residence is not built on impacted soil.
	Subsurface Soil	Outdoors	Construction Worker	Adult	Dermal	**Complete**	Construction worker may come in contact with subsurface soils during construction related activities. (Evaluated only to depth of construction.)
					Ingestion	**Complete**	Construction worker may come in contact with subsurface soils during construction related activities. (Evaluated only to depth of construction.)
	Outdoor Air				Inhalation	**Complete**	Construction worker may come in contact with subsurface soils during construction related activities. (Evaluated only to depth of construction.)
	Particulates				Inhalation	**Complete**	Construction worker may come in contact with subsurface soils during construction related activities. (Evaluated only to depth of construction.)
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Construction work evaluation is limited to outdoor construction activities.
	Subsurface Soil	Outdoors	Commercial/ Industrial	Adult	Dermal	Incomplete	Commercial worker is not expected to come into contact with subsurface soils.
					Ingestion	Incomplete	Commercial worker is not expected to come into contact with subsurface soils.
	Outdoor Air				Inhalation	**Complete**	Commercial worker may conduct outdoor activities.
	Particulates				Inhalation	Incomplete	Commercial worker is not expected to come into contact with subsurface soils.
	Indoor Air	Foundation Cracks			Inhalation	**Complete**	Site buildings are on top of contaminated subsurface soils.
	Subsurface Soil	Outdoors	Recreational	Adult/Child	Dermal	Incomplete	Recreational use is not currently allowed on the Site.
					Ingestion	Incomplete	Recreational use is not currently allowed on the Site.
	Outdoor Air				Inhalation	Incomplete	Recreational use is not currently allowed on the Site.
	Particulates				Inhalation	Incomplete	Recreational use is not currently allowed on the Site.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Recreational use is not currently allowed on the Site.
	Subsurface Soil	Outdoors	Visitor/Trespasser	Adult	Dermal	Incomplete	Trespasser is not expected to have access to subsurface soils.
					Ingestion	Incomplete	Trespasser is not expected to have access to subsurface soils.
	Outdoor Air				Inhalation	**Complete**	Trespasser may conduct outdoor activities
	Particulates				Inhalation	Incomplete	Trespasser is not expected to have access to subsurface soils.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Trespasser is not expected to have access to indoor facilities.
	Subsurface Soil	Outdoors	Agricultural Worker	Adult	Dermal	Incomplete	Agricultural worker is not expected to come into contact with subsurface soils.
					Ingestion	Incomplete	Agricultural worker is not expected to come into contact with subsurface soils.
	Outdoor Air				Inhalation	**Complete**	Agricultural worker is expected to come into contact with outdoor air.
	Particulates				Inhalation	**Complete**	Agricultural worker is expected to come into contact with outdoor air.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Agricultural worker is not expected to conduct indoor activities.

Table 1.2 Selection of Exposure Pathways -- Future

Westinghouse Electric Co. Hematite Site

Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Complete/Incomplete	Rationale for Selection or Exclusion of Exposure Pathway
Groundwater	Groundwater	Tap Water/Shower	Resident	Adult/Child	Dermal	**Complete**	Resident is expected to use groundwater for domestic use.
		On Site			Dermal	Incomplete	Resident is not expected to come into contact with groundwater that is not obtained from a well.
		Tap Water			Ingestion	**Complete**	Resident is expected to use groundwater for domestic use.
	Indoor Air	Showerhead			Inhalation	**Complete**	Resident is expected to use groundwater for domestic use.
		Foundation Cracks			Inhalation	**Complete**	Pathway is complete when residential structures are built on top of areas with shallow groundwater contamination.
	Outdoor Air	Outdoors			Inhalation	**Complete**	Resident is expected to conduct outdoor activities.
	Groundwater	Tap Water/ Shower	Construction Worker	Adult	Dermal	Incomplete	Construction work is limited to outdoor activities.
		Outdoors			Dermal	**Complete**	Construction worker may come in contact with impacted groundwater during excavation activities.
		Tap Water			Ingestion	Incomplete	Construction work evaluation is limited to construction activities.
	Indoor Air	Showerhead			Inhalation	Incomplete	Construction work evaluation is limited to construction activities.
		Foundation Cracks			Inhalation	Incomplete	Construction work evaluation is limited to construction activities. Construction workers not expected to perform work inside buildings.
	Outdoor Air	Outdoors			Inhalation	**Complete**	Construction worker may be exposed to volatile chemicals from groundwater during excavation activities to depth of construction.
	Groundwater	Tap Water/ Shower	Commercial/ Industrial	Adult	Dermal	**Complete**	Groundwater is impacted in aquifers that are a source of domestic water.
		Outdoors			Dermal	Incomplete	Commercial worker is not expected to come into contact with groundwater that is obtained from a well.
		Tap Water			Ingestion	**Complete**	Groundwater is impacted in aquifers that are a source of domestic water.
	Indoor Air	Showerhead			Inhalation	Incomplete	Commercial workers are not expected to shower at their place of employment.
		Foundation Cracks			Inhalation	**Complete**	Pathway is complete when commercial structures are built on top of areas with shallow groundwater contamination.
	Outdoor Air	Outdoors			Inhalation	**Complete**	Commercial worker may conduct outdoor activities.
	Groundwater	Tap Water/Shower	Recreational	Adult/Child	Dermal	Incomplete	Recreational use evaluation is limited to recreational activities, and does not include indoor activities.
		Outdoors			Dermal	Incomplete	Recreational user is not expected to have access to groundwater.
		Tap Water			Ingestion	Incomplete	Recreational user is not expected to have access to groundwater.
	Indoor Air	Showerhead			Inhalation	Incomplete	Recreational user is not expected to have access to groundwater.
		Foundation Cracks			Inhalation	Incomplete	Recreational use evaluation is limited to recreational activities, and does not include indoor activities.
	Outdoor Air	Outdoors			Inhalation	**Complete**	Recreational user is expected to be exposed to outdoor air.
	Groundwater	Tap Water/ Shower	Visitor/Trespasser	Adult	Dermal	Incomplete	Trespasser is not expected to have access to indoor facilities.
		Outdoors			Dermal	Incomplete	Trespasser is not expected to have access to groundwater.
		Tap Water			Ingestion	Incomplete	Trespasser is not expected to have access to groundwater.
	Indoor Air	Showerhead			Inhalation	Incomplete	Trespasser is not expected to have access to indoor facilities.
		Foundation Cracks			Inhalation	Incomplete	Trespasser is not expected to have access to indoor facilities.
	Outdoor Air	Outdoors			Inhalation	**Complete**	Trespasser is expected to be exposed to outdoor air.
	Groundwater	Tap Water/ Shower	Agricultural Worker	Adult	Dermal	Incomplete	Evaluation of agricultural worker considers only farming activities. Agricultural worker is not expected to perform indoor activities.
		Outdoors			Dermal	Incomplete	Agricultural worker is not expected to come into contact with groundwater.
		Tap Water			Ingestion	Incomplete	Agricultural worker is not expected to come into contact with groundwater.
	Indoor Air	Showerhead			Inhalation	Incomplete	Evaluation of agricultural worker considers only farming activities. Agricultural worker is not expected to perform indoor activities.
		Foundation Cracks			Inhalation	Incomplete	Evaluation of agricultural worker considers only farming activities. Agricultural worker is not expected to perform indoor activities.
	Outdoor Air	Outdoors			Inhalation	**Complete**	Agricultural worker is expected to come into contact with outdoor air.

Table 1.2 Selection of Exposure Pathways -- Future

Westinghouse Electric Co. Hematite Site

Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Complete/Incomplete	Rationale for Selection or Exclusion of Exposure Pathway
Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Resident	Adult/Child	Dermal	**Complete**	Receptor may enter streams or ponds.
					Ingestion	**Complete**	Receptor may enter streams or ponds.
	Outdoor Air				Inhalation	**Complete**	Receptor may enter streams or ponds.
	Surface Water/Sediment	Stream or Pond	Construction Worker	Adult	Dermal	**Complete**	Construction worker may come in contact with surface water during construction related activities.
					Ingestion	**Complete**	Construction worker may come in contact with surface water during construction related activities.
	Outdoor Air				Inhalation	**Complete**	Construction worker may come in contact with surface water during construction related activities.
	Surface Water/Sediment	Stream or Pond	Commercial/ Industrial	Adult	Dermal	**Complete**	Receptor may conduct outdoor activities.
					Ingestion	**Complete**	Receptor may conduct outdoor activities.
	Outdoor Air				Inhalation	**Complete**	Receptor may conduct outdoor activities.
	Surface Water/Sediment	Stream or Pond	Recreational	Adult/Child	Dermal	**Complete**	Receptor may enter streams or ponds.
					Ingestion	**Complete**	Receptor may enter streams or ponds.
	Outdoor Air				Inhalation	**Complete**	Receptor may enter streams or ponds.
	Surface Water/Sediment	Stream or Pond	Visitor/Trespasser	Adult	Dermal	**Complete**	Receptor may enter streams or ponds.
					Ingestion	**Complete**	Receptor may enter streams or ponds.
	Outdoor Air				Inhalation	**Complete**	Receptor may enter streams or ponds.
	Surface Water/Sediment	Stream or Pond	Agricultural Worker	Adult	Dermal	**Complete**	Receptor may conduct outdoor activities.
					Ingestion	**Complete**	Receptor may conduct outdoor activities.
	Outdoor Air				Inhalation	**Complete**	Receptor may conduct outdoor activities.

Table 1.2 Selection of Exposure Pathways -- Future

Westinghouse Electric Co. Hematite Site

Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Complete/Incomplete	Rationale for Selection or Exclusion of Exposure Pathway
Surface Soil	Surface Soil	Outdoors	Resident	Adult/Child	Dermal	**Complete**	Resident may come into contact with surface soil during outdoor activities.
					Ingestion	**Complete**	Resident may come into contact with surface soil during outdoor activities.
	Outdoor Air				Inhalation	**Complete**	Resident may come into contact with surface soil during outdoor activities.
	Particulate				Inhalation	**Complete**	Resident may come into contact with surface soil during outdoor activities.
	Indoor Air	Foundation Cracks			Inhalation	**Complete**	Pathway is complete when residential structures are built on top of areas with surface soil contamination.
	Surface Soil	Outdoors	Construction Worker	Adult	Dermal	**Complete**	Construction worker may come in contact with surface soils during construction related activities.
					Ingestion	**Complete**	Construction worker may come in contact with surface soils during construction related activities.
	Outdoor Air				Inhalation	**Complete**	Construction worker may come in contact with surface soils during construction related activities.
	Particulates				Inhalation	**Complete**	Construction worker may come in contact with surface soils during construction related activities.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Construction work evaluation is limited to outdoor construction activities.
	Surface Soil	Outdoors	Commercial/ Industrial	Adult	Dermal	**Complete**	Commercial worker may conduct outdoor activities.
					Ingestion	**Complete**	Commercial worker may conduct outdoor activities.
	Outdoor Air				Inhalation	**Complete**	Commercial worker may conduct outdoor activities.
	Particulate				Inhalation	**Complete**	Commercial worker may conduct outdoor activities.
	Indoor Air	Foundation Cracks			Inhalation	**Complete**	Pathway is complete when commercial structures are built on top of areas with surface soil contamination.
	Surface Soil	Outdoors	Recreational	Adult/Child	Dermal	**Complete**	Recreational user is expected to come into contact with surface soils during recreational activities.
					Ingestion	**Complete**	Recreational user is expected to come into contact with surface soils during recreational activities.
	Outdoor Air				Inhalation	**Complete**	Recreational user is expected to come into contact with surface soils during recreational activities.
	Particulates				Inhalation	**Complete**	Recreational user is expected to come into contact with surface soils during recreational activities.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Recreational user is not expected to perform indoor activities.
	Surface Soil	Outdoors	Visitor/Trespasser	Adult	Dermal	**Complete**	Trespasser may have contact with surface soil.
					Ingestion	**Complete**	Trespasser may have contact with surface soil.
	Outdoor Air				Inhalation	**Complete**	Trespasser may have contact with surface soil.
	Particulates				Inhalation	**Complete**	Trespasser may have contact with surface soil.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Trespasser is not expected to have access to indoor facilities.
	Surface Soil	Outdoors	Agricultural Worker	Adult	Dermal	**Complete**	Agricultural worker is expected to come into contact with surface soils during farming activities.
					Ingestion	**Complete**	Agricultural worker is expected to come into contact with surface soils during farming activities.
	Outdoor Air				Inhalation	**Complete**	Agricultural worker is expected to come into contact with outdoor air.
	Particulates				Inhalation	**Complete**	Agricultural worker is expected to come into contact with outdoor air.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Agricultural worker is not expected to perform indoor activities.

Table 1.2 Selection of Exposure Pathways -- Future

Westinghouse Electric Co. Hematite Site

Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Complete/Incomplete	Rationale for Selection or Exclusion of Exposure Pathway
Subsurface Soil	Subsurface Soil	Outdoors	Resident	Adult/Child	Dermal	Incomplete	Resident is not expected to come into contact with subsurface soils.
					Ingestion	Incomplete	Resident is not expected to come into contact with subsurface soils.
	Outdoor Air				Inhalation	**Complete**	Resident may conduct outdoor activities.
	Particulates				Inhalation	Incomplete	Resident is not expected to come into contact with subsurface soils.
	Indoor Air	Foundation Cracks			Inhalation	**Complete**	Pathway is complete when residential structures are built on top of areas with subsurface soil contamination.
	Subsurface Soil	Outdoors	Construction Worker	Adult	Dermal	**Complete**	Construction worker may come in contact with subsurface soils during construction related activities. (Evaluated only to depth of construction.)
					Ingestion	**Complete**	Construction worker may come in contact with subsurface soils during construction related activities. (Evaluated only to depth of construction.)
	Outdoor Air				Inhalation	**Complete**	Construction worker may come in contact with subsurface soils during construction related activities. (Evaluated only to depth of construction.)
	Particulates				Inhalation	**Complete**	Construction worker may come in contact with subsurface soils during construction related activities. (Evaluated only to depth of construction.)
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Construction work evaluation is limited to outdoor construction activities.
	Subsurface Soil	Outdoors	Commercial/ Industrial	Adult	Dermal	Incomplete	Commercial worker is not expected to come into contact with subsurface soils.
					Ingestion	Incomplete	Commercial worker is not expected to come into contact with subsurface soils.
	Outdoor Air				Inhalation	**Complete**	Commercial worker may conduct outdoor activities.
	Particulates				Inhalation	Incomplete	Commercial worker is not expected to come into contact with subsurface soils.
	Indoor Air	Foundation Cracks			Inhalation	**Complete**	Pathway is complete when commercial structures are built on top of areas with subsurface soil contamination.
	Subsurface Soil	Outdoors	Recreational	Adult/Child	Dermal	Incomplete	Recreational user is not expected to come into contact with subsurface soils.
					Ingestion	Incomplete	Recreational user is not expected to come into contact with subsurface soils.
	Outdoor Air				Inhalation	**Complete**	Recreational user is expected to be exposed to outdoor air.
	Particulates				Inhalation	Incomplete	Recreational user is not expected to come into contact with subsurface soils.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Recreational user is not expected to perform indoor activities.
	Subsurface Soil	Outdoors	Visitor/Trespasser	Adult	Dermal	Incomplete	Trespasser is not expected to have access to subsurface soils.
					Ingestion	Incomplete	Trespasser is not expected to have access to subsurface soils.
	Outdoor Air				Inhalation	**Complete**	Visitor/trespasser user is expected to be exposed to outdoor air.
	Particulates				Inhalation	Incomplete	Trespasser is not expected to have access to subsurface soils.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Trespasser is not expected to have access to indoor facilities.
	Subsurface Soil	Outdoors	Agricultural Worker	Adult	Dermal	Incomplete	Agricultural worker is not expected to come into contact with subsurface soils.
					Ingestion	Incomplete	Agricultural worker is not expected to come into contact with subsurface soils.
	Outdoor Air				Inhalation	**Complete**	Agricultural worker is expected to come into contact with outdoor air.
	Particulates				Inhalation	**Complete**	Agricultural worker is expected to come into contact with outdoor air.
	Indoor Air	Foundation Cracks			Inhalation	Incomplete	Agricultural worker is not expected to conduct indoor activities.

TABLE 1.3 SELECTION OF SAMPLE POINTS FOR EXPOSURE PATHWAYS
Westinghouse Electric Co. Hematite Site

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Sample Points	EPC Set#
Current/Future	Groundwater	Groundwater	Tap Water/Shower	Resident	Child/Adult	Dermal	Overburden wells	1
Current/Future		Groundwater	Tap Water	Resident	Child/Adult	Ingestion		
Current/Future		Indoor Air - Vapors	Showerhead	Resident	Child/Adult	Inhalation		
Current/Future		Indoor Air - Vapors	Foundation Cracks	Resident	Child/Adult	Inhalation		
Current/Future		Outdoor Air - Vapors	Outdoors	Resident	Child/Adult	Inhalation		
Current/Future		Groundwater	Tap Water/Shower	Com. & Ind. Worker	Adult	Dermal		
Current/Future		Groundwater	Tap Water	Com. & Ind. Worker	Adult	Ingestion		
Current/Future		Indoor Air - Vapors	Foundation Cracks	Com. & Ind. Worker	Adult	Inhalation		
Current/Future		Outdoor Air - Vapors	Outdoors	Com. & Ind. Worker	Adult	Inhalation		
Current/Future		Outdoor Air - Vapors	Outdoors	Construction Worker	Adult	Inhalation		
Current/Future		Groundwater	Outdoors	Construction Worker	Adult	Dermal		
Future		Outdoor Air - Vapors	Outdoors	Recreational	Child/Adult	Inhalation		
Current/Future		Outdoor Air - Vapors	Outdoors	Visitor/Trespasser	Adult	Inhalation		
Current/Future		Outdoor Air - Vapors	Outdoors	Agricultural Worker	Adult	Inhalation		
Current/Future	Groundwater	Groundwater	Tap Water/Shower	Resident	Child/Adult	Dermal	Bedrock wells	2
Current/Future		Groundwater	Tap Water	Resident	Child/Adult	Ingestion		
Current/Future		Indoor Air - Vapors	Showerhead	Resident	Child/Adult	Inhalation		
Current/Future		Groundwater	Tap Water/Shower	Com. & Ind. Worker	Adult	Dermal		
Current/Future		Groundwater	Tap Water	Com. & Ind. Worker	Adult	Ingestion		
Current/Future	Surface Water/ Sediment	Surface Water/Sediment	Stream or Pond	Resident	Child/Adult	Dermal	Surface water	3
Current/Future		Surface Water/Sediment	Stream or Pond	Resident	Child/Adult	Ingestion		
Current/Future		Outdoor Air - Vapors	Stream or Pond	Resident	Child/Adult	Inhalation		
Current/Future		Surface Water/Sediment	Stream or Pond	Com. & Ind. Worker	Adult	Dermal		
Current/Future		Surface Water/Sediment	Stream or Pond	Com. & Ind. Worker	Adult	Ingestion		
Current/Future		Outdoor Air - Vapors	Stream or Pond	Com. & Ind. Worker	Adult	Inhalation		
Current/Future		Surface Water/Sediment	Stream or Pond	Construction Worker	Adult	Dermal		
Current/Future		Surface Water/Sediment	Stream or Pond	Construction Worker	Adult	Ingestion		
Current/Future		Outdoor Air - Vapors	Stream or Pond	Construction Worker	Adult	Inhalation		
Future		Surface Water/Sediment	Stream or Pond	Recreational	Child/Adult	Dermal		
Future		Surface Water/Sediment	Stream or Pond	Recreational	Child/Adult	Ingestion		
Future		Outdoor Air - Vapors	Stream or Pond	Recreational	Child/Adult	Inhalation		
Current/Future		Surface Water/Sediment	Stream or Pond	Visitor/Trespasser	Adult	Dermal		
Current/Future		Surface Water/Sediment	Stream or Pond	Visitor/Trespasser	Adult	Ingestion		
Current/Future		Outdoor Air - Vapors	Stream or Pond	Visitor/Trespasser	Adult	Inhalation		
Future		Surface Water/Sediment	Stream or Pond	Agricultural Worker	Adult	Dermal		
Future		Surface Water/Sediment	Stream or Pond	Agricultural Worker	Adult	Ingestion		
Future		Outdoor Air - Vapors	Stream or Pond	Agricultural Worker	Adult	Inhalation		

TABLE 1.3 SELECTION OF SAMPLE POINTS FOR EXPOSURE PATHWAYS
Westinghouse Electric Co. Hematite Site

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Sample Points	EPC Set#
Current/Future	Surface Soil	Surface Soil	Outdoors	Resident	Child/Adult	Dermal	Surface soil	4
Current/Future		Surface Soil	Outdoors	Resident	Child/Adult	Ingestion		
Current/Future		Outdoor Air - Vapors	Outdoors	Resident	Child/Adult	Inhalation		
Current/Future		Outdoor Air - Particulates	Outdoors	Resident	Child/Adult	Inhalation		
Current/Future		Indoor Air - Vapors	Foundation Cracks	Resident	Child/Adult	Inhalation		
Current/Future		Surface Soil	Outdoors	Com. & Ind. Worker	Adult	Dermal		
Current/Future		Surface Soil	Outdoors	Com. & Ind. Worker	Adult	Ingestion		
Current/Future		Outdoor Air - Vapors	Outdoors	Com. & Ind. Worker	Adult	Inhalation		
Current/Future		Outdoor Air - Particulates	Outdoors	Com. & Ind. Worker	Adult	Inhalation		
Current/Future		Indoor Air - Vapors	Foundation Cracks	Com. & Ind. Worker	Adult	Inhalation		
Current/Future		Surface Soil	Outdoors	Construction Worker	Adult	Dermal		
Current/Future		Surface Soil	Outdoors	Construction Worker	Adult	Ingestion		
Current/Future		Outdoor Air - Vapors	Outdoors	Construction Worker	Adult	Inhalation		
Current/Future		Outdoor Air - Particulates	Outdoors	Construction Worker	Adult	Inhalation		
Future		Surface Soil	Outdoors	Recreational	Child/Adult	Dermal		
Future		Surface Soil	Outdoors	Recreational	Child/Adult	Ingestion		
Future		Outdoor Air - Vapors	Outdoors	Recreational	Child/Adult	Inhalation		
Future		Outdoor Air - Particulates	Outdoors	Recreational	Child/Adult	Inhalation		
Current/Future		Surface Soil	Outdoors	Visitor/Trespasser	Adult	Dermal		
Current/Future		Surface Soil	Outdoors	Visitor/Trespasser	Adult	Ingestion		
Current/Future		Outdoor Air - Vapors	Outdoors	Visitor/Trespasser	Adult	Inhalation		
Current/Future		Outdoor Air - Particulates	Outdoors	Visitor/Trespasser	Adult	Inhalation		
Current/Future		Surface Soil	Outdoors	Agricultural Worker	Adult	Dermal		
Current/Future		Surface Soil	Outdoors	Agricultural Worker	Adult	Ingestion		
Current/Future		Outdoor Air - Vapors	Outdoors	Agricultural Worker	Adult	Inhalation		
Current/Future		Outdoor Air - Particulates	Outdoors	Agricultural Worker	Adult	Inhalation		
Current/Future	Subsurface Soil	Indoor Air - Vapors	Foundation Cracks	Resident	Child/Adult	Inhalation	Subsurface soil	5
Future		Outdoor Air - Vapors	Outdoors	Resident	Child/Adult	Inhalation		
Current/Future		Indoor Air - Vapors	Foundation Cracks	Com. & Ind. Worker	Adult	Inhalation		
Current/Future		Outdoor Air - Vapors	Outdoors	Com. & Ind. Worker	Adult	Inhalation		
Current/Future		Outdoor Air - Vapors	Outdoors	Construction Worker	Adult	Inhalation		
Current/Future		Outdoor Air - Particulates	Outdoors	Construction Worker	Adult	Inhalation		
Future		Outdoor Air - Vapors	Outdoors	Recreational	Child/Adult	Inhalation		
Current/Future		Outdoor Air - Vapors	Outdoors	Visitor/Trespasser	Adult	Inhalation		
Current/Future		Outdoor Air - Vapors	Outdoors	Agricultural Worker	Adult	Inhalation		
Current/Future		Outdoor Air - Particulates	Outdoors	Agricultural Worker	Adult	Inhalation		
Current/Future	Subsurface Soil	Subsurface Soil	Outdoors	Construction Worker	Adult	Dermal	Subsurface soil samples to depth of 15 feet	6
Current/Future		Subsurface Soil	Outdoors	Construction Worker	Adult	Ingestion		

TABLE 1.4 SPECIFIC SAMPLING POINTS FOR CALCULATION OF EXPOSURE POINT CONCENTRATIONS
Westinghouse Electric Co. Hematite Site

1	2	3	4	5	6
Overburden wells	Bedrock wells	Surface water	Surface soil	Subsurface soil	Subsurface soil samples to depth of 15 feet
BP-21-25-35-OL-GW-SS	BW-BR10-32-39-GW-SS	SW-01-SW	BD-09-00-SL	BD-13-09-SL	BD-13-09-SL
BW-BR3-24-34-GW-SS	BW-BR11-69-109-GW-SS	SW-02-SW	BD-10-00-SL	BD-13-15-SL	BD-13-15-SL
GW-BD1-121704	BW-BR12-27-38-GW-SS	SW-08-SW	BD-11-00-SL	BD-13-23-SL	BD-14-05-SL
GW-BD13-122804	BW-BR7-65-75-GW-SS	SW-08-SW-FD	BD-12-00-SL	BD-13-30-SL	BD-14-13-SL
GW-BD14-122904	BW-BR9-49-58-GW-SS	SW-09-SW	BP-01-00-SL	BD-14-05-SL	BD-15-05-SL
GW-BD16-122204	GW-BR10JC-121304	SW-14-SW	BP-02-00-SL	BD-14-13-SL	BD-16-05-SL
GW-BD2-121604	GW-BR11JC-121304	SW-15-SW	BP-03-00-SL	BD-14-25-SL	BD-16-15-SL
GW-BD3-121704	GW-BR12JC-120804	SW-16-SW	BP-04-00-SL	BD-14-31-SL	BLD240-01-01
GW-BD4-121704	GW-BR1JC-120604	US-01-SW	BP-05-00-SL	BD-15-05-SL	BLD240-03-04
GW-BD5-121504	GW-BR1JC-121704	US-02-SW	BP-06-00-SL	BD-15-17-SL	BLD240-03-14
GW-BD6-121404	GW-BR2JC-120804	US-03-SW	BP-07-00-SL	BD-15-25-SL	BLD240-04-02
GW-BD7-121504	GW-BR3JC-120904	US-04-SW	BP-08-00-SL	BD-15-31-SL	BLD240-05-01
GW-BD8-122804	GW-BR4JC-121404	US-05-SW	BP-09-00-SL	BD-16-05-SL	BLD253-02-01
GW-BP17-122204	GW-BR5JC-121304		BP-10-00-SL	BD-16-15-SL	BLD255-07-02
GW-BP22A-122804	GW-BR7JC-121504		BP-11-00-SL	BD-16-19-SL	BLD255-08-01
GW-BP22B-122804	GW-BR8JC-120604		BP-12-00-SL	BD-16-25-SL	BLD260-06-01
GW-BR10OB-120804	GW-BR9JC-121404		CB-01-00-SL	BD-16-34-SL	BP-13-05-SL
GW-BR3OB-120804	GW-PW6JC-121604		CB-01-00-SL-FD	BLD240-01-01	BP-13-11-SL
GW-BR6OB-120704	GW-PZ3-121704		DM-01-00-SL	BLD240-01-31	BP-13-15-SL
GW-BR8OB-120604	GW-PZ4-121304		DM-02-00-SL	BLD240-01-31FD	BP-17-05-SL
GW-CB02-121404	GW-WS30-121604		EP-01-00-SL	BLD240-03-04	BP-17-15-SL
GW-DM02-122204	GW-WS31-121604		EP-02-00-SL	BLD240-03-14	BP-18-05-SL
GW-EP15-121004	BR5-236-OL-GW		EP-03-00-SL	BLD240-04-02	BP-18-15-SL
GW-EP16-121304	BW-BR6-65-80-GW-SS		EP-04-00-SL	BLD240-04-33	BP-19-05-SL
GW-EP20-121504	GW-BR10RB-121304		EP-04-00-SL-FD	BLD240-05-01	BP-19-13-SL
GW-FD1-120704	GW-BR12RB-120804		EP-05-00-SL	BLD240-05-23	BP-20-03-SL
GW-FD2-121304	GW-BR1RB-120704		EP-06-00-SL	BLD253-02-01	BP-21-07-SL
GW-FD3-121304	GW-BR2RB-120804		EP-07-00-SL	BLD253-02-21	BP-21-07-SL-FD
GW-FD4-121404	GW-BR3RB-120904		EP-08-00-SL	BLD253-02-21FD	BP-21-13-SL
GW-FD5-121604	GW-BR4RB-121004		EP-09-00-SL	BLD255-07-02	BP-22-05-SL
GW-FD6-121304	GW-BR5RB-121004		EP-10-00-SL	BLD255-07-33	BP-22-13-SL
GW-FD7-122004	GW-BR6RB-120704		EP-11-00-SL	BLD255-08-01	CB-02-05-SL
GW-LF08-122104	GW-BR7RB-121404		EP-12-00-SL	BLD255-08-24	CB-02-05-SL-FD
GW-LF09-122004	GW-BR8RB-120704		GS-01-00-SL	BLD260-06-01	CB-02-15-SL
GW-NB31-122104	GW-PW6RB-121704		GS-01-00-SL-FD	BLD260-06-31	EP-13-06-SL
GW-NB32-122004	GW-PW19RB-121504		GS-02-00-SL	BP-13-05-SL	EP-13-13-SL
GW-NB33-122104	GW-PW19JC-121504		GS-03-00-SL	BP-13-11-SL	EP-14-05-SL
GW-NB34-120704	GW-PW16RB-121604		GS-04-00-SL	BP-13-15-SL	EP-14-13-SL
GW-NB35-122104	GW-PW16JC-121604		GS-05-00-SL	BP-13-25-SL	EP-15-05-SL
GW-NB36-122204			LF-01-00-SL	BP-13-35-SL	EP-15-13-SL
GW-NB38-120904			LF-02-00-SL	BP-17-05-SL	EP-16-05-SL
GW-NB39-121504			LF-03-00-SL	BP-17-15-SL	EP-16-15-SL
GW-NB44-120604			LF-04-00-SL	BP-17-23-SL	EP-17-05-SL
GW-NB46-121004			LF-05-00-SL	BP-17-31-SL	EP-17-15-SL
GW-NB50-121604			NB-01-00-SL	BP-18-05-SL	EP-18-09-SL
GW-NB54-122004			NB-02-00-SL	BP-18-15-SL	EP-18-09-SL-FD
GW-NB56-121604			NB-03-00-SL	BP-18-25-SL	EP-18-15-SL
GW-NB57A-121404			NB-04-00-SL	BP-18-31-SL	EP-19-05-SL
GW-NB57B-121504			NB-05-00-SL	BP-19-05-SL	EP-19-13-SL
GW-NB61-122204			NB-06-00-SL	BP-19-13-SL	EP-20-05-SL
GW-NB63-120704			NB-07-00-SL	BP-19-25-SL	EP-20-15-SL
GW-NB64-122104			NB-07-00-SL-FD	BP-19-29-SL	GS-06-05-SL
GW-NB65-122004			NB-08-00-SL	BP-20-03-SL	GS-07-05-SL
GW-NB66-120604			NB-09-00-SL	BP-20-19-SL	GS-07-15-SL
GW-NB67-120704			NB-10-00-SL	BP-20-27-SL	GS-09-05-SL
GW-NB71-121304			NB-11-00-SL	BP-21-07-SL	GS-09-15-SL
GW-NB72-122104			NB-12-00-SL	BP-21-07-SL-FD	LF-06-05-SL
GW-NB73-122004			NB-13-00-SL	BP-21-13-SL	LF-06-13-SL
GW-NB74-121304			NB-14-00-SL	BP-21-24-SL	LF-07-03-SL
GW-NB77-122004			NB-15-00-SL	BP-21-34-SL	LF-07-15-SL
GW-NB78-122104			NB-16-00-SL	BP-22-05-SL	LF-08-03-SL
GW-NB79-121704			NB-17-00-SL	BP-22-13-SL	LF-08-03-SL-FD
GW-NB80-121704			NB-18-00-SL	BP-22-23-SL	LF-08-15-SL
GW-NB81-120904			NB-19-00-SL	BP-22-33-SL	LF-09-03-SL
GW-NB82-121004			NB-20-00-SL	CB-02-05-SL	NB-28-04-SL
GW-NB83-120904			NB-21-00-SL	CB-02-05-SL-FD	NB-28-14-SL
GW-NB84-120804			NB-22-00-SL	CB-02-15-SL	NB-29-05-SL
GW-NB85-120804			NB-23-00-SL	CB-02-25-SL	NB-29-14-SL
GW-NB86-120804			NB-24-00-SL	DM-02-05-SL	NB-30-05-SL
GW-OA19-122104			NB-25-00-SL	DM-02-17-SL	NB-30-15-SL
GW-OB1-121404			NB-26-00-SL	DM-02-25-SL	NB-31-05-SL
GW-OB2-121404			NB-27-00-SL	DM-02-33-SL	NB-31-15-SL
GW-PL04-122204			NB-27-00-SL-FD	DM-03-05-SL	NB-32-05-SL
GW-PL06-121504			OA-01-00-SL	DM-03-05-SL-FD	NB-32-15-SL
GW-RR05-120904			OA-01-00-SL-FD	DM-03-13-SL	NB-33-05-SL
GW-SW07-121004			OA-02-00-SL	DM-03-25-SL	NB-33-15-SL
GW-WS14-121604			OA-03-00-SL	DM-03-34-SL	NB-34-05-SL
GW-WS15-121604			OA-04-00-SL	EP-13-06-SL	NB-34-15-SL
GW-WS16-121604			OA-05-00-SL	EP-13-13-SL	NB-35-01-SL
GW-WS17B-121704			OA-06-00-SL	EP-13-25-SL	NB-35-15-SL
GW-WS22-121304			OA-07-00-SL	EP-13-30-SL	NB-36-05-SL
GW-WS23-121304			OA-08-00-SL	EP-14-05-SL	NB-36-15-SL
GW-WS24-121504			OA-09-00-SL	EP-14-13-SL	NB-37-05-SL
GW-WS25-121504			OA-10-00-SL	EP-14-25-SL	NB-37-15-SL

Note: Only radiological analytical is available for samples that are preceded by (*).

TABLE 1.4 SPECIFIC SAMPLING POINTS FOR CALCULATION OF EXPOSURE POINT CONCENTRATIONS
Westinghouse Electric Co. Hematite Site

1	2	3	4	5	6
Overburden wells	Bedrock wells	Surface water	Surface soil	Subsurface soil	Subsurface soil samples to depth of 15 feet
GW-WS26-121504			OA-11-00-SL	EP-14-31-SL	NB-38-09-SL
GW-WS27-121504			OA-12-00-SL	EP-15-05-SL	NB-38-15-SL
GW-WS28-121604			OA-13-00-SL	EP-15-13-SL	NB-39-05-SL
GW-WS29-121604			OA-14-00-SL	EP-15-25-SL	NB-39-15-SL
GW-WS32-121704			OA-15-00-SL	EP-15-29-SL	NB-40-05-SL
GW-WS34-121404			OA-16-00-SL	EP-16-05-SL	NB-40-05-SL-FD
GW-WS7-121304			OA-20-00-SL	EP-16-15-SL	NB-41-05-SL
GW-WS8-120904			OA-21-00-SL	EP-16-27-SL	NB-41-13-SL
NB-34-22-32-OL-GW-SS			OA-22-00-SL	EP-17-05-SL	NB-42-05-SL
EP-20-20-30-OL-GW*			OA-23-00-SL	EP-17-15-SL	NB-42-13-SL
NB-30-27-32-OL-GW*			OA-24-00-SL	EP-17-25-SL	NB-43-05-SL
NB-32-24-34-OL-GW*			OA-25-00-SL	EP-17-30-SL	NB-43-13-SL
NB-35-24-29-OL-GW*			OA-26-00-SL	EP-18-09-SL	NB-44-05-SL
			OA-27-00-SL	EP-18-09-SL-FD	NB-44-05-SL-FD
			OA-28-00-SL	EP-18-15-SL	NB-44-11-SL
			OA-29-00-SL	EP-18-29-SL	NB-45-05-SL
			OA-30-00-SL	EP-19-05-SL	NB-45-05-SL-FD
			OA-31-00-SL	EP-19-13-SL	NB-45-13-SL
			OA-32-00-SL	EP-19-25-SL	NB-46-09-SL
			OA-33-00-SL	EP-19-31-SL	NB-47-05-SL
			OA-34-00-SL	EP-20-05-SL	NB-47-15-SL
			OA-35-00-SL	EP-20-15-SL	NB-48-05-SL
			OA-36-00-SL	EP-20-25-SL	NB-48-11-SL
			OA-37-00-SL	GS-06-05-SL	NB-48-15-SL
			OA-38-00-SL	GS-06-19-SL	NB-49-05-SL
			OA-39-00-SL	GS-06-25-SL	NB-49-05-SL-FD
			OA-40-00-SL	GS-07-05-SL	NB-49-15-SL
			PL-01-00-SL	GS-07-15-SL	NB-50-05-SL
			PL-02-00-SL	GS-07-25-SL	NB-50-15-SL
			PL-03-00-SL	GS-09-05-SL	NB-51-05-SL
			RR-01-00-SL	GS-09-15-SL	NB-51-13-SL
			RR-02-00-SL	GS-09-23-SL	NB-52-05-SL
			RR-03-00-SL	LF-06-05-SL	NB-52-13-SL
			SW-01-00-SL	LF-06-13-SL	NB-53-05-SL
			SW-02-00-SL	LF-06-27-SL	NB-53-13-SL
			SW-03-00-SL	LF-06-32-SL	NB-54-05-SL
			SW-04-00-SL	LF-07-03-SL	NB-54-13-SL
			BG-01-00-SL*	LF-07-15-SL	NB-55-05-SL
			BG-02-00-SL*	LF-07-25-SL	NB-55-13-SL
			BG-03-00-SL*	LF-07-34-SL	NB-56-05-SL
			BG-04-00-SL*	LF-08-03-SL	NB-56-13-SL
			BG-05-00-SL*	LF-08-03-SL-FD	NB-57-05-SL
			BG-06-00-SL*	LF-08-15-SL	NB-57-05-SL-FD
			BG-07-00-SL*	LF-08-21-SL	NB-57-15-SL
			BG-08-00-SL*	LF-08-37-SL	NB-58-05-SL
			BG-09-00-SL*	LF-09-03-SL	NB-58-15-SL
			BG-10-00-SL*	LF-09-17-SL	NB-59-05-SL
			BG-11-00-SL*	LF-09-25-SL	NB-59-13-SL
			BG-12-00-SL*	LF-09-31-SL	NB-60-05-SL
			BG-13-00-SL*	LS-01-00-SL	NB-60-13-SL
			BG-14-00-SL*	LS-02-00-SL	NB-61-05-SL
			BG-15-00-SL*	LS-03-00-SL	NB-61-13-SL
			BG-16-00-SL*	NB-28-04-SL	NB-62-05-SL
				NB-28-14-SL	NB-62-12-SL
				NB-28-24-SL	NB-63-05-SL
				NB-28-35-SL	NB-63-13-SL
				NB-39-05-SL	NB-64-05-SL
				NB-39-15-SL	NB-64-13-SL
				NB-39-25-SL	NB-65-05-SL
				NB-39-30-SL	NB-65-13-SL
				NB-46-09-SL	NB-66-05-SL
				NB-46-17-SL	NB-66-05-SL-FD
				NB-46-25-SL	NB-66-15-SL
				NB-46-29-SL	NB-67-05-SL
				NB-47-05-SL	NB-67-11-SL
				NB-47-15-SL	NB-68-05-SL
				NB-47-25-SL	NB-68-13-SL
				NB-47-31-SL	NB-69-05-SL
				NB-48-05-SL	NB-69-15-SL
				NB-48-11-SL	NB-70-05-SL
				NB-48-15-SL	NB-70-15-SL
				NB-48-25-SL	NB-71-05-SL
				NB-48-35-SL	NB-71-05-SL-FD
				NB-49-05-SL	NB-71-13-SL
				NB-49-05-SL-FD	NB-72-05-SL
				NB-49-15-SL	NB-72-11-SL
				NB-49-25-SL	NB-73-05-SL
				NB-49-37-SL	NB-73-13-SL
				NB-50-05-SL	NB-74-05-SL
				NB-50-15-SL	NB-75-08-SL
				NB-50-25-SL	NB-75-15-SL
				NB-50-37-SL	NB-76-06-SL
				NB-51-05-SL	NB-76-10-SL
				NB-51-13-SL	NB-77-05-SL

Note: Only radiological analytical is available for samples that are preceded by (*).

TABLE 1.4 SPECIFIC SAMPLING POINTS FOR CALCULATION OF EXPOSURE POINT CONCENTRATIONS
Westinghouse Electric Co. Hematite Site

1	2	3	4	5	6
Overburden wells	Bedrock wells	Surface water	Surface soil	Subsurface soil	Subsurface soil samples to depth of 15 feet
				NB-51-25-SL	NB-77-13-SL
				NB-51-37-SL	NB-78-07-SL
				NB-52-05-SL	NB-78-11-SL
				NB-52-13-SL	NB-79-05-SL
				NB-52-25-SL	NB-79-05-SL-FD
				NB-52-35-SL	NB-79-11-SL
				NB-53-05-SL	NB-80-05-SL
				NB-53-13-SL	NB-80-11-SL
				NB-53-23-SL	NB-81-05-SL
				NB-53-33-SL	NB-81-13-SL
				NB-54-05-SL	NB-82-05-SL
				NB-54-13-SL	NB-82-11-SL
				NB-54-25-SL	NB-83-05-SL
				NB-54-31-SL	NB-83-11-SL
				NB-55-05-SL	NB-84-05-SL
				NB-55-13-SL	NB-84-15-SL
				NB-55-25-SL	NB-85-05-SL
				NB-55-33-SL	NB-85-15-SL
				NB-56-05-SL	NB-86-05-SL
				NB-56-13-SL	NB-86-15-SL
				NB-56-25-SL	OA-18-03-SL
				NB-56-33-SL	OA-19-05-SL
				NB-57-05-SL	OA-19-15-SL
				NB-57-05-SL-FD	PL-04-05-SL
				NB-57-15-SL	PL-04-13-SL
				NB-57-29-SL	PL-05-05-SL
				NB-57-34-SL	PL-05-15-SL
				NB-58-05-SL	PL-06-07-SL
				NB-58-15-SL	PL-06-13-SL
				NB-58-29-SL	RR-04-05-SL
				NB-58-36-SL	RR-04-15-SL
				NB-59-05-SL	RR-05-05-SL
				NB-59-13-SL	RR-05-05-SL-FD
				NB-59-25-SL	RR-05-15-SL
				NB-59-31-SL	SW-02-01-SL
				NB-60-05-SL	SW-02-09-SL
				NB-60-13-SL	SW-02-15-SL
				NB-60-23-SL	SW-05-08-SL
				NB-60-31-SL	SW-05-12-SL
				NB-61-05-SL	SW-06-05-SL
				NB-61-13-SL	SW-06-05-SL-FD
				NB-61-23-SL	SW-06-13-SL
				NB-61-28-SL	SW-07-05-SL
				NB-68-05-SL	SW-07-15-SL
				NB-68-13-SL	SW-08-03-SL
				NB-68-17-SL	SW-08-05-SL
				NB-68-25-SL	SW-08-15-SL
				NB-68-33-SL	DM-02-05-SL
				NB-69-05-SL	DM-03-05-SL
				NB-69-15-SL	DM-03-05-SL-FD
				NB-69-22-SL	DM-03-13-SL
				NB-69-34-SL	BLD240-05-02*
				NB-70-05-SL	BLD253-02-04*
				NB-70-15-SL	BLD253-02-Concrete*
				NB-70-23-SL	BLD253-02-Fill*
				NB-70-33-SL	BLD253-02-FillFD*
				NB-71-05-SL	BLD255-05-01*
				NB-71-05-SL-FD	BLD255-05-23*
				NB-71-13-SL	BLD255-05-Concrete*
				NB-71-27-SL	BLD255-05-Fill*
				NB-74-05-SL	BLD255-07-15*
				NB-74-17-SL	BLD255-07-Concrete*
				NB-74-25-SL	BLD255-07-ConcreteFD*
				NB-74-33-SL	BLD255-07-Fill*
				NB-79-05-SL	BLD255-08-08*
				NB-79-05-SL-FD	BLD255-08-CONCRETE*
				NB-79-11-SL	BLD260-06-03*
				NB-79-24-SL	BLD260-06-CONCRETE*
				NB-80-05-SL	BLD260-06-FILL*
				NB-80-11-SL	LF-08-05-SL*
				NB-80-27-SL	LF-08-05-SL-FD*
				NB-81-05-SL	RR-04-07-SL*
				NB-81-13-SL	
				NB-81-31-SL	
				OA-18-03-SL	
				OA-18-17-SL	
				OA-18-25-SL	
				OA-18-33-SL	
				OA-19-05-SL	
				OA-19-15-SL	
				OA-19-25-SL	
				OA-19-33-SL	
				PL-04-05-SL	
				PL-04-13-SL	

Note: Only radiological analytical is available for samples that are preceded by (*).

1	2	3	4	5	6
Overburden wells	Bedrock wells	Surface water	Surface soil	Subsurface soil	Subsurface soil samples to depth of 15 feet
				PL-04-23-SL	
				PL-04-31-SL	
				PL-05-05-SL	
				PL-05-15-SL	
				PL-05-28-SL	
				PL-06-07-SL	
				PL-06-13-SL	
				PL-06-17-SL	
				PL-06-29-SL	
				PL-06-33-SL	
				RR-04-05-SL	
				RR-04-15-SL	
				RR-04-25-SL	
				RR-05-05-SL	
				RR-05-05-SL-FD	
				RR-05-15-SL	
				RR-05-25-SL	
				SW-02-01-SL	
				SW-02-09-SL	
				SW-02-15-SL	
				SW-02-23-SL	
				SW-05-08-SL	
				SW-05-12-SL	
				SW-06-05-SL	
				SW-06-05-SL-FD	
				SW-06-13-SL	
				SW-06-23-SL	
				SW-07-05-SL	
				SW-07-15-SL	
				SW-07-23-SL	
				SW-08-03-SL	
				SW-08-05-SL	
				SW-08-15-SL	
				SW-08-25-SL	
				NB-29-05-SL	
				NB-29-14-SL	
				NB-29-22-SL	
				NB-30-05-SL	
				NB-30-15-SL	
				NB-30-25-SL	
				NB-30-33-SL	
				NB-31-05-SL	
				NB-31-15-SL	
				NB-31-27-SL	
				NB-31-32-SL	
				NB-32-05-SL	
				NB-32-15-SL	
				NB-32-27-SL	
				NB-32-33-SL	
				NB-33-05-SL	
				NB-33-15-SL	
				NB-33-27-SL	
				NB-34-05-SL	
				NB-34-15-SL	
				NB-34-25-SL	
				NB-35-01-SL	
				NB-35-15-SL	
				NB-35-25-SL	
				NB-36-05-SL	
				NB-36-15-SL	
				NB-36-27-SL	
				NB-37-05-SL	
				NB-37-15-SL	
				NB-37-25-SL	
				NB-38-09-SL	
				NB-38-15-SL	
				NB-38-25-SL	
				NB-40-05-SL	
				NB-40-05-SL-FD	
				NB-40-17-SL	
				NB-40-25-SL	
				NB-40-31-SL	
				NB-41-05-SL	
				NB-41-13-SL	
				NB-41-19-SL	
				NB-42-05-SL	
				NB-42-13-SL	
				NB-42-23-SL	
				NB-43-05-SL	
				NB-43-13-SL	
				NB-44-05-SL	
				NB-44-05-SL-FD	
				NB-44-11-SL	
				NB-44-18-SL	

Note: Only radiological analytical is available for samples that are preceded by (*).

TABLE 1.4 SPECIFIC SAMPLING POINTS FOR CALCULATION OF EXPOSURE POINT CONCENTRATIONS
Westinghouse Electric Co. Hematite Site

1	2	3	4	5	6
Overburden wells	Bedrock wells	Surface water	Surface soil	Subsurface soil	Subsurface soil samples to depth of 15 feet
				NB-45-05-SL	
				NB-45-05-SL-FD	
				NB-45-13-SL	
				NB-45-25-SL	
				NB-45-33-SL	
				NB-62-05-SL	
				NB-62-12-SL	
				NB-62-22-SL	
				NB-63-05-SL	
				NB-63-13-SL	
				NB-63-19-SL	
				NB-64-05-SL	
				NB-64-13-SL	
				NB-64-17-SL	
				NB-65-05-SL	
				NB-65-13-SL	
				NB-65-17-SL	
				NB-66-05-SL	
				NB-66-05-SL-FD	
				NB-66-15-SL	
				NB-66-19-SL	
				NB-67-05-SL	
				NB-67-11-SL	
				NB-67-21-SL	
				NB-72-05-SL	
				NB-72-11-SL	
				NB-72-19-SL	
				NB-72-22-SL	
				NB-73-05-SL	
				NB-73-13-SL	
				NB-73-23-SL	
				NB-75-08-SL	
				NB-75-15-SL	
				NB-75-19-SL	
				NB-76-06-SL	
				NB-76-10-SL	
				NB-76-24-SL	
				NB-77-05-SL	
				NB-77-13-SL	
				NB-77-24-SL	
				NB-78-07-SL	
				NB-78-11-SL	
				NB-78-18-SL	
				NB-82-05-SL	
				NB-82-11-SL	
				NB-82-20-SL	
				NB-83-05-SL	
				NB-83-11-SL	
				NB-83-23-SL	
				NB-84-05-SL	
				NB-84-15-SL	
				NB-84-23-SL	
				NB-84-33-SL	
				NB-85-05-SL	
				NB-85-15-SL	
				NB-85-25-SL	
				NB-85-35-SL	
				NB-86-05-SL	
				NB-86-15-SL	
				NB-86-19-SL	
				BLD240-05-02*	
				BLD253-02-04*	
				BLD253-02-Concrete*	
				BLD253-02-Fill*	
				BLD253-02-FillFD*	
				BLD255-05-01*	
				BLD255-05-23*	
				BLD255-05-Concrete*	
				BLD255-05-Fill*	
				BLD255-07-15*	
				BLD255-07-Concrete*	
				BLD255-07-ConcreteFD*	
				BLD255-07-Fill*	
				BLD255-08-08*	
				BLD255-08-CONCRETE*	
				BLD260-06-03*	
				BLD260-06-CONCRETE*	
				BLD260-06-FILL*	
				EP-20-20-30-OL-GW*	
				LF-08-05-SL*	
				LF-08-05-SL-FD*	
				RR-04-07-SL*	

Note: Only radiological analytical is available for samples that are preceded by (*).

TABLE 2.1
SUMMARY OF CONSTITUENTS OF POTENTIAL CONCERN
Westinghouse Electric Co. Hematite Site

Medium	CAS Number	Constituent of Potential Concern (1)(3)	Minimum Concentration (Qualifier) (2)	Maximum Concentration (Qualifier) (2)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits
Groundwater	75-35-4	1,1-Dichloroethene	0.7 J	5100 J	ppb	GW-BD2-121604	60/138	5-25000
	156-59-2	cis-1,2-Dichloroethene	1 J	1900	ppb	GW-BD6-121404	75/138	5-25000
	75-09-2	Methylene chloride	1.8 J	1600	ppb	GW-FD7-122004	24/138	5-25000
	127-18-4	Tetrachloroethene	1.4 J	200000	ppb	GW-BD2-121604	79/138	5-25000
	156-60-5	trans-1,2-Dichloroethene	1 J	700 E	ppb	GW-BD13-122804	22/138	5-25000
	79-01-6	Trichloroethene	1.2 J	18000	ppb	GW-BD6-121404	81/138	5-25000
	75-01-4	Vinyl chloride	0.68 J	1000 E	ppb	GW-BD6-121404	29/138	10-50000
	117-81-7	bis(2-Ethylhexyl)phthalate	4 J	26	ppb	GW-LF08-122104	8/42	9.4-11
	7440-38-2	Arsenic	0.01	0.13	ppm	GW-WS23-121304	13/115	0.01
	7439-92-1	Lead	0.0032	0.059	ppm	GW-WS23-121304	18/115	0.003-0.006
		Radium 226	-0.015U	2.22	pCi/l	GW-FD4-121404	11/16	0.01-0.65
		Neptunium 237	-0.011U	0.018	pCi/l	GW-BD16-122204	1/32	0.01-0.016
		Plutonium 239	-0.012U	0.018U	pCi/l	GW-BR2RB-120804	0/32	0.01-0.018
		Uranium 238	-0.002U	56.3	pCi/l	GW-DM02-122204	55/115	0.02-0.09
		Uranium 235	-0.04U	0.19	pCi/l	GW-BR6OB-120704	35/115	0.01-0.1
		Uranium 234	-0.04U	12.5	pCi/l	GW-BR12RB-120804	60/115	0.01-1.3
		Thorium 232	-0.01U	0.24	pCi/l	GW-OB2-121404	26/115	0.01-0.07
		Thorium 230	-0.07U	0.31	pCi/l	GW-OB2-121404	2/115	0.01-0.2
		Technetium 99	-2.83U	5100	pCi/l	GW-BD2-121604	26/115	0.01-0.22
Surface Water	7440-38-2	Arsenic	0.011	0.011	ppm	SW-01-SW	1/13	0.01
	7439-92-1	Lead	0.068	0.068	ppm	SW-01-SW	1/13	0.003
	7440-62-2	Vanadium	0.045	0.045	ppm	SW-01-SW	1/13	0.01
	127-18-4	Tetrachloroethene	0.73 J	2.1 J	ppb	SW-01-SW	3/13	5
	79-01-6	Trichloroethene	0.64 J	0.84 J	ppb	SW-09-SW	2/13	5
		Uranium 238	0.152	4.77	pCi/l	SW-01-SW	13/13	0.02-0.1
		Uranium 235	0.004U	0.14J	pCi/l	SW-02-SW	7/13	0.01-0.07
		Uranium 234	---	1.49	pCi/l	SW-02-SW	1/1	0.08
		Thorium 232	-0.013U	0.029U	pCi/l	SW-02-SW	0/13	0.01-0.03
		Thorium 230	-0.034U	0.045U	pCi/l	US-04-SW	0/13	0.01-0.05
		Technetium 99	-2.31U	3.16U	pCi/l	US-02-SW	0/13	0.01-0.22
Surface Soil	56-55-3	Benzo(a)anthracene	18 J	6400	ppb	BD-10-00-SL	82/121	360-1600
	50-32-8	Benzo(a)pyrene	16 J	6600	ppb	BD-10-00-SL	81/121	360-1600
	205-99-2	Benzo(b)fluoranthene	20 J	7800	ppb	BD-10-00-SL	87/121	360-1600
	193-39-5	Indeno(1,2,3-cd)pyrene	29 J	5800 E	ppb	OA-16-00-SL	48/121	360-1600
	11097-69-1	Aroclor-1254 (PCB-1254)	21 J	540 J	ppb	RR-01-00-SL	15/121	36-200
	11096-82-5	Aroclor-1260 (PCB-1260)	3.6 J	560	ppb	LF-01-00-SL	27/121	36-200
	7440-38-2	Arsenic	1.1	160	ppm	EP-06-00-SL	121/121	0.76-1.2
	7440-47-3	Chromium Total	4.9	280	ppm	BD-10-00-SL	121/121	0.43-0.66
	7439-92-1	Lead	3.7	1400	ppm	OA-13-00-SL	121/121	0.35-3.9
		Radium 226	0.166U	1.71	pCi/g	NB-04-00-SL	106/121	0.17-1.0
		Neptunium 237	-36.6U	2610	pCi/g	DM-01-00-SL	20/121	0.01-156
		Plutonium 239	-0.002U	0.0334	pCi/g	NB-03-00-SL	7/30	0.002-0.013
		Uranium 238	-0.484U	705	pCi/g	OA-04-00-SL	56/121	0.1-23.2
		Uranium 235	-0.285U	308	pCi/g	DM-01-00-SL	43/121	0.1-5.5
		Thorium 232	-0.054U	36.4	pCi/g	BP-08-00-SL	84/121	0.1-1.9
		Technetium 99	-0.429U	17100	pCi/g	EP-10-00-SL	65/121	0.1-6.6
Subsurface Soil	127-18-4	Tetrachloroethene	1.1 J	6600000	ppb	BLD253-02-21	127/428	5.3-7.4
	79-01-6	Trichloroethene	1.2 J	1600	ppb	BLD255-08-24	98/428	5.3-65000
	7440-38-2	Arsenic	1.1	24	ppm	BP-18-25-SL	428/428	0.74-1
	7439-92-1	Lead	3.8	680	ppm	NB-75-19-SL	428/428	0.32-3.4
		Radium 226	-0.22U	1.53	pCi/g	NB-36-15-SL	307/428	0.02-0.72
		Neptunium 237	-30U	0.353	pCi/g	NB-35-15-SL	6/428	0.002-26
		Plutonium 239	0.002U	0.008	pci/g	BLD255-08-08	8/28	0.001-0.007
		Uranium 238	-1.9U	71	pCi/g	BLD240-03-Fill	21/428	0.1-6
		Uranium 235	0.54U	23.1	pCi/g	BLD255-08-01	42/428	0.1-1.7
		Uranium 234	17.8	604	pCi/g	BLD255-08-01	6/6	0.01-0.07
		Thorium 230	0.675M3	1.74M3	pCi/g	DM-02-22-SL	18/18	0.02-0.19
		Thorium 232	0.418	1.21	pCi/g	SW-02-01-SL	16/16	0.003-0.03
		Technetium 99	-0.828U	131	pCi/g	EP-13-30-SL	58/428	0.1-1.6

Footnote Instructions:

(1) Chemicals selected based on exceeding the screening level (Table 2.2-2.19) or other criteria (Table 2.20-2.30), based on EPA, 1994.

(2) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.
E: This flag identifies compounds whose concentration exceeds the upper level of the calibration range.

(3) All listed radioactive isotopes include a contribution from the ambient background.

TABLE 2.2 VOCs

SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1

Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)
Groundwater	71-55-6	1,1,1-Trichloroethane	1.3 J	85	ppb	NB-34-22-32-OL-GW-SS	11/138	5-25000	85	3.17E+03	N	BSL
	79-00-5	1,1,2-Trichloroethane	1.4 J	8	ppb	GW-NB80-121704	5/138	5-25000	8	2.00E-01	Y	ASL
	75-34-3	1,1-Dichloroethane	1.3 J	610 =	ppb	GW-BD6-121404	63/138	5-25000	610	8.11E+02	N	BSL
	75-35-4	1,1-Dichloroethene	0.7 J	5100 J	ppb	GW-BD2-121604	60/138	5-25000	5100	3.39E+02	Y	ASL
	107-06-2	1,2-Dichloroethane	1.1 J	9	ppb	GW-BD8-122804	9/138	5-25000	9	1.23E-01	Y	ASL
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	29	150	ppb	GW-PW16JC-121604	2/138	10-50000	150	6.97E+03	N	BSL
	67-64-1	Acetone	9.9 J, B	76 J	ppb	GW-NB34-120704	5/138	10-50000	76	5.48E+03	N	BSL
	71-43-2	Benzene	1.3 J	4.8 J	ppb	GW-BD6-121404	2/138	5-25000	4.8	3.54E-01	Y	ASL
	75-15-0	Carbon disulfide	1 J	8 J	ppb	GW-DM02-122204	4/138	5-25000	8	1.04E+03	N	BSL
	75-00-3	Chloroethane	3 J	71	ppb	BP-21-25-35-OL-GW-SS	6/138	10-50000	71	4.64E+00	Y	ASL
	67-66-3	Chloroform (Trichloromethane)	1.1 J	6.8 =	ppb	GW-BD6-121404	5/138	5-25000	6.8	1.66E-01	Y	ASL
	74-87-3	Chloromethane (Methyl Chloride)	1.3 J	1.3 J	ppb	BW-BR6-65-80-GW-SS	1/138	10-50000	1.3	1.58E+02	N	BSL
	156-59-2	cis-1,2-Dichloroethene	1 J	1900 =	ppb	GW-BD6-121404	75/138	5-25000	1900	6.08E+01	Y	ASL
	75-09-2	Methylene chloride	1.8 J	1600	ppb	GW-FD7-122004	24/138	5-25000	1600	4.28E+00	Y	ASL
	95-47-6	o-Xylene	3.7 J	3.7 J	ppb	GW-BD6-121404	1/138	5-25000	3.7	2.06E+02	N	BSL
	127-18-4	Tetrachloroethene	1.4 J	200000	ppb	GW-BD2-121604	79/138	5-25000	200000	1.04E-01	Y	ASL
	108-88-3	Toluene	0.57 J	3.7 J	ppb	GW-PZ3-121704	6/138	5-25000	3.7	7.23E+02	N	BSL
	156-60-5	trans-1,2-Dichloroethene	1 J	700 E	ppb	GW-BD13-122804	22/138	5-25000	700	1.22E+02	Y	ASL
	79-01-6	Trichloroethene	1.2 J	18000 =	ppb	GW-BD6-121404	81/138	5-25000	18000	2.80E-02	Y	ASL
	75-01-4	Vinyl chloride	0.68 J	1000 E	ppb	GW-BD6-121404	29/138	10-50000	1000	1.98E-02	Y	ASL

Footnote Instructions:

(1) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.
E: This flag identifies compounds whose concentration exceeds the upper level of the calibration range.
U: Indicates that the compound was analyzed for but was not detected above the reported SQL.
B: This flag is used when the analyte is detected in the associated method blank as well as in the sample.
= : Indicates that the value has been validated and that the compound has been positively identified and the associated concentration value is accurate.

(2) Maximum concentration used for screening

(3) Region IX PRGs for tap water

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.3 VOCs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)
Surface Water	156-59-2	cis-1,2-Dichloroethene	0.66 J	4.4 J	ppb	SW-09-SW	2/13	5	4.4	6.1E+01	N	BSL
	75-09-2	Methylene chloride	1.1 J, B	3.3 J,B	ppb	US-02-SW	8/13	5	3.3	4.3E+00	N	BSL
	127-18-4	Tetrachloroethene	0.73 J	2.1 J	ppb	SW-01-SW	3/13	5	2.1	5.0E+00	N	BSL
	108-88-3	Toluene	0.85 J	0.85 J	ppb	US-02-SW	1/13	5	0.85	7.2E+02	N	BSL
	79-01-6	Trichloroethene	0.64 J	0.84 J	ppb	SW-09-SW	2/13	5	0.84	5.0E+00	N	BSL

Footnote Instructions:

(1) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.
B: This flag is used when the analyte is detected in the associated method blank as well as in the sample.

(2) Maximum concentration used for screening

(3) Region IX PRGs for tap water, MRBCA DTLs used for TCE and PCE

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.4 VOCs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)
Surface Soil	67-64-1	Acetone	7 J	8.5 J	ppb	GS-05-00-SL	4/121	11-16	8.5	1.41E+07	N	BSL
	NA	Diesel Range Organics	15	35	ppb	GS-04-00-SL	3/6	5.9-13	35	4.14E+06	N	BSL
	NA	Gasoline Range Organics, C6-C14	0.29 J	0.29 J	ppb	GS-04-00-SL	1/6	0.59-0.66	0.29	3.83E+05	N	BSL
	108-38-3/106-42-3	m&p-Xylene	2.5 J	2.5 J	ppb	EP-04-00-SL-FD	1/121	5.4-8.2	2.5	2.71E+05	N	BSL
	75-09-2	Methylene chloride	1.1 J, B	8.1 B	ppb	BD-10-00-SL	65/121	5.4-8.2	8	9.11E+03	N	BSL
	127-18-4	Tetrachloroethene	1.6 J	34	ppb	BD-10-00-SL	10/121	5.4-8.2	34	4.84E+02	N	BSL
	108-88-3	Toluene	1.6 J	9.3	ppb	EP-04-00-SL-FD	3/121	5.4-8.2	9.3	5.20E+05	N	BSL
	79-01-6	Trichloroethene	1.3 J	1.3 J	ppb	BD-10-00-SL	1/121	5.4-8.2	1.3	5.30E+01	N	BSL

Footnote Instructions:

(1) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.
B: This flag is used when the analyte is detected in the associated method blank as well as in the sample.

(2) Maximum concentration used for screening

(3) Region IX PRGs; MDNR DTLs (March 3, 2005) used for DRO and GRO screening toxicity value.

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.5 VOCs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)
Subsurface Soil	71-55-6	1,1,1-Trichloroethane	1.3 J	360 E	ppb	EP-17-30-SL	25/428	5.3-65000	360	1.2E+06	N	BSL
	75-34-3	1,1-Dichloroethane	1.6 J	190 E	ppb	BP-19-25-SL	47/428	5.3-65000	190	5.1E+05	N	BSL
	75-35-4	1,1-Dichloroethene	1.6 J	3600 J	ppb	BLD253-02-21	47/428	5.3-65000	3600	1.2E+05	N	BSL
	120-82-1	1,2,4-Trichlorobenzene	2.5 J	2.5 J	ppb	BLD253-02-21	1/428	5.3-65000	2.5	6.2E+04	N	BSL
	107-06-2	1,2-Dichloroethane	1.9 J	10	ppb	BP-22-33-SL	5/428	5.3-65000	10	2.8E+02	N	BSL
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	7 J	46	ppb	LF-06-05-SL	15/428	11-130000	46	2.2E+07	N	BSL
	67-64-1	Acetone	7.1 J, B	220	ppb	LF-06-05-SL	106/428	11-130000	220	1.4E+07	N	BSL
	75-15-0	Carbon disulfide	1.5 J	290 E	ppb	SW-02-23-SL	4/428	5.3-65000	290	3.6E+05	N	BSL
	56-23-5	Carbon tetrachloride	45	45	ppb	BLD253-02-21	1/428	5.3-65000	45	2.5E+02	N	BSL
	75-00-3	Chloroethane	3.1 J	29	ppb	BP-22-33-SL	2/428	11-130000	29	3.0E+03	N	BSL
	67-66-3	Chloroform (Trichloromethane)	5.5 J	12	ppb	BLD253-02-21	2/428	5.3-65000	12	2.2E+02	N	BSL
	156-59-2	cis-1,2-Dichloroethene	1.5 J	430 E	ppb	OA-19-33-SL	70/428	5.3-65000	430	4.3E+04	N	BSL
	127-18-4	Tetrachloroethene	1.1 J	6600000	ppb	BLD253-02-21	127/428	5.3-7.4	6600000	4.8E+02	Y	ASL
	108-88-3	Toluene	1.3 J	15	ppb	BLD253-02-21	26/428	5.3-65000	15	5.2E+05	N	BSL
	156-60-5	trans-1,2-Dichloroethene	1.7 J	22	ppb	OA-19-33-SL	6/428	5.3-65000	22	6.9E+04	N	BSL
	79-01-6	Trichloroethene	1.2 J	1600	ppb	BLD255-08-24	98/428	5.3-65000	1600	5.3E+01	Y	ASL
	75-01-4	Vinyl chloride	1.6 J	15	ppb	BP-22-33-SL	12/428	11-130000	15	7.9E+01	N	BSL

Footnote Instructions:

(1) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.
E: This flag identifies compounds whose concentration exceeds the upper level of the calibration range.
B: This flag is used when the analyte is detected in the associated method blank as well as in the sample.

(2) Maximum concentration used for screening

(3) Region IX PRGs

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.6 SVOCs & PCBs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)
Groundwater	117-81-7	bis(2-Ethylhexyl)phthalate	4 J	26	ppb	GW-LF08-122104	8/42	9.4-11	26	4.8E+00	Y	ASL
	67-72-1	Hexachloroethane	6.5 J	6.5 J	ppb	GW-BD2-121604	1/42	9.4-11	6.5	1.1E+04	N	BSL
	108-95-2	Phenol	2.1 J	9.8 J	ppb	GW-BD7-121504	2/42	9.4-11	9.8	4.8E+00	Y	ASL

Footnote Instructions:

(1) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.

(2) Maximum concentration used for screening

(3) Region IX PRGs for tap water; PRG for Aroclor-1254 is used for Aroclor-1260.

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.7 SVOCs & PCBs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (4)	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
Surface Water	206-44-0	Fluoranthene	0.97 J	0.97 J	ppb	SW-01-SW	1/13	9.4-10	0.97	1.5E+03	N	BSL

Footnote Instructions:

(1) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.

(2) Maximum concentration used for screening

(3) Region IX PRGs for tap water

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.8 SVOCs & PCBs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (4)	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
Surface Soil	83-32-9	Acenaphthene	12 J	380 J	ppb	OA-16-00-SL	19/121	360-1600	380	3.68E+06	N	BSL
	120-12-7	Anthracene	29 J	1100	ppb	OA-16-00-SL	20/121	360-1600	1,100	2.19E+07	N	BSL
	56-55-3	Benzo(a)anthracene	18 J	6400	ppb	BD-10-00-SL	82/121	360-1600	6400	6.21E+02	Y	ASL
	50-32-8	Benzo(a)pyrene	16 J	6600	ppb	BD-10-00-SL	81/121	360-1600	6600	6.21E+01	Y	ASL
	205-99-2	Benzo(b)fluoranthene	20 J	7800	ppb	BD-10-00-SL	87/121	360-1600	7,800	6.21E+02	Y	ASL
	207-08-9	Benzo(k)fluoranthene	25 J	3200	ppb	BD-10-00-SL	52/121	360-1600	3,200	6.21E+03	N	BSL
	117-81-7	bis(2-Ethylhexyl)phthalate	79 J	4700	ppb	OA-08-00-SL	23/121	360-1600	4700	3.47E+04	N	BSL
	85-68-7	Butyl benzylphthalate	29 J	220 J	ppb	BD-10-00-SL	10/121	360-1600	220	1.22E+07	N	BSL
	86-74-8	Carbazole	22 J	910	ppb	OA-16-00-SL	21/121	360-1600	910	2.43E+04	N	BSL
	218-01-9	Chrysene	18 J	8100	ppb	BD-10-00-SL	81/121	360-1600	8100	6.21E+04	N	BSL
	53-70-3	Dibenz(a,h)anthracene	35 J	440	ppb	OA-15-00-SL	3/121	360-1600	440	6.21E+01	Y	ASL
	84-74-2	Di-n-butylphthalate	26 J	4300	ppb	EP-04-00-SL-FD	20/121	360-1600	4300	6.11E+06	N	BSL
	117-84-0	Di-n-octyl phthalate	84 J	350 J	ppb	DM-02-00-SL	2/121	360-1600	350	2.44E+06	N	BSL
	206-44-0	Fluoranthene	16 J	8800 E	ppb	OA-16-00-SL	94/121	360-1600	8800	2.29E+06	N	BSL
	86-73-7	Fluorene	19 J	530	ppb	OA-16-00-SL	17/121	360-1600	530	2.75E+06	N	BSL
	118-74-1	Hexachlorobenzene	40 J	40 J	ppb	EP-02-00-SL	1/121	360-1600	40	3.47E+04	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	29 J	5800 E	ppb	OA-16-00-SL	48/121	360-1600	5800	6.21E+02	Y	ASL
	78-59-1	Isophorone	200 J	200 J	ppb	OA-29-00-SL	1/121	360-1600	200	5.12E+05	N	BSL
	91-20-3	Naphthalene	25 J	100 J	ppb	OA-16-00-SL	12/121	360-1600	100	5.59E+04	N	BSL
	129-00-0	Pyrene	39 J	38000 E	ppb	OA-16-00-SL	70/121	360-1600	38000	2.32E+06	N	BSL
	11097-69-1	Aroclor-1254 (PCB-1254)	21 J	540 J	ppb	RR-01-00-SL	15/121	36-200	540	2.22E+02	Y	ASL
	11096-82-5	Aroclor-1260 (PCB-1260)	3.6 J	560	ppb	LF-01-00-SL	27/121	36-200	560	2.22E+02	Y	ASL

Footnote Instructions:

(1) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.
E: This flag identifies compounds whose concentration exceeds the upper level of the calibration range.

(2) Maximum concentration used for screening

(3) Region IX PRGs; PRG for Aroclor-1254 is used for Aroclor-1260.

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2. SVOCs & PCBs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (4)	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
Subsurface Soil	95-48-7	2-Methylphenol	34 J	34 J	ppb	NB-32-33-SL	1/396	350-490	34	3.1E+06	N	BSL
	83-32-9	Acenaphthene	9.2 J	740	ppb	NB-55-13-SL	8/396	350-490	740	3.7E+06	N	BSL
	120-12-7	Anthracene	21 J	420	ppb	NB-55-13-SL	8/396	350-490	420	2.2E+07	N	BSL
	56-55-3	Benzo(a)anthracene	16 J	630	ppb	NB-53-33-SL	22/396	350-490	630	6.2E+02	Y	ASL
	50-32-8	Benzo(a)pyrene	23 J	780	ppb	NB-53-33-SL	17/396	350-490	780	6.2E+01	Y	ASL
	205-99-2	Benzo(b)fluoranthene	19 J	1800	ppb	NB-53-33-SL	23/396	350-490	1800	6.2E+02	Y	ASL
	207-08-9	Benzo(k)fluoranthene	31 J	620	ppb	NB-53-33-SL	13/396	350-490	620	6.2E+03	N	BSL
	117-81-7	bis(2-Ethylhexyl)phthalate	81 J	2,400	ppb	NB-56-05-SL	22/396	350-490	2,400	3.5E+04	N	BSL
	85-68-7	Butyl benzylphthalate	110 J	1500	ppb	BLD260-06-01	3/396	350-490	1500	1.2E+07	N	BSL
	218-01-9	Chrysene	18 J	1000	ppb	NB-53-33-SL	19/396	350-490	1000	6.2E+04	N	BSL
	84-74-2	Di-n-butylphthalate	280 J	280 J	ppb	BLD260-06-01	1/396	350-490	280	6.1E+06	N	BSL
	117-84-0	Di-n-octyl phthalate	93 J	93 J	ppb	PL-05-05-SL	1/396	350-490	93	2.4E+06	N	BSL
	206-44-0	Fluoranthene	17 J	3500	ppb	NB-55-13-SL	28/396	350-490	3500	2.3E+06	N	BSL
	86-73-7	Fluorene	25 J	500	ppb	NB-55-13-SL	5/396	350-490	500	2.7E+06	N	BSL
	67-72-1	Hexachloroethane	25 J	430 J	ppb	BLD253-02-21	5/396	350-490	430	3.5E+04	N	BSL
	193-39-5	Indeno(1,2,3-cd)pyrene	63 J	360 J	ppb	NB-53-33-SL	5/396	350-490	360	6.2E+02	N	BSL
	91-20-3	Naphthalene	19 J	19 J	ppb	NB-53-33-SL	1/396	350-490	19	5.6E+04	N	BSL
	129-00-0	Pyrene	43 J	7800 E	ppb	NB-56-05-SL	19/396	350-490	7800	2.3E+06	N	BSL
	11097-69-1	Aroclor-1254 (PCB-1254)	22 J	67	ppb	LF-09-03-SL	2/396	35-49	67	2.2E+02	N	BSL
	11096-82-5	Aroclor-1260 (PCB-1260)	4.2 J	5.8 J	ppb	EP-18-09-SL-FD	3/396	35-49	5.8	2.2E+02	N	BSL

Footnote Instructions:

(1) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.
E: This flag identifies compounds whose concentration exceeds the upper level of the calibration range.

(2) Maximum concentration used for screening

(3) Region IX PRGs; PRG for Aroclor-1254 is used for Aroclor-1260.

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.10 Pesticides
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)
Surface Soil	72-54-8	4,4'-DDD	0.46 J	2.5	ppb	BD-10-00-SL	2/121	1.8-2.7	2.5	2.44E+03	N	BSL
	72-55-9	4,4'-DDE	0.32 J	4.7 J	ppb	OA-01-00-SL	5/121	1.8-2.7	5	1.72E+03	N	BSL
	50-29-3	4,4'-DDT	1.4 J	25	ppb	EP-04-00-SL-FD	13/121	1.8-2.7	25	1.72E+03	N	BSL
	319-84-6	alpha-BHC	31	35 E	ppb	EP-04-00-SL-FD	2/121	1.8-2.7	35	9.02E+01	N	BSL
	60-57-1	Dieldrin	1.4 J	7	ppb	BD-10-00-SL	3/121	1.8-2.7	7	3.04E+01	N	BSL
	959-98-8	Endosulfan I	0.79 J	1.1 J	ppb	EP-04-00-SL-FD	2/121	1.8-2.7	1	3.67E+05	N	BSL
	33213-65-9	Endosulfan II	0.16 J	4.2	ppb	NB-22-00-SL	7/121	1.8-2.7	4.2	3.67E+05	N	BSL
	72-20-8	Endrin	0.3 J	21 J	ppb	RR-01-00-SL	11/121	1.8-2.7	21	1.83E+04	N	BSL
	76-44-8	Heptachlor	11	13	ppb	EP-04-00-SL-FD	2/121	1.8-2.7	13	1.08E+02	N	BSL

Footnote Instructions:

(1) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.
E: This flag identifies compounds whose concentration exceeds the upper level of the calibration range.

(2) Maximum concentration used for screening

(3) Region IX PRGs

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.11 Pesticides
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)
Subsurface Soil	72-55-9	4,4'-DDE	3	3	ppb	NB-55-13-SL	1/396	1.8-2.5	3	1.7E+03	N	BSL
	50-29-3	4,4'-DDT	0.73 J	1.1 J	ppb	BLD253-02-21	2/396	1.8-2.5	1.1	1.7E+03	N	BSL
	319-84-6	alpha-BHC	0.12 J	1.3 J	ppb	EP-17-30-SL	5/396	1.8-2.5	1.3	9.0E+01	N	BSL
	33213-65-9	Endosulfan II	0.8 J	0.8 J	ppb	LF-09-03-SL	1/396	1.8-2.5	0.8	3.7E+05	N	BSL
	72-20-8	Endrin	0.65 J	0.65 J	ppb	LF-08-03-SL	1/396	1.8-2.5	0.65	1.8E+04	N	BSL
	58-89-9	gamma-BHC (Lindane)	0.2 J	0.23 J	ppb	NB-55-13-SL	2/396	1.8-2.5	0.23	4.4E+02	N	BSL

Footnote Instructions:

(1) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.

(2) Maximum concentration used for screening

(3) Region IX PRGs

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.12 Inorganics/Radionuclides
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)(5)
Groundwater	7429-90-5	Aluminum	0.11	16	ppm	GW-WS23-121304	60/115	0.1	16	3.6E+01	N	BSL
	7440-38-2	Arsenic	0.01	0.13	ppm	GW-WS23-121304	13/115	0.01	0.13	4.5E-05	Y	ASL
	7440-38-2	Arsenic (Dissolved)	0.062	0.062	ppm	GW-BR1RB-120704	1/17	0.01	0.062	4.5E-05	Y	ASL
	7440-39-3	Barium	0.027	1.2	ppm	GW-BD2-121604	115/115	0.012	1.2	2.6E+00	N	BSL
	7440-39-3	Barium (Dissolved)	0.068	0.54	ppm	GW-BR1JC-120604	17/17	0.012	0.54	2.6E+00	N	BSL
	7440-43-9	Cadmium	0.0035	0.0035	ppm	GW-BD2-121604	1/115	0.002	0.0035	1.8E-02	N	BSL
	NA	Chloride	0.88	430	ppm	GW-BD2-121604	113/115	0.2-10	430	2.5E+02	Y	ASL
	7440-47-3	Chromium Total	0.0059 =	0.037	ppm	GW-WS23-121304	10/115	0.004	0.037	1.1E-01	N	BSL
	7440-48-4	Cobalt	0.002 =	0.0042	ppm	GW-BD3-121704	28/115	0.002	0.0042	7.3E-01	N	BSL
	7440-48-4	Cobalt (Dissolved)	0.0024	0.0055 =	ppm	GW-BR9JC-121404	5/17	0.002	0.0055	7.3E-01	N	BSL
	7440-50-8	Copper	0.019	0.039	ppm	GW-BD2-121604	6/115	0.01	0.039	1.5E+00	N	BSL
	7439-89-6	Iron	0.11	38	ppm	GW-BD2-121604	92/115	0.1	38	1.1E+01	Y	ASL
	7439-89-6	Iron (Dissolved)	0.17	20	ppm	GW-NB61-122204	10/17	0.1	20	1.1E+01	Y	ASL
	7439-92-1	Lead	0.0032	0.059	ppm	GW-WS23-121304	18/115	0.003-0.006	0.059	1.5E-02	Y	ASL
	7439-96-5	Manganese	0.0014	13	ppm	GW-BD2-121604	110/115	0.001-0.002	13	8.8E-01	Y	ASL
	7439-96-5	Manganese (Dissolved)	0.0044	3.2	ppm	GW-BP22A-122804	17/17	0.001	3.2	8.8E-01	Y	ASL
	7440-02-0	Nickel	0.005	0.15	ppm	GW-BD8-122804	53/115	0.005	0.15	7.3E-01	N	BSL
	7440-02-0	Nickel (Dissolved)	0.0055	0.048	ppm	GW-EP20-121504	7/17	0.005	0.048	7.3E-01	N	BSL
	NA	Nitrate (as N)	0.22	290	ppm	GW-BD2-121604	42/115	10-0.2	290	1.0E+01	Y	ASL
	7782-49-2	Selenium	0.0051	0.0095	ppm	GW-NB78-122104	8/115	0.005	0.0095	1.8E-01	N	BSL
	NA	Sulfate	1.5	170	ppm	GW-WS26-121504	114/115	1-5	170	2.5E+02	N	BSL
	7440-28-0	Thallium	0.011	0.026	ppm	GW-BD2-121604	3/115	0.01-0.02	0.026	2.4E-03	Y	ASL
	7440-62-2	Vanadium	0.018	0.004	ppm	GW-WS23-121304	6/115	0.01	0.004	3.6E-02	N	BSL
	7440-66-6	Zinc	0.0067	0.65	ppm	GW-BD13-122804	81/115	0.006	0.65	1.1E+01	N	BSL
	7440-66-6	Zinc (Dissolved)	0.0085	0.026	ppm	GW-BR6OB-120704	8/17	0.006	0.026	1.1E+01	N	BSL

Footnote Instructions:

(1) = : Indicates that the value has been validated and that the compound has been positively identified and the associated concentration value is accurate.

(2) Maximum concentration used for screening

(3) Region IX PRGs for tap water, PRG for Chromium IV used for screening Chromium Total concentrations. MCL used for screening Lead.

(4) BSL = Below Screening Level; ASL = Above Screening Level

(5) All radioactive isotopes, including the contribtion from background, were included in the baseline risk assesment. No isotopes were omitted by the screening process.

TABLE 2.13 Inorganics/Radionuclides
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)(5)
Surface Water	7429-90-5	Aluminum	0.1	19	ppm	SW-01-SW	10/13	0.1	19	3.6E+01	*0.05*	SMCL	N	BSL
	7440-38-2	Arsenic	0.011	0.011	ppm	SW-01-SW	1/13	0.01	0.011	4.5E-05	0.01	MCL	Y	ASL
	7440-39-3	Barium	0.069	0.63	ppm	SW-01-SW	13/13	0.012	0.63	2.6E+00	2	MCL	N	BSL
	7440-47-3	Chromium Total	0.026	0.026	ppm	SW-01-SW	1/13	0.004	0.026	1.1E-01	0.1	MCL	N	BSL
	7440-48-4	Cobalt	0.017	0.017	ppm	SW-01-SW	1/13	0.002	0.017	7.3E-01			N	BSL
	7440-50-8	Copper	0.055	0.055	ppm	SW-01-SW	1/13	0.001	0.055	1.5E+00	**1.3**	MCL	N	BSL
	NA	Fluoride	0.67	0.67	ppm	SW-09-SW	1/13	0.5	0.67	2.2E+00	4	MCL	N	BSL
	7439-89-6	Iron	0.11	23	ppm	SW-01-SW	9/13	0.1	23	1.1E+01	*0.3*	SMCL	Y	ASL
	7439-92-1	Lead	0.068	0.068	ppm	SW-01-SW	1/13	0.003	0.068	1.5E-02	**0.015**	MCL	Y	ASL
	7439-96-5	Manganese	0.015	1.3	ppm	SW-01-SW	13/13	0.001	1.3	8.8E-01	*0.05*	SMCL	Y	ASL
	7440-02-0	Nickel	0.031	0.031	ppm	SW-01-SW	1/13	0.005	0.031	7.3E-01			N	BSL
	7440-62-2	Vanadium	0.045	0.045	ppm	SW-01-SW	1/13	0.01	0.045	3.6E-02			Y	ASL

Footnote Instructions:

(1) NA

(2) Maximum concentration used for screening

(3) Region IX PRGs for tap water, PRG for Chromium IV used for screening Chromium Total concentrations. MCL used for screening Lead.

(4) BSL = Below Screening Level; ASL = Above Screening Level

(5) All radioactive isotopes, including the contribtion from background, were included in the baseline risk assesment. No isotopes were omitted by the screening process.

TABLE 2.14 Inorganics/Radionuclides
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)(5)
Surface Soil	7429-90-5	Aluminum	2000	24000 J	ppm	SW-01-00-SL	121/121	11-16	24000	7.6E+04	N	BSL
	7440-36-0	Antimony	0.94	21	ppm	BD-10-00-SL	30/121	0.87-1.3	21	3.1E+01	N	BSL
	7440-38-2	Arsenic	1.1	160	ppm	EP-06-00-SL	121/121	0.76-1.2	160	3.9E-01	Y	ASL
	7440-39-3	Barium	24	1500	ppm	NB-04-00-SL	121/121	0.54-1.2	1500	5.4E+03	N	BSL
	7440-41-7	Beryllium	0.35	5.8	ppm	EP-04-00-SL	113/121	0.33-0.49	5.8	1.5E+02	N	BSL
	7440-43-9	Cadmium	0.23	11	ppm	EP-02-00-SL	78/121	0.22-1.2	11	3.7E+01	N	BSL
	7440-47-3	Chromium Total	4.9	280	ppm	BD-10-00-SL	121/121	0.43-0.66	280	2.1E+02	Y	ASL
	7440-48-4	Cobalt	0.86	300	ppm	OA-23-00-SL	121/121	0.22-0.48	300	9.0E+02	N	BSL
	7440-50-8	Copper	5.6	1800	ppm	EP-02-00-SL	121/121	0.87-2.2	1800	3.1E+03	N	BSL
	NA	Fluoride	6.6 =	170	ppm	OA-25-00-SL	98/121	5.4-8.2	170	3.7E+03	N	BSL
	7439-89-6	Iron	1600	61000	ppm	BD-10-00-SL	121/121	11-59	61000	2.3E+04	Y	ASL
	7439-92-1	Lead	3.7	1400	ppm	OA-13-00-SL	121/121	0.35-3.9	1400	4.0E+02	Y	ASL
	7439-96-5	Manganese	41	4400 J	ppm	SW-02-00-SL	121/121	0.22-1.4	4400	1.8E+03	Y	ASL
	7439-97-6	Mercury	0.024	3.4	ppm	EP-01-00-SL	98/121	0.022-0.27	3.4	2.3E+01	N	BSL
	7440-02-0	Nickel	5.3	300	ppm	BD-10-00-SL	121/121	0.54-0.82	300	1.6E+03	N	BSL
	7782-49-2	Selenium	0.61	4.1	ppm	EP-10-00-SL	81/121	0.54-2.9	4.1	3.9E+02	N	BSL
	7440-22-4	Silver	0.57	2	ppm	EP-02-00-SL	9/121	0.54-0.82	2	3.9E+02	N	BSL
	7440-28-0	Thallium	1 =	2.2 =	ppm	OA-03-00-SL	8/121	0.87-5.4	2.2	5.2E+00	N	BSL
	7440-62-2	Vanadium	5.4	45	ppm	SW-01-00-SL	121/121	0.54-0.82	45	7.8E+01	N	BSL
	7440-66-6	Zinc	19	1500	ppm	EP-04-00-SL-FD	121/121	0.65-1.5	1500	2.3E+04	N	BSL

Footnote Instructions:

(1) J: This flag indicates an estimated value.
= : Indicates that the value has been validated and that the compound has been positively identified and the associated concentration value is accurate.

(2) Maximum concentration used for screening

(3) Region IX PRGs

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.15 Inorganics/Radionuclides
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 1
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Reporting Limits	Concentration Used for Screening (2)	Screening Toxicity Value (N/C) (3)	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)(5)
Subsurface Soil	7429-90-5	Aluminum	680	28000	ppm	BLD253-02-21FD	428/428	11-15	28000	7.6E+04	N	BSL
	7440-36-0	Antimony	1	1.8	ppm	NB-39-15-SL	13/428	0.85-1.2	1.8	3.1E+01	N	BSL
	7440-38-2	Arsenic	1.1	24	ppm	BP-18-25-SL	428/428	0.74-1	24	3.9E-01	Y	ASL
	7440-39-3	Barium	9.6	790	ppm	NB-37-15-SL	428/428	0.53-0.74	790	5.4E+03	N	BSL
	7440-41-7	Beryllium	0.35	2.8	ppm	SW-02-01-SL	375/428	0.32-0.44	2.8	1.5E+02	N	BSL
	7440-43-9	Cadmium	0.22	4.7	ppm	SW-02-01-SL	70/428	0.21-0.59	4.7	3.7E+01	N	BSL
	7440-47-3	Chromium Total	5.8	49	ppm	BLD240-05-01	428/428	0.43-0.59	49	2.1E+02	N	BSL
	7440-48-4	Cobalt	1.2	54	ppm	NB-36-15-SL	428/428	0.21-0.29	54	9.0E+02	N	BSL
	7440-50-8	Copper	1.5	38	ppm	BLD240-05-23	428/428	0.85-1.2	38	3.1E+03	N	BSL
	NA	Fluoride	6.3	200	ppm	LS-02-00-SL	70/405	5.3-7.4	200	3.7E+03	N	BSL
	7439-89-6	Iron	2100	35000	ppm	BD-15-17-SL	428/428	11-29	35000	2.3E+04	Y	ASL
	7439-92-1	Lead	3.8	680	ppm	NB-75-19-SL	428/428	0.32-3.4	680	4.0E+02	Y	ASL
	7439-96-5	Manganese	20 =	5700	ppm	NB-37-15-SL	428/428	0.21-1.3	5700	1.8E+03	Y	ASL
	7439-97-6	Mercury	0.02	0.54	ppm	SW-02-01-SL	117/428	0.013-0.03	0.54	2.3E+01	N	BSL
	7440-02-0	Nickel	2.7	97	ppm	NB-85-25-SL	428/428	0.53-0.74	97	1.6E+03	N	BSL
	7782-49-2	Selenium	0.55	2.9	ppm	NB-47-31-SL	244/428	0.53-1.5	2.9	3.9E+02	N	BSL
	7440-22-4	Silver	0.85	0.85	ppm	SW-02-01-SL	1/428	0.53-0.74	0.85	3.9E+02	N	BSL
	7440-28-0	Thallium	0.98	2.6	ppm	BD-16-19-SL	82/428	0.85-5.4	2.6	5.2E+00	N	BSL
	7440-62-2	Vanadium	8	56	ppm	BLD253-02-21	428/428	0.53-0.74	56	7.8E+01	N	BSL
	7440-66-6	Zinc	18	850	ppm	NB-63-05-SL	428/428	0.64-0.88	850	2.3E+04	N	BSL

Footnote Instructions:

(1) = : Indicates that the value has been validated and that the compound has been positively identified and the associated concentration value is accurate.

(2) Maximum concentration used for screening

(3) Region IX PRGs

(4) BSL = Below Screening Level; ASL = Above Screening Level

TABLE 2.16 VOCs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 2
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte (1)	Minimum Concentration (Qualifier) (2)	Maximum Concentration (Qualifier) (2)	Units	Location of Maximum Concentration	Detection Frequency	Concentration Used for Screening (3)	Frequency (<5%) (Y/N)	Essential Nutrient (Y/N)	Selected as CCOC (Y/N)
Groundwater	79-00-5	1,1,2-Trichloroethane	1.4 J	8	ppb	GW-NB80-121704	5/138	8	Y	N	N
	75-35-4	1,1-Dichloroethene	0.7 J	5100 J	ppb	GW-BD2-121604	60/138	5100	N	N	Y
	107-06-2	1,2-Dichloroethane	1.1 J	9	ppb	GW-BD8-122804	9/138	9	Y	N	N
	71-43-2	Benzene	1.3 J	4.8 J	ppb	GW-BD6-121404	2/138	4.8	Y	N	N
	75-00-3	Chloroethane	3 J	71	ppb	BP-21-25-35-OL-GW-SS	6/138	71	Y	N	N
	67-66-3	Chloroform (Trichloromethane)	1.1 J	6.8 =	ppb	GW-BD6-121404	5/138	6.8	Y	N	N
	156-59-2	cis-1,2-Dichloroethene	1 J	1900 =	ppb	GW-BD6-121404	75/138	1900	N	N	Y
	75-09-2	Methylene chloride	1.8 J	1600	ppb	GW-FD7-122004	24/138	1600	N	N	Y
	127-18-4	Tetrachloroethene	1.4 J	200000	ppb	GW-BD2-121604	79/138	200000	N	N	Y
	156-60-5	trans-1,2-Dichloroethene	1 J	700 E	ppb	GW-BD13-122804	22/138	700	N	N	Y
	79-01-6	Trichloroethene	1.2 J	18000 =	ppb	GW-BD6-121404	81/138	18000	N	N	Y
	75-01-4	Vinyl chloride	0.68 J	1000 E	ppb	GW-BD6-121404	29/138	1000	N	N	Y

Footnote Instructions:

(1) Chemical listed exceeded screening levels (Table 2.2-2.19)

(2) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.
E: This flag identifies compounds whose concentration exceeds the upper level of the calibration range.
= : Indicates that the value has been validated and that the compound has been positively identified and the associated concentration value is accurate.

(3) Maximum concentration used for screening

TABLE 2.17 VOCs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 2
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte (1)	Minimum Concentration (Qualifier) (2)	Maximum Concentration (Qualifier) (2)	Units	Location of Maximum Concentration	Detection Frequency	Concentration Used for Screening (3)	Frequency (<5%) (Y/N)	Essential Nutrient (Y/N)	Selected as COPC (Y/N)
Subsurface Soil	127-18-4	Tetrachloroethene	1.1 J	6600000	ppb	BLD253-02-21	127/428	6600000	N	N	Y
	79-01-6	Trichloroethene	1.2 J	1600	ppb	BLD255-08-24	98/428	1600	N	N	Y

Footnote Instructions:

(1) Chemical listed exceeded screening levels (Table 2.2-2.16)

(2) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.

(3) Maximum concentration used for screening

TABLE 2.18 SVOCs & PCBs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 2
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte (1)	Minimum Concentration (Qualifier) (2)	Maximum Concentration (Qualifier) (2)	Units	Location of Maximum Concentration	Detection Frequency	Concentration Used for Screening (3)	Frequency (<5%) (Y/N)	Essential Nutrient (Y/N)	Selected as COPC (Y/N)
Groundwater	117-81-7	bis(2-Ethylhexyl)phthalate	4 J	26	ppb	GW-LF08-122104	8/42	26	N	N	Y
	108-95-2	Phenol	2.1 J	9.8 J	ppb	GW-BD7-121504	2/42	9.8	Y	N	N

Footnote Instructions:

(1) Chemical listed exceeded screening levels (Table 2.2-2.16)

(2) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.

(3) Maximum concentration used for screening

TABLE 2.19 SVOCs & PCBs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 2
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte (1)	Minimum Concentration (Qualifier) (2)	Maximum Concentration (Qualifier) (2)	Units	Location of Maximum Concentration	Detection Frequency	Concentration Used for Screening (3)	Frequency (<5%) (Y/N)	Essential Nutrient (Y/N)	Selected as COPC (Y/N)
Surface Soil	56-55-3	Benzo(a)anthracene	18 J	6400	ppb	BD-10-00-SL	82/121	6400	N	N	Y
	50-32-8	Benzo(a)pyrene	16 J	6600	ppb	BD-10-00-SL	81/121	6600	N	N	Y
	205-99-2	Benzo(b)fluoranthene	20 J	7800	ppb	BD-10-00-SL	87/121	7,800	N	N	Y
	53-70-3	Dibenz(a,h)anthracene	35 J	440	ppb	OA-15-00-SL	3/121	440	Y	N	N
	193-39-5	Indeno(1,2,3-cd)pyrene	29 J	5800 E	ppb	OA-16-00-SL	48/121	5800	N	N	Y
	11097-69-1	Aroclor-1254 (PCB-1254)	21 J	540 J	ppb	RR-01-00-SL	15/121	540	N	N	Y
	11096-82-5	Aroclor-1260 (PCB-1260)	3.6 J	560	ppb	LF-01-00-SL	27/121	560	N	N	Y

Footnote Instructions:

(1) Chemical listed exceeded screening levels (Table 2.2-2.16)

(2) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.
E: This flag identifies compounds whose concentration exceeds the upper level of the calibration range.

(3) Maximum concentration used for screening

TABLE 2.20 SVOCs & PCBs
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 2
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte (1)	Minimum Concentration (Qualifier) (2)	Maximum Concentration (Qualifier) (2)	Units	Location of Maximum Concentration	Detection Frequency	Concentration Used for Screening (3)	Frequency (<5%) (Y/N)	Essential Nutrient (Y/N)	Selected as COPC (Y/N) (4)
Subsurface Soil	56-55-3	Benzo(a)anthracene	16 J	630	ppb	NB-53-33-SL	22/396	630	N	N	N
	50-32-8	Benzo(a)pyrene	23 J	780	ppb	NB-53-33-SL	17/396	780	Y	N	N
	205-99-2	Benzo(b)fluoranthene	19 J	1800	ppb	NB-53-33-SL	23/396	1800	N	N	N

Footnote Instructions:

(1) Chemical listed exceeded screening levels (Table 2.2-2.16)

(2) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.

(3) Maximum concentration used for screening

(4) Benzo(a)anthracene and Benzo(b)fluoranthene were not retained as COPCs due to there low frequency of detection, which was approaching 5%.

TABLE 2.21 Inorganics/Radionuclides
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 2
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte (1)	Minimum Concentration (Qualifier) (2)	Maximum Concentration (Qualifier) (2)	Units	Location of Maximum Concentration	Detection Frequency	Concentration Used for Screening (3)	Frequency (<5%) (Y/N)	Essential Nutrient (Y/N)	Selected as COPC (Y/N)
Groundwater	7440-38-2	Arsenic	0.01	0.13	ppm	GW-WS23-121304	13/115	0.13	N	N	Y
	7440-38-2	Arsenic (Dissolved)	0.062	0.062	ppm	GW-BR1RB-120704	1/17	0.062	N	N	Y
	NA	Chloride	0.88	430	ppm	GW-BD2-121604	113/115	430	N	Y	N
	7439-89-6	Iron	0.11	38	ppm	GW-BD2-121604	92/115	38	N	Y	N
	7439-89-6	Iron (Dissolved)	0.17	20	ppm	GW-NB61-122204	10/17	20	N	Y	N
	7439-92-1	Lead	0.0032	0.059	ppm	GW-WS23-121304	18/115	0.059	N	N	Y
	7439-96-5	Manganese	0.0014	13	ppm	GW-BD2-121604	110/115	13	N	Y	N
	7439-96-5	Manganese (Dissolved)	0.0044	3.2	ppm	GW-BP22A-122804	17/17	3.2	N	Y	N
	NA	Nitrate (as N)	0.22	290	ppm	GW-BD2-121604	42/115	290	N	N	N
	7440-28-0	Thallium	0.011	0.026	ppm	GW-BD2-121604	3/115	0.026	Y	N	N

Footnote Instructions:

(1) Chemical listed exceeded screening levels (Table 2.2-2.16)

(2) NA

(3) Maximum concentration used for screening

TABLE 2.22 Inorganics/Radionuclides
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 2
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte (1)	Minimum Concentration (Qualifier) (2)	Maximum Concentration (Qualifier) (2)	Units	Location of Maximum Concentration	Detection Frequency	Concentration Used for Screening (3)	Frequency (<5%) (Y/N)	Essential Nutrient (Y/N)	Selected as COPC (Y/N)
Surface Water	7440-38-2	Arsenic	0.011	0.011	ppm	SW-01-SW	1/13	0.011	N	N	Y
	7439-89-6	Iron	0.11	23	ppm	SW-01-SW	9/13	23	N	Y	N
	7439-92-1	Lead	0.068	0.068	ppm	SW-01-SW	1/13	0.068	N	N	Y
	7439-96-5	Manganese	0.015	1.3	ppm	SW-01-SW	13/13	1.3	N	Y	N
	7440-62-2	Vanadium	0.045	0.045	ppm	SW-01-SW	1/13	0.045	N	N	Y
	7440-66-6	Zinc	0.012	0.35	ppm	SW-01-SW	3/13	0.35	N	Y	N

Footnote Instructions:

(1) Chemical listed exceeded screening levels (Table 2.2-2.16)

(2) NA

(3) Maximum concentration used for screening

TABLE 2.23 Inorganics/Radionuclides
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 2
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte (1)	Minimum Concentration (Qualifier) (2)	Maximum Concentration (Qualifier) (2)	Units	Location of Maximum Concentration	Detection Frequency	Concentration Used for Screening (3)	Frequency (<5%) (Y/N)	Essential Nutrient (Y/N)	Selected as COPC (Y/N)
Surface Soil	7440-38-2	Arsenic	1.1	160	ppm	EP-06-00-SL	121/121	160	N	N	Y
	7440-47-3	Chromium Total	4.9	280	ppm	BD-10-00-SL	121/121	280	N	N	Y
	7439-89-6	Iron	1600	61000	ppm	BD-10-00-SL	121/121	61000	N	Y	N
	7439-92-1	Lead	3.7	1400	ppm	OA-13-00-SL	121/121	1400	N	N	Y
	7439-96-5	Manganese	41	4400 J	ppm	SW-02-00-SL	121/121	4400	N	Y	N

Footnote Instructions:

(1) Chemical listed exceeded screening levels (Table 2.2-2.16)

(2) J: Indicates that the compound was positively identified. The associated numerical value is the approximate concentration of the compound in the sample.

(3) Maximum concentration used for screening

TABLE 2.24 Inorganics/Radionuclides
SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN - SCREEN 2
Westinghouse Electric Co. Hematite Site

Scenario Timeframe: Current/Future

Medium	CAS Number	Analyte (1)	Minimum Concentration (Qualifier) (2)	Maximum Concentration (Qualifier) (2)	Units	Location of Maximum Concentration	Detection Frequency	Concentration Used for Screening (3)	Frequency (<5%) (Y/N)	Essential Nutrient (Y/N)	Selected as COPC (Y/N)
Subsurface Soil	7440-38-2	Arsenic	1.1	24	ppm	BP-18-25-SL	428/428	24	N	N	Y
	7439-89-6	Iron	2100	35000	ppm	BD-15-17-SL	428/428	35000	N	Y	N
	7439-92-1	Lead	3.8	680	ppm	NB-75-19-SL	428/428	680	N	N	Y
	7439-96-5	Manganese	20 =	5700	ppm	NB-37-15-SL	428/428	5700	N	Y	N

Footnote Instructions:

(1) Chemical listed exceeded screening levels (Table 2.2-2.16)

(2) = : Indicates that the value has been validated and that the compound has been positively identified and the associated concentration value is accurate.

(3) Maximum concentration used for screening

TABLE 3.1
EXPOSURE POINT CONCENTRATION SUMMARY
Westinghouse Electric Co. Hematite Site

EPC Set: 1, Overburden Wells

Medium	Constituent of Potential Concern (1)	Units	Max	Mean	Number of Samples	Number of Non-detects	95% UCL Method (2)	Distribution (2)	UCL (2)(3)
Groundwater	1,1-Dichloroethene	ppb	790	6.7E+01	92	50	97.5% Chebyshev (Mean, Sd) UCL	Non-parametric	1.64E+02
	cis-1,2-Dichloroethene	ppb	19000	4.3E+02	92	38	99% Chebyshev (Mean, Sd) UCL	Non-parametric	2.57E+03
	Methylene chloride	ppb	1600	5.3E+01	92	79	97.5% Chebyshev (Mean, Sd) UCL	Non-parametric	1.93E+02
	Tetrachloroethene	ppb	14000	7.1E+02	92	34	99% Chebyshev (Mean, Sd) UCL	Non-parametric	2.93E+03
	trans-1,2-Dichloroethene	ppb	700	4.3E+01	92	76	97.5% Chebyshev (Mean, Sd) UCL	Non-parametric	1.24E+02
	Trichloroethene	ppb	18000	7.4E+02	92	34	99% Chebyshev (Mean, Sd) UCL	Non-parametric	3.32E+03
	Vinyl chloride	ppb	1250	7.8E+01	92	76	97.5% Chebyshev (Mean, Sd) UCL	Non-parametric	2.29E+02
	Arsenic	ppm	0.13	7.9E-03	89	81	95% Chebyshev (Mean, Sd) UCL	Non-parametric	1.47E-02
	Lead	ppm	0.059	4.0E-03	89	72	95% Chebyshev (Mean, Sd) UCL	Non-parametric	8.01E-03
	Bis(2-ethylhexyl)phthalate	ppb	26	6.0E+00	39	33	Student's-t UCL	Normal	7.12E+00
	Radium 226	pCi/l	2.22	5.7E-01	11	4	Approximate Gamma UCL	Gamma	1.01E+00
	Neptunium 237	pCi/l	0.018	2.2E-03	25	24	Student's-t UCL	Normal	4.36E-03
	Plutonium 239	pCi/l	0.018	2.0E-03	25	25	Student's-t UCL	Normal	4.38E-03
	Uranium 238	pCi/l	56.3	1.4E+00	92	58	H-UCL	Lognormal	1.39E+00
	Uranium 235	pCi/l	0.19	3.2E-02	92	62	95% Chebyshev (Mean, Sd) UCL	Non-parametric	5.04E-02
	Uranium 234	pCi/l	4.81	3.8E-01	92	46	99% Chebyshev (Mean, Sd) UCL	Non-parametric	1.64E+00
	Thorium 232	pCi/l	0.241	3.6E-02	92	84	95% Chebyshev (Mean, Sd) UCL	Non-parametric	5.55E-02
	Thorium 230	pCi/l	0.306	1.8E-02	92	91	95% Chebyshev (Mean, Sd) UCL	Non-parametric	4.75E-02
	Technetium 99	pCi/l	5100	1.5E+02	92	66	95% Chebyshev (Mean, Sd) UCL	Non-parametric	4.53E+02

(1) COPCs not listed from Table 2.1 were not detected in the particular EPC set.

(2) As determined or calculated by PROUCL Version 3.1
(3) Radioactive isotopes include the contribution from background

TABLE 3.2
EXPOSURE POINT CONCENTRATION SUMMARY
Westinghouse Electric Co. Hematite Site

EPC Set: 2, Bedrock Wells

Medium	Constituent of Potential Concern (1)	Units	Max	Mean	Number of Samples	Number of Non-detects	95% UCL Method (2)	Distribution (2)	UCL (2)(3)
Groundwater	1,1-Dichloroethene	ppb	210	2.2E+01	39	26	99% Chebyshev (Mean, Sd) UCL	Non-parametric	9.67E+01
	cis-1,2-Dichloroethene	ppb	2400	2.5E+02	39	24	99% Chebyshev (Mean, Sd) UCL	Non-parametric	1.21E+03
	Methylene chloride	ppb	125	1.5E+01	39	35	99% Chebyshev (Mean, Sd) UCL	Non-parametric	6.72E+01
	Tetrachloroethene	ppb	2200	2.0E+02	39	25	99% Chebyshev (Mean, Sd) UCL	Non-parametric	1.04E+03
	trans-1,2-Dichloroethene	ppb	125	1.6E+01	39	36	99% Chebyshev (Mean, Sd) UCL	Non-parametric	6.78E+01
	Trichloroethene	ppb	5800	5.2E+02	39	22	99% Chebyshev (Mean, Sd) UCL	Non-parametric	2.48E+03
	Vinyl chloride	ppb	250	2.9E+01	39	31	99% Chebyshev (Mean, Sd) UCL	Non-parametric	1.20E+02
	Arsenic	ppm	0.046	8.1E-03	25	21	95% Chebyshev (Mean, Sd) UCL	Non-parametric	1.60E-02
	Neptunium 237	pCi/l	0.006	1.3E-04	7	7	Student's t UCL	Normal	4.25E-03
	Plutonium 239	pCi/l	0.018	6.5E-03	7	7	Student's t UCL	Normal	1.24E-02
	Radium 226	pCi/l	1.62	1.0E+00	5	2	Student's t UCL	Normal	1.66E+00
	Uranium 238	pCi/l	1.43	5.7E-01	23	2	Student's t UCL	Normal	7.05E-01
	Uranium 235	pCi/l	0.0986	4.7E-02	23	18	Student's t UCL	Normal	5.72E-02
	Uranium 234	pCi/l	12.5	5.0E+00	23	14	Student's t UCL	Normal	6.91E+00
	Thorium 232	pCi/l	0.119	2.4E-02	23	18	Approximate Gamma UCL	Gamma	3.58E-02
	Thorium 230	pCi/l	0.113	1.3E-02	23	22	Student's t UCL	Normal	3.17E-02
	Technetium 99	pCi/l	8.96	3.6E+00	23	23	Student's t UCL	Normal	4.47E+00

(1) COPCs not listed from Table 2.1 were not detected in the particular EPC set.

(2) As determined or calculated by PROUCL Version 3.1
(3) Radioactive isotopes include the contribution from background

TABLE 3.3
EXPOSURE POINT CONCENTRATION SUMMARY
Westinghouse Electric Co. Hematite Site

EPC Set: 3, Surface Water

Medium	Constituent of Potential Concern (1)	Units	Max	Mean	Number of Samples	Number of Non-detects	95% UCL Method (2)	Distribution (2)	UCL (2)(3)
Surface Water	Arsenic	ppm	0.011	5.5E-03	13	12	Student's-t UCL	Non-parametric	6.28E-03
	Lead	ppm	0.068	6.6E-03	13	12	99% Chebyshev (Mean, Sd) UCL	Non-parametric	5.75E-02
	Vanadium	ppm	0.045	8.1E-03	13	12	95% Chebyshev (Mean, Sd) UCL	Non-parametric	2.15E-02
	Tetrachloroethene	ppb	2.5	2.2E+00	13	10	Student's-t UCL	Normal	2.52E+00
	Trichloroethene	ppb	2.5	2.2E+00	13	11	Student's-t UCL	Normal	2.56E+00
	Uranium 238	pCi/l	4.77	7.1E-01	13	0	95% Chebyshev (Mean, Sd) UCL	Non-parametric	2.21E+00
	Uranium 235	pCi/l	0.14	5.3E-02	13	6	Student's-t UCL	Normal	7.20E-02
	Uranium 234	pCi/l	1.49		1	0	Insufficient Number of Samples		
	Thorium 232	pCi/l	0.0293	1.5E-02	13	13	Student's-t UCL	Normal	1.87E-02
	Thorium 230	pCi/l	0.0451	2.0E-02	13	13	95% Chebyshev (Mean, Sd) UCL	Non-parametric	3.58E-02
	Technetium 99	pCi/l	3.16	1.1E+00	13	13	Student's-t UCL	Normal	1.63E+00

(1) COPCs not listed from Table 2.1 were not detected in the particular EPC set.

(2) As determined or calculated by PROUCL Version 3.0
(3) Radioactive isotopes include the contribution from background

TABLE 3.4
EXPOSURE POINT CONCENTRATION SUMMARY
Westinghouse Electric Co. Hematite Site

EPC Set: 4, Surface soil

Medium	Constituent of Potential Concern (1)	Units	Max	Mean	Number of Samples	Number of Non-detects	95% UCL Method (2)	Distribution (2)	UCL (2)(3)
Surface Soil	Arsenic	ppm	160	1.4E+01	121	0	95% Chebyshev (Mean, Sd) UCL	Non-parametric	2.25E+01
	Chromium Total	ppm	280	2.0E+01	121	0	95% Chebyshev (Mean, Sd) UCL	Non-parametric	3.07E+01
	Lead	ppm	1400	9.2E+01	121	0	95% Chebyshev (Mean, Sd) UCL	Non-parametric	1.54E+02
	Benzo(a)anthracene	ppb	6400	3.44E+02	121	39	97.5% Chebyshev (Mean, Sd) UCL	Non-parametric	8.53E+02
	Benzo(a)pyrene	ppb	6600	3.73E+02	121	40	97.5% Chebyshev (Mean, Sd) UCL	Non-parametric	9.15E+02
	Benzo(b)fluoranthene	ppb	7,800	5.14E+02	121	34	97.5% Chebyshev (Mean, Sd) UCL	Non-parametric	1.26E+03
	Indeno(1,2,3-cd)pyrene	ppb	5800	3.91E+02	121	73	95% Chebyshev (Mean, Sd) UCL	Non-parametric	7.55E+02
	Aroclor-1254 (PCB-1254)	ppb	540	3.55E+01	121	106	95% Chebyshev (Mean, Sd) UCL	Non-parametric	5.79E+01
	Aroclor-1260 (PCB-1260)	ppb	560	4.03E+01	121	94	95% Chebyshev (Mean, Sd) UCL	Non-parametric	7.07E+01
	Neptunium 237	pCi/g	2610	5.56E+01	121	101	95% Chebyshev (Mean, Sd) UCL	Non-parametric	1.66E+02
	Plutonium 239	pCi/g	0.033	7.60E-03	30	23	95% Chebyshev (Mean, Sd) UCL	Non-parametric	1.37E-02
	Radium 226	pCi/g	1.71	8.56E-01	121	15	Student's t UCL	Normal	8.98E-01
	Uranium 238	pCi/g	705	4.1E+01	121	65	95% Chebyshev (Mean, Sd) UCL	Non-parametric	9.02E+01
	Uranium 235	pCi/g	308	1.4E+01	121	78	95% Chebyshev (Mean, Sd) UCL	Non-parametric	3.20E+01
	Thorium 232	pCi/g	36.4	1.5E+00	121	37	95% Chebyshev (Mean, Sd) UCL	Non-parametric	3.22E+00
	Technetium 99	pCi/g	17100	2.1E+02	121	56	95% Chebyshev (Mean, Sd) UCL	Non-parametric	8.34E+02

(1) COPCs not listed from Table 2.1 were not detected in the particular EPC set.
(2) As determined or calculated by PROUCL Version 3.0
(3) Radioactive isotopes include the contribution from background

TABLE 3.5
EXPOSURE POINT CONCENTRATION SUMMARY
Westinghouse Electric Co. Hematite Site

EPC Set: 5, Subsurface soil

Medium	Constituent of Potential Concern (1)	Units	Max	Mean	Number of Samples	Number of Non-detects	95% UCL Method (2)	Distribution (2)	UCL (2)(3)
Subsurface Soil	Tetrachloroethene	ppb	6700	1.1E+02	394	269	97.5% Chebyshev (Mean, Sd) UCL	Non-parametric	3.26E+02
	Trichloroethene	ppb	1600	2.1E+01	394	297	97.5% Chebyshev (Mean, Sd) UCL	Non-parametric	6.08E+01
	Arsenic	ppm	24	6.5E+00	394	0	Student's-t UCL	Normal	6.70E+00
	Lead	ppm	680	2.3E+01	394	0	Student's-t UCL	Normal	2.56E+01
	Neptunium 237	pCi/g	0.353	-1.45E+00	394	393	95% Chebyshev (Mean, Sd) UCL	Non-parametric	-4.85E-01
	Plutonium 239	pCi/g	0.008	2.24E-03	28	24	Student's t UCL	Normal	3.23E-03
	Radium 226	pCi/g	1.53	6.65E-01	394	49	95% Chebyshev (Mean, Sd) UCL	Non-parametric	7.29E-01
	Uranium 238	pCi/g	71	1.3E+00	394	90	95% Chebyshev (Mean, Sd) UCL	Non-parametric	2.17E+00
	Uranium 235	pCi/g	23.1	4.1E-01	394	379	95% Chebyshev (Mean, Sd) UCL	Non-parametric	8.46E-01
	Thorium 230	pCi/g	1.74	1.1E+00	18	0	Student's-t UCL	Normal	1.25E+00
	Thorium 232	pCi/g	2.38	8.5E-01	394	218	95% Chebyshev (Mean, Sd) UCL	Non-parametric	9.43E-01
	Technetium 99	pCi/g	131	2.0E+00	394	380	95% Chebyshev (Mean, Sd) UCL	Non-parametric	4.23E+00

(1) COPCs not listed from Table 2.1 were not detected in the particular EPC set.

(2) As determined or calculated by PROUCL Version 3.0
(3) Radioactive isotopes include the contribution from background

TABLE 3.6
EXPOSURE POINT CONCENTRATION SUMMARY
Westinghouse Electric Co. Hematite Site

EPC Set: 6, Subsurface soil to depth of 15 feet

Medium	Constituent of Potential Concern (1)	Units	Max	Mean	Number of Samples	Number of Non-detects	95% UCL Method (2)	Distribution (2)	UCL (2)(3)
Subsurface Soil	Tetrachloroethene	ppb	5100	3.8E+01	219	163	97.5% Chebyshev (Mean, Sd) UCL	Non-parametric	1.86E+02
	Trichloroethene	ppb	34	3.8E+00	219	181	Student's-t UCL	Normal	4.20E+00
	Arsenic	ppm	17	6.8E+00	219	0	Student's-t UCL	Normal	7.00E+00
	Lead	ppm	120	2.4E+01	219	0	Student's-t UCL	Normal	2.57E+01
	Neptunium 237	pCi/g	0.353	-1.4E+00	219	213	95% Chebyshev (Mean, Sd) UCL	Non-parametric	-1.25E-02
	Plutonium 239	pCi/g	0.007	2.6E-03	23	19	Student's-t UCL	Normal	3.73E-03
	Uranium 238	pCi/g	71	1.7E+00	219	200	95% Chebyshev (Mean, Sd) UCL	Non-parametric	3.29E+00
	Uranium 235	pCi/g	23.1	6.2E-01	219	205	95% Chebyshev (Mean, Sd) UCL	Non-parametric	1.35E+00
	Uranium 234	pCi/g	604	2.6E+02	6	0	Student's-t UCL	Normal	4.88E+02
	Thorium 232	pCi/g	2.38	9.0E-01	219	103	95% Chebyshev (Mean, Sd) UCL	Non-parametric	1.02E+00
	Thorium 230	pCi/g	1.71	1.1E+00	13	0	Student's-t UCL	Normal	1.22E+00
	Technetium 99	pCi/g	30.2	1.3E+00	219	209	95% Chebyshev (Mean, Sd) UCL	Non-parametric	2.31E+00
	Radium 226	pCi/g	1.53	7.1E-01	219	40	95% Chebyshev (Mean, Sd) UCL	Non-parametric	7.93E-01

(1) COPCs not listed from Table 2.1 were not detected in the particular EPC set.

(2) As determined or calculated by PROUCL Version 3.0

(3) Radioactive isotopes include the contribution from background

TABLE 4.1 EXPOSURE FACTORS
Westinghouse Electric Co. Hematite Site

Parameter	Symbol	Unit	Exposure Value	Source
Averaging Time for Carcinogen	AT_c	days	25,550	EPA, 1989
Averaging Time for Non-Carcinogen	AT_{nc}	days	Exposure Duration	EPA, 1989
Body Weight:				
Resident Child	BW	kg	15	EPA, 1991
Resident Adult	BW	kg	70	EPA, 1991
Commercial/Industrial Worker	BW	kg	70	EPA, 1991
Construction Worker	BW	kg	70	EPA, 1991
Agricultural	BW	kg	70	EPA, 1991
Recreational Child	BW	kg	15	EPA, 1991
Recreational Adult	BW	kg	70	EPA, 1991
Visitor/Trespasser	BW	kg	70	EPA, 1991
Exposure Duration:				
Resident Child	ED	year	6	EPA, 1991
Resident Adult	ED	year	24	EPA, 2002 (Adult years only)
Commercial/Industrial Worker	ED	year	25	EPA, 1991
Construction Worker	ED	year	1	MRBCA
Agricultural	ED	year	30	EPA, 1991
Recreational Child	ED	year	6	EPA, 1991
Recreational Adult	ED	year	24	EPA, 1991
Visitor/Trespasser	ED	year	24	EPA, 1991
Exposure Time for Dermal Contact with Water:				
Resident Child (Bathing)	ET_w	hr/day	0.75	EPA, 1997 Table 1-2 (1 event/day)
Resident Adult (Showering)	ET_w	hr/day	0.583	EPA, 1997 Table 1-2 (1 event/day)
Resident Child (During other domestic use)	ET_w	hr/day	1	MRBCA (1 event/day)
Resident Adult (During other domestic use)	ET_w	hr/day	1	MRBCA (1 event/day)
Commercial/Industrial Worker (During workplace use)	ET_w	hr/day	1	MRBCA (1 event/day)
Construction Worker (Incidental contact)	ET_w	hr/day	1	MRBCA (1 event/day)
Exposure Frequency:				
Resident Child	EF	day/year	350	EPA, 1991
Resident Adult	EF	day/year	350	EPA, 1991
Commercial/Industrial Worker	EF	day/year	250	EPA, 2002
Construction Worker	EF	day/year	225	EPA, 2002
Agricultural	EF	day/year	225	EPA, 2002
Recreational Child	EF	day/year	195	VA DEQ
Recreational Adult	EF	day/year	195	VA DEQ
Visitor/Trespasser	EF	day/year	24	VA DEQ
Soil Ingestion Rate:				
Resident Child	IR_{soil}	mg/day	200	EPA, 1991
Resident Adult	IR_{soil}	mg/day	100	EPA, 1991
Commercial/Industrial Worker	IR_{soil}	mg/day	100	EPA, 1991
Construction Worker	IR_{soil}	mg/day	330	EPA, 2002
Agricultural	IR_{soil}	mg/day	200	EPA, 1991
Recreational Child	IR_{soil}	mg/day	200	EPA, 1991
Recreational Adult	IR_{soil}	mg/day	100	EPA, 1991
Visitor/Trespasser	IR_{soil}	mg/day	100	EPA, 1991
Groundwater Ingestion Rate:				
Resident Child	IR_w	L/day	1	EPA, 1991
Resident Adult	IR_w	L/day	2	EPA, 1991
Commercial/Industrial Worker	IR_w	L/day	1	EPA, 1991
Indoor Inhalation Rate (hourly):				
Resident Child	IR_{ai}	m^3/hr	0.3625	EPA, 1997 Table 1-2 (Children 1-12)
Resident Adult	IR_{ai}	m^3/hr	0.833	EPA, 1991
Commercial/Industrial Worker	IR_{ai}	m^3/hr	0.833	EPA, 1991
Exposure Time for Indoor Inhalation:				
Resident Child	ET_{in}	hr/day	16.4	EPA, 1991
Resident Adult	ET_{in}	hr/day	16.4	EPA, 1991
Commercial/Industrial Worker	ET_{in}	hr/day	8	EPA, 1991
Outdoor Inhalation Rate (hourly):				
Resident Child	IR_{ao}	m^3/hr	0.3625	EPA, 1997 Table 1-2 (Children 1-12)
Resident Adult	IR_{ao}	m^3/hr	0.833	EPA, 1991
Commercial/Industrial Worker	IR_{ao}	m^3/hr	0.833	EPA, 1991
Construction Worker	IR_{ao}	m^3/hr	1.5	EPA, 1997 Table 5-2 (Medium activity)
Agricultural	IR_{ao}	m^3/hr	1.5	EPA, 1997 Table 5-2 (Medium activity)
Recreational Child	IR_{ao}	m^3/hr	0.65	EPA, 1997 Table 5-6 (Young children, Light acitivity)
Recreational Adult	IR_{ao}	m^3/hr	1.39	EPA, 1997 Table 5-6 (Average of Female and Male, Light acitivity)
Visitor/Trespasser	IR_{ao}	m^3/hr	0.833	EPA, 1991
Exposure Time for Outdoor Inhalation:				
Resident Child	ET_{out}	hr/day	5.57	Weighted Avg. based on EPA, 1997 Table 1-2
Resident Adult	ET_{out}	hr/day	2	EPA, 1997 Table 1-2
Commercial/Industrial Worker	ET_{out}	hr/day	1.5	EPA, 1997 Table 1-2
Construction Worker	ET_{out}	hr/day	10	10-hour Workday
Agricultural	ET_{out}	hr/day	10	10-hour Workday
Recreational Child	ET_{out}	hr/day	0.17	Weighted Avg. based on EPA, 1997 Table 15-3 (Age 3-5, Sports and Outdoor Activities)
Recreational Adult	ET_{out}	hr/day	0.83	EPA, 1997 Table 15-5
Visitor/Trespasser	ET_{out}	hr/day	2	VA DEQ

TABLE 4.1 EXPOSURE FACTORS
Westinghouse Electric Co. Hematite Site

Parameter	Symbol	Unit	Exposure Value	Source
Skin Surface Area for Dermal Contact with Soil:				
Resident Child	SA_{soil}	cm^2/day	2800	EPA, 2004 (face, hands, forearms, lower legs, feet)
Resident Adult	SA_{soil}	cm^2/day	5700	EPA, 2004 (face, hands, forearms, lower legs, feet)
Commercial/Industrial Worker	SA_{soil}	cm^2/day	3300	EPA, 2004 (face, hands, forearms)
Construction Worker	SA_{soil}	cm^2/day	3300	EPA, 2004 (face, hands, forearms)
Agricultural	SA_{soil}	cm^2/day	3300	EPA, 2004 (face, hands, forearms) based on Const. Worker
Recreational Child	SA_{soil}	cm^2/day	2800	EPA, 2004 (face, hands, forearms, lower legs, feet)
Recreational Adult	SA_{soil}	cm^2/day	5700	EPA, 2004 (face, hands, forearms, lower legs, feet)
Visitor/Trespasser	SA_{soil}	cm^2/day	5700	EPA, 2004
Skin Surface Area for Dermal Contact with Water:				
Resident Child (Full Body)	SA_w	cm^2/day	6600	EPA, 2004
Resident Adult (Full Body)	SA_w	cm^2/day	18000	EPA, 2004
Resident Child (During other domestic use)	SA_w	cm^2/day	360	EPA, 2002 (Hands only)
Resident Adult (During other domestic use)	SA_w	cm^2/day	800	EPA, 2002 (Hands only)
Commercial/Industrial Worker (During workplace use)	SA_w	cm^2/day	800	EPA, 1997
Construction Worker (Incidental contact)	SA_w	cm^2/day	3300	EPA, 1997
Agricultural (Incidental contact)	SA_w	cm^2/day	3300	EPA, 1997
Recreational Child (Full Body)	SA_w	cm^2/day	6600	EPA, 2004
Recreational Adult (Full Body)	SA_w	cm^2/day	18000	EPA, 2004
Visitor/Trespasser (Full Body)	SA_w	cm^2/day	18000	EPA, 2004
Soil to Skin Adherence Factor:				
Resident Child	AF	mg/cm^2	0.2	EPA, 2004
Resident Adult	AF	mg/cm^2	0.07	EPA, 2004
Commercial/Industrial Worker	AF	mg/cm^2	0.2	EPA, 2004
Construction Worker	AF	mg/cm^2	0.3	EPA, 2002
Agricultural	AF	mg/cm^2	0.3	EPA, 2002
Recreational Child	AF	mg/cm^2	0.2	EPA, 2004
Recreational Adult	AF	mg/cm^2	0.07	EPA, 2004
Visitor/Trespasser	AF	mg/cm^2	0.07	EPA, 2004
Ingestion Rate of Surface Water:				
Resident Child	IR_{sw}	L/hour	0.05	VA DEQ
Resident Adult	IR_{sw}	L/hour	0.05	VA DEQ
Commercial/Industrial Worker	IR_{sw}	L/hour	0.005	REI
Construction Worker	IR_{sw}	L/hour	0.005	REI
Agricultural	IR_{sw}	L/hour	0.005	REI
Recreational Child	IR_{sw}	L/hour	0.05	VA DEQ
Recreational Adult	IR_{sw}	L/hour	0.05	VA DEQ
Visitor/Trespasser	IR_{sw}	L/hour	0.05	VA DEQ
Exposure Time for Dermal Contact with Soil:				
All Receptors	ET_{soil}	hr/day	1	EPA, 1997 Table 1-2
Exposure Time for Surface Water:				
Resident Child (Swimming)	ET_{sw}	hr/day	3	EPA, 1997 Table 1-2
Resident Adult (Swimming)	ET_{sw}	hr/day	3	EPA, 1997 Table 1-2
Commercial/Industrial Worker (Incidental contact)	ET_{sw}	hr/day	1	MRBCA
Construction Worker (Incidental contact)	ET_{sw}	hr/day	1	MRBCA
Agricultural (Incidental contact)	ET_{sw}	hr/day	1	MRBCA
Recreational Child (Swimming)	ET_{sw}	hr/day	3	EPA, 1997 Table 1-2
Recreational Adult (Swimming)	ET_{sw}	hr/day	3	EPA, 1997 Table 1-2
Visitor/Trespasser (Swimming)	ET_{sw}	hr/day	3	EPA, 1997 Table 1-2
Exposure Frequency for Surface Water:				
Resident Child (Swimming)	EF_{sw}	days/year	12	EPA, 1997 Table 1-2
Resident Adult (Swimming)	EF_{sw}	days/year	12	EPA, 1997 Table 1-2
Commercial/Industrial Worker (Incidental contact)	EF_{sw}	days/year	250	EPA, 2002
Construction Worker (Incidental contact)	EF_{sw}	days/year	225	EPA, 2002
Agricultural (Incidental contact)	EF_{sw}	days/year	225	EPA, 2002
Recreational Child (Swimming)	EF_{sw}	days/year	12	EPA, 1997 Table 1-2
Recreational Adult (Swimming)	EF_{sw}	days/year	12	EPA, 1997 Table 1-2
Visitor/Trespasser (Swimming)	EF_{sw}	days/year	12	EPA, 1997 Table 1-2

MRBCA= Missouri Risk-Based Corrective Action, March 2, 2005
VA DEQ= Virginia Department of Environmental Quality VRP
EPA, 1989= Risk Assessment Guidance for Superfund: Volume I -- Human Health Evaluation Manual (Part A). Office of Emergency and Remedial Response. EPA/540/1-89/002.
EPA, 1991= Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. Office of Solid Waste and Emergency Response. OSWER Directive 9285.6-03 Assessment. EPA/600/8-91/011B.
EPA, 1997= Exposure Factors Handbook. Office of Research and Development. EPA/600/P-95/002Fa.
EPA, 2002= Supplemental Guidance for Devloping Soil Screening Levels for Superfund Sites: OSWER 9355.4-24
EPA, 2004= Risk Assessment Guidance for Superfund: Volume I -- Human Health Evaluation Manual (Part E). Office of Emergency and Remedial Response. EPA/540/R/99/005.
REI= Riverfront Environmental Incorporated Professional Judgment

TABLE 5.1
INTAKE FACTOR SUMMARY FOR GROUNDWATER PATHWAYS
Westinghouse Electric Co. Hematite Site

		Unit	Residential Child	Residential Adult	Commercial/ Industrial Worker	Construction Worker	Recreational Adult	Recreactional Child	Visitor/ Trespasser	Agricultural
Dermal: Tap or Incidental										
IF-C	Intake Factor (Cancer)	event-cm^2/kg-day	1.97E+00	3.76E+00	2.80E+00	4.15E-01	--	--	--	--
IF-N	Intake Factor (Non-cancer)	event-cm^2/kg-day	2.30E+01	1.10E+01	7.83E+00	2.91E+01	--	--	--	--
Dermal: Bath/Shower										
IF-C	Intake Factor (Cancer)	event-cm^2/kg-day	3.62E+01	8.45E+01	--	--	--	--	--	--
IF-N	Intake Factor (Non-cancer)	event-cm^2/kg-day	4.22E+02	2.47E+02	--	--	--	--	--	--
Ingestion: Oral										
IF-C	Intake Factor (Cancer)	liters/kg-day	5.48E-03	9.39E-03	3.49E-03	--	--	--	--	--
IF-N	Intake Factor (Non-cancer)	liters/kg-day	6.39E-02	2.74E-02	9.78E-03	--	--	--	--	--
Inhalation: Indoor Air										
IF-C	Intake Factor (Cancer)	m^3/kg-day	3.26E-02	6.42E-02	2.33E-02	--	--	--	--	--
IF-N	Intake Factor (Non-cancer)	m^3/kg-day	3.80E-01	1.87E-01	6.52E-02	--	--	--	--	--
Inhalation: Outdoor Air										
IF-C	Intake Factor (Cancer)	m^3/kg-day	1.11E-02	7.82E-03	4.37E-03	1.89E-03	3.02E-03	9.19E-04	5.37E-04	5.66E-02
IF-N	Intake Factor (Non-cancer)	m^3/kg-day	1.29E-01	2.28E-02	1.22E-02	1.32E-01	8.81E-03	1.07E-02	1.56E-03	1.32E-01
Inhalation: Bath/Shower										
IF-C	Intake Factor (Cancer)	m^3/kg-day	1.49E-03	1.51E-03	--	--	--	--	--	--
IF-N	Intake Factor (Non-cancer)	m^3/kg-day	1.74E-02	4.39E-03	--	--	--	--	--	--

TABLE 5.2
INTAKE FACTOR SUMMARY FOR SURFACE WATER/SEDIMENT PATHWAYS
Westinghouse Electric Co. Hematite Site

		Unit	Residential Child	Residential Adult	Commercial/ Industrial Worker	Construction Worker	Recreational Adult	Recreactional Child	Visitor/ Trespasser	Agricultural
Dermal										
IF-C	Intake Factor (Cancer)	event-cm^2/kg-day	1.24E+00	2.90E+00	2.80E+00	4.15E-01	2.90E+00	1.24E+00	2.90E+00	1.25E+01
IF-N	Intake Factor (Non-cancer)	event-cm^2/kg-day	1.45E+01	8.45E+00	7.83E+00	2.91E+01	8.45E+00	1.45E+01	8.45E+00	2.91E+01
Ingestion: Oral										
IF-C	Intake Factor (Cancer)	liters/kg-day	2.82E-05	2.42E-05	1.75E-05	6.29E-07	2.42E-05	2.82E-05	2.42E-05	1.887E-05
IF-N	Intake Factor (Non-cancer)	liters/kg-day	3.29E-04	7.05E-05	4.89E-05	4.40E-05	7.05E-05	3.29E-04	7.05E-05	4.403E-05

TABLE 5.3
INTAKE FACTOR SUMMARY FOR SURFACE AND SUBSURFACE SOIL PATHWAYS
Westinghouse Electric Co. Hematite Site

		Unit	Residential Child	Residential Adult	Commercial/ Industrial Worker	Construction Worker	Recreational Adult	Recreactional Child	Visitor/ Trespasser	Agricultural
Dermal										
IF-C	Intake Factor (Cancer)	days^-1	3.07E-06	1.87E-06	2.31E-06	1.25E-07	1.04E-06	1.71E-06	1.29E-07	3.74E-06
IF-N	Intake Factor (Non-cancer)	days^-1	3.58E-05	5.47E-06	6.46E-06	8.72E-06	3.05E-06	1.99E-05	3.75E-07	8.72E-06
Ingestion: Oral										
IF-C	Intake Factor (Cancer)	days^-1	1.10E-06	4.70E-07	3.49E-07	4.15E-08	3.27E-08	3.27E-08	4.03E-09	1.17E-06
IF-N	Intake Factor (Non-cancer)	days^-1	1.28E-05	1.37E-06	9.78E-07	2.91E-06	9.54E-08	9.54E-08	1.17E-08	2.74E-06
Inhalation: Indoor Air										
IF-C	Intake Factor (Cancer)	m^3/kg-day	3.26E-02	6.42E-02	8.52E-03	--	--	--	--	--
IF-N	Intake Factor (Non-cancer)	m^3/kg-day	3.80E-01	1.87E-01	2.39E-02	--	--	--	--	--
Inhalation: Outdoor Air										
IF-C	Intake Factor (Cancer)	m^3/kg-day	1.11E-02	7.82E-03	4.37E-03	1.89E-03	3.02E-03	9.19E-04	5.37E-04	5.66E-02
IF-N	Intake Factor (Non-cancer)	m^3/kg-day	1.29E-01	2.28E-02	1.22E-02	1.32E-01	8.81E-03	1.07E-02	1.56E-03	1.32E-01

TABLE 6.1
TOXICOLOGICAL DATA SUMMARY
Westinghouse Electric Co. Hematite Site

Chemical Constituent of Potential Concern	Adjusted Dermal Cancer Slope Factor CSFd 1/(mg/kg-day)	Adjusted Dermal Reference Dose (chronic) RfDd mg/kg-day	Adjusted Dermal Reference Dose (subchronic) RfDd mg/kg-day	Source	Oral to Dermal Adjustment Factor (1)	Oral to Dermal Adjustment Factor Source	Oral Cancer Slope Factor CSFo 1/(mg/kg-day)	Source	Oral Reference Dose (chronic) RfDo mg/kg-day	Source	Oral Reference Dose (subchronic) RfDo mg/kg-day	Source	Inhalation Cancer Slope Factor CSFi 1/(mg/kg-day)	Source	Inhalation Reference Dose (chronic) RfDi mg/kg-day	Source	Inhalation Reference Dose (subchronic) RfDi mg/kg-day	Source
Arsenic	1.50E+00	3.00E-04	3.00E-04	HEAST	1.00E+00	EPA 2001	1.50E+00	IRIS	3.00E-04	IRIS	3.00E-04	HEAST	1.50E+01	IRIS				
Chromium		7.50E-05	5.00E-04	HEAST	2.50E-02	EPA 2001			3.00E-03	IRIS, Cr IV	2.00E-02	HEAST	4.20E+01	IRIS, Total Cr	2.20E-06	IRIS		
Lead	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Vanadium		2.60E-05			1.00E+00	EPA 2001			1.00E-03	NCEA								
1,1-Dichloroethene		5.00E-02			1.00E+00	EPA 2001			5.00E-02	IRIS					5.70E-02	IRIS		
cis-1,2-Dichloroethene		1.00E-02	1.00E-01	HEAST	1.00E+00	EPA 2001			1.00E-02	PPRTV	1.00E-01	HEAST			1.00E-01	route-extrapolation		
trans-1,2-Dichloroethene		2.00E-02	2.00E-01	HEAST	1.00E+00	EPA 2001			2.00E-02	IRIS	2.00E-01	HEAST			2.00E-02	route-extrapolation		
Methylene chloride	7.50E-03	6.00E-02	6.00E-02	HEAST	1.00E+00	EPA 2001	7.50E-03	IRIS	6.00E-02	IRIS	6.00E-02	HEAST	1.60E-03	IRIS	8.60E-01	HEAST	8.60E-01	HEAST
Tetrachloroethene	5.40E-01	1.00E-02			1.00E+00	EPA 2001	5.40E-01	Cal-EPA	1.00E-02	IRIS			2.10E-02	Cal-EPA	1.00E-02	Cal-EPA		
Trichloroethene	4.00E-01	3.00E-04			1.00E+00	EPA 2001	4.00E-01	NCEA	3.00E-04	NCEA			4.00E-01	NCEA	1.00E-02	NCEA		
Vinyl Chloride (birth to adulthood)	1.50E+00	3.00E-03			1.00E+00	EPA 2001	1.50E+00	IRIS	3.00E-03	IRIS			3.10E-02	IRIS	2.90E-02	IRIS		
Vinyl chloride (adulthood)	7.20E-01	3.00E-03			1.00E+00	EPA 2001	7.20E-01	IRIS	3.00E-03	IRIS			1.50E-02	IRIS	2.90E-02	IRIS		
bis-(2-Ethylhexyl)phthalate	1.40E-02	2.00E-02			1.00E+00	EPA 2001	1.40E-02	IRIS	2.00E-02	IRIS								
Benzo(a)anthracene	7.30E-01				1.00E+00	EPA 2001	7.30E-01	IRIS/NCEA										
Benzo(a)pyrene	7.30E+00				1.00E+00	EPA 2001	7.30E+00	IRIS					3.10E+00	NCEA				
Benzo(b)fluoranthene	7.30E-01				1.00E+00	EPA 2001	7.30E-01	IRIS										
Indeno(1,2,3-cd)pyrene	7.30E-01				1.00E+00	EPA 2001	7.30E-01	IRIS										
Aroclor-1254	2.00E+00	2.00E-05			1.00E+00	EPA 2001	2.00E+00	IRIS	2.00E-05	IRIS			2.00E+00	IRIS				
Aroclor-1260	2.00E+00				1.00E+00	EPA 2001	2.00E+00	IRIS					2.00E+00	IRIS				

IRIS = USEPA Integrated Risk Information System
PPRTV = USEPA Provisional Peer Reviewed Toxicity Values
NCEA = USEPA National Center for Environmental Assessment
HEAST = Health Effects Assessment Summary Tables
Cal-EPA = California Environmental Protection Agency
EPA, 2001 = Risk Assessment Guidance for Superfund: Volume I -- Human Health Evaluation Manual (Part E).
(*) Lead exposures are modeled with EPA's IEUBK model for childern

TABLE 6.2
CHEMICAL PROPERTIES
Westinghouse Electric Co. Hematite Site

CAS No.	Chemical Constituent of Potential Concern	Henry's law constant H' (unitless)	Henry's law constant at reference T (25°C) H (atm-m^3/mol)	Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Soil-Water Partition Coefficient K_d (cm^3/g)
7440-38-2	Arsenic	--	--	--	--	--	8.58E-02
7440-47-3	Chromium	--	--	--	--	--	1.90E+01
7439-92-1	Lead	--	--	--	--	--	9.00E+02
7440-62-2	Vanadium	--	--	--	--	--	1.00E+03
75-35-4	1,1-Dichloroethylene	1.07E+00	2.61E-02	9.00E-02	1.04E-05	5.89E+01	3.49E-01
156-59-2	cis-1,2-Dichloroethylene	1.67E-01	4.07E-03	7.36E-02	1.13E-05	3.55E+01	2.14E-01
75-09-2	Methylene chloride	8.98E-02	2.19E-03	1.01E-01	1.17E-05	1.17E+01	7.02E-02
127-18-4	Tetrachloroethylene	7.54E-01	1.84E-02	7.20E-02	8.20E-06	1.55E+02	3.54E+00
156-60-5	trans-1,2-Dichloroethylene	3.85E-01	9.39E-03	7.07E-02	1.19E-05	5.25E+01	3.25E-01
79-01-6	Trichloroethylene	4.22E-01	1.03E-02	7.90E-02	9.10E-06	1.66E+02	5.93E-01
75-01-4	Vinyl chloride	1.11E+00	2.71E-02	1.06E-01	1.23E-05	1.86E+01	8.58E-02
117-81-7	bis-(2-Ethylhexyl)phthalate	1.02E-07	4.18E-06	3.51E-02	3.66E-06	1.06E+05	6.33E+02
56-55-3	Benzo(a)anthracene	3.35E-06	1.37E-04	5.10E-02	9.00E-06	3.70E+05	2.22E+03
50-32-8	Benzo(a)pyrene	1.13E-06	4.63E-05	4.30E-02	9.00E-06	7.39E+05	4.44E+03
205-99-2	Benzo(b)fluoranthene	1.11E-04	4.55E-03	2.50E-02	6.41E-06	1.05E+06	6.29E+03
193-39-5	Indeno(1,2,3-cd)pyrene	1.60E-06	6.56E-05	2.45E-02	6.31E-06	2.97E+06	1.78E+04
11097-69-1	Aroclor-1254	2.00E-03	8.20E-02	2.37E-02	6.08E-06	2.45E+06	1.47E+04
11096-82-5	Aroclor-1260	4.60E-03	1.89E-01	2.26E-02	5.78E-06	4.84E+06	2.90E+04

Table 6.3
RADIATION DOSE CONVERSION FACTORS
Westinghouse Electric Co. Hematite Site

Radioactive Constituent of Concern	Child 5 yrs old			Adult			Source
	Dose Conversion Factor DCF mrem/uCi	Slope Factor Morbidity 1/uCi	Slope Factor Mortality 1/uCi	Dose Conversion Factor DCF mrem/uCi	Slope Factor Morbidity 1/uCi	Slope Factor Mortality 1/uCi	
Plutonium 239/240	1.23E+00	9.10E-04	2.88E-04	9.28E-01	8.88E-05	7.44E-05	USEPA, 1999
Neptunium 237	5.28E-01	5.66E-04	3.43E-04	3.96E-01	5.48E-05	3.65E-05	USEPA, 1999
Uranium 238	3.00E+02	2.50E-04	1.50E-04	1.70E+02	3.20E-05	2.20E-05	USEPA, 1999
Uranium 235	3.20E+02	2.70E-04	1.70E-04	1.70E+02	3.40E-05	2.30E-05	USEPA, 1999
Uranium 234	3.30E+02	2.70E-04	1.70E-04	1.80E+02	3.50E-05	2.40E-05	USEPA, 1999
Thorium 230	1.14E+03	2.90E-04	1.86E-04	7.91E+02	6.11E-05	4.37E-05	USEPA, 1999
Thorium 232+D	1.31E+03	6.02E-03	6.11E-03	8.53E+02	4.74E-04	3.51E-04	USEPA, 1999
Radium 226	2.28E+00	2.22E-03	9.58E-04	1.03E+00	1.57E-04	1.14E-04	USEPA, 1999
Technetium 99	8.50E+00	1.30E-05	7.60E-06	2.40E+00	7.60E-07	4.60E-07	USEPA, 1999

(USEPA, 1999). U.S. Environmental Protection Agency, Cancer Risk Coefficients for Environmental Exposure to Radionuclides, Federal Guidance Report 13, EPA 402-R-99-001, 1999.

Thorium 232	1.30E+03	3.30E-04	2.20E-04	8.50E+02	5.80E-05	4.20E-05
Thorium 228	8.08E-01	1.18E-03	7.10E-04	2.66E-01	4.92E-05	3.40E-05
Radium 228	1.27E+01	4.51E-03	5.18E-03	2.58E+00	3.67E-04	2.75E-04
Thorium 232 + D	1.31E+03	6.02E-03	6.11E-03	8.53E+02	4.74E-04	3.51E-04

Table 6.3 Radiation Dose Conversion Factors

Radioactive Constituent of Concern	Child 5 yrs old			Adult			Source
	Dose Conversion Factor DCF mrem/uCi	Slope Factor Morbidity 1/uCi	Slope Factor Mortality 1/uCi	Dose Conversion Factor DCF mrem/uCi	Slope Factor Morbidity 1/uCi	Slope Factor Mortality 1/uCi	
Plutonium 239/240	1.23E+00	9.10E-04	2.88E-04	9.28E-01	8.88E-05	7.44E-05	USEPA, 1999
Neptunium 237	5.28E-01	5.66E-04	3.43E-04	3.96E-01	5.48E-05	3.65E-05	USEPA, 1999
Uranium 238	3.00E+02	2.50E-04	1.50E-04	1.70E+02	3.20E-05	2.20E-05	USEPA, 1999
Uranium 235	3.20E+02	2.70E-04	1.70E-04	1.70E+02	3.40E-05	2.30E-05	USEPA, 1999
Uranium 234	3.30E+02	2.70E-04	1.70E-04	1.80E+02	3.50E-05	2.40E-05	USEPA, 1999
Thorium 232	1.30E+03	3.30E-04	2.20E-04	8.50E+02	5.80E-05	4.20E-05	USEPA, 1999
Thorium 232 + D	1.95E+03	8.70E-04	5.60E-04	1.20E+03	1.27E-04	8.90E-05	Table 6.4
Thorium 230	1.10E+03	2.90E-04	1.90E-04	7.90E+02	5.50E-05	4.00E-05	USEPA, 1999
Thorium 228	8.08E-01	1.18E-03	7.10E-04	2.66E-01	4.92E-05	3.40E-05	USEPA, 1999
Radium 228	1.27E+01	4.51E-03	5.18E-03	2.58E+00	3.67E-04	2.75E-04	USEPA, 1999
Radium 226	2.28E+00	2.22E-03	9.58E-04	1.03E+00	1.57E-04	1.14E-04	USEPA, 1999
Technetium 99	8.50E+00	1.30E-05	7.60E-06	2.40E+00	7.60E-07	4.60E-07	USEPA, 1999

(USEPA, 1999). U.S. Environmental Protection Agency, Cancer Risk Coefficients for Environmental Exposure to Radionuclides, Federal Guidance Report 13, EPA 402-R-99-001, 1999.

TABLE 6.4
DERMAL CONTACT CHEMICAL-SPECIFIC PROPERTIES
Westinghouse Electric Co. Hematite Site

Chemical Constituent of Potential Concern	Permeability Coefficient Kp cm/hr	Lag Time Per Event tau hr/event	Time to Reach Steady-State t* hour	Permeability Ratio B	Fraction Absorbed FA	Absorption Factor ABS
Arsenic	1.00E-03	--	--	--	--	3.00E-02
Chromium	--	--	--	--	--	1.00E-02
Lead	1.00E-04	--	--	--	--	1.00E-02
Vanadium	1.00E-03	--	--	--	--	--
1,1-Dichloroethene	1.16E-02	3.66E-01	8.79E-01	4.38E-02	1.00E+00	--
cis-1,2-Dichloroethene	7.67E-03	3.66E-01	8.80E-01	2.90E-02	1.00E+00	--
trans-1,2-Dichloroethene	7.67E-03	3.66E-01	8.80E-01	2.90E-02	1.00E+00	--
Methylene chloride	3.54E-03	3.14E-01	7.53E-01	1.26E-02	1.00E+00	--
Tetrachloroethene	3.28E-02	8.91E-01	2.14E+00	1.62E-01	1.00E+00	--
Trichloroethene	1.15E-02	5.72E-01	1.37E+00	5.08E-02	1.00E+00	--
Vinyl Chloride	5.59E-03	2.35E-01	5.64E-01	1.70E-02	1.00E+00	--
Bis(2-ethylhexyl)phthalate	2.42E-02	1.62E+01	3.90E+01	1.84E-01	8.00E-01	--
Benzo(a)anthracene	--	--	--	--	--	1.30E-01
Benzo(a)pyrene	--	--	--	--	--	1.30E-01
Benzo(b)fluoranthene	--	--	--	--	--	1.30E-01
Indeno(1,2,3-cd)pyrene	--	--	--	--	--	1.30E-01
Aroclor-1254	--	--	--	--	--	1.40E-01
Aroclor-1260	--	--	--	--	--	1.40E-01

-- Values are either not available or not needed for the risk assessment.
Source: EPA, 2001 Risk Assessment Guidance for Superfund: Volume I -- Human Health Evaluation Manual (Part E). Office of Emergency and Remedial Response. EPA/540/R/99/005.

Radioactive Constituent of Concern	Child 5 yrs old			Adult		
	Dose Conversion Factor DCF mrem/uCi	Slope Factor Morbidity 1/uCi	Slope Factor Mortality 1/uCi	Dose Conversion Factor DCF mrem/uCi	Slope Factor Morbidity 1/uCi	Slope Factor Mortality 1/uCi
Plutonium 239/240	1.23E+00	9.10E-04	2.88E-04	9.28E-01	8.88E-05	7.44E-05
Neptunium 237	5.28E-01	5.66E-04	3.43E-04	3.96E-01	5.48E-05	3.65E-05
Uranium 238	3.00E+02	2.50E-04	1.50E-04	1.70E+02	3.20E-05	2.20E-05
Uranium 235	3.20E+02	2.70E-04	1.70E-04	1.70E+02	3.40E-05	2.30E-05
Uranium 234	3.30E+02	2.70E-04	1.70E-04	1.80E+02	3.50E-05	2.40E-05
Thorium 230	1.10E+03	2.90E-04	1.90E-04	7.90E+02	5.50E-05	4.00E-05
Thorium 232+D	1.31E+03	6.02E-03	6.11E-03	8.53E+02	4.74E-04	3.51E-04
Radium 226	2.28E+00	2.22E-03	9.58E-04	1.03E+00	1.57E-04	1.14E-04
Technetium 99	8.50E+00	1.30E-05	7.60E-06	2.40E+00	7.60E-07	4.60E-07

(USEPA, 1999). U.S. Environmental Protection Agency, Cancer Risk Coefficients for Environmental Exposure to Radionuclides, Federal Guidance Report 13, EPA 402-R-99-001, 1999.

Thorium 232	1.30E+03	3.30E-04	2.20E-04	8.50E+02	5.80E-05	4.20E-05
Thorium 228	8.08E-01	1.18E-03	7.10E-04	2.66E-01	4.92E-05	3.40E-05
Radium 228	1.27E+01	4.51E-03	5.18E-03	2.58E+00	3.67E-04	2.75E-04
Thorium 232 + D	1.31E+03	6.02E-03	6.11E-03	8.53E+02	4.74E-04	3.51E-04

Source
USEPA, 1999
USEPA, 1999
USEPA, 1999
USEPA, 1999
USEPA, 1999
USEPA, 1999
USEPA, 1999
USEPA, 1999
USEPA, 1999

TABLE 7.1
SUMMARY OF RISKS FOR COMPLETE EXPOSURE PATHWAYS
Westinghouse Electric Co. Hematite Site

EPC Set#	Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Exposure Route	Cancer Risk			Hazard Quotient			Cancer Risk Radioactive Materials			Ra
							Child	Adult	Composite Adult [1]	Child	Adult	Composite Adult [1]	Child	Adult	Composite Adult [1]	Child
1	Current/Future	Groundwater from overburden wells	Groundwater	Tap Water/Shower	Resident	Dermal	5.66E-03	1.16E-02	1.73E-02	1.15E+02	5.89E+01	1.74E+02				
	Current/Future		Groundwater	Tap Water	Resident	Ingestion	1.80E-02	3.08E-02	4.88E-02	7.52E+02	3.22E+02	1.07E+03	1.04E-05	2.34E-05	3.38E-05	1.73E+00
	Current/Future		Indoor Air - Vapors	Showerhead/Bath	Resident	Inhalation	9.16E-01	9.26E-01	1.84E+00	6.97E+03	1.76E+03	8.73E+03				
	Current/Future		Indoor Air - Vapors	Foundation Cracks [2]	Resident	Inhalation	--	6.15E-04	--	--	7.64E-01	--				
	Current/Future		Outdoor Air - Vapors	Outdoors	Resident	Inhalation	8.80E-06	6.22E-06	1.50E-05	6.22E-02	1.10E-02	7.32E-02				
	Current/Future		Groundwater	Tap Water	Com. & Ind. Worker	Dermal	--	4.71E-04	--	--	2.32E+00	--				
	Current/Future		Groundwater	Tap Water	Com. & Ind. Worker	Ingestion	--	1.08E-02	--	--	1.15E+02	--	--	8.69E-06	8.69E-06	--
	Current/Future		Indoor Air - Vapors	Foundation Cracks [2]	Com. & Ind. Worker	Inhalation	--	4.58E-04	--	--	5.45E-01	--				
	Current/Future		Outdoor Air - Vapors	Outdoors	Com. & Ind. Worker	Inhalation	--	3.46E-06	--	--	5.90E-03	--				
	Current/Future		Groundwater	Outdoors	Construction Worker	Dermal	--	7.00E-05	--	--	8.51E+00	--				
	Current/Future		Outdoor Air - Vapors	Outdoors	Construction Worker	Inhalation	--	1.31E-06	--	--	4.98E-02	--				
	Future		Outdoor Air - Vapors	Outdoors	Recreational	Inhalation	6.40E-07	2.10E-06	2.74E-06	4.04E-03	3.32E-03	7.36E-03				
	Current/Future		Outdoor Air - Vapors	Outdoors	Visitor/Trespasser	Inhalation	--	3.74E-07	--	--	5.90E-04	--				
	Current/Future		Outdoor Air - Vapors	Outdoors	Agricultural Worker	Inhalation	--	3.93E-05	--	--	4.98E-02	--				
2	Current/Future	Groundwater from bedrock wells	Groundwater	Tap Water/Shower	Resident	Dermal	2.43E-03	4.99E-03	7.42E-03	8.14E+01	4.17E+01	1.23E+02				
	Current/Future		Groundwater	Tap Water	Resident	Ingestion	9.61E-03	1.65E-02	2.61E-02	5.48E+02	2.35E+02	7.83E+02	6.16E-06	3.00E-05	3.62E-05	9.22E-01
	Current/Future		Indoor Air - Vapors	Showerhead/Bath	Resident	Inhalation	6.53E-01	6.60E-01	1.31E+00	3.55E+03	8.96E+02	4.44E+03				
	Current/Future		Groundwater	Tap Water	Com. & Ind. Worker	Dermal	--	2.02E-04	--	--	1.64E+00	--				
	Current/Future		Groundwater	Tap Water	Com. & Ind. Worker	Ingestion	--	5.80E-03	--	--	8.39E+01	--	--	1.12E-05	1.12E-05	--
3	Current/Future	Surface Water/ Sediment	Surface Water/Sediment	Stream or Pond	Resident/Recreational / Visitor/Trespasser	Dermal	3.51E-07	2.85E-07	6.35E-07	3.73E-02	2.99E-03	4.03E-02				
	Current/Future		Surface Water/Sediment	Stream or Pond	Resident/Recreational /	Ingestion	3.32E-07	8.19E-07	1.15E-06	1.42E-02	2.15E-02	3.57E-02	7.71E-07	9.94E-07	1.77E-06	2.68E-01
	Current/Future		Outdoor Air - Vapors	Stream or Pond	Resident/Recreational /	Inhalation	--	--	--	--	--	--				
	Current/Future		Surface Water/Sediment	Stream or Pond	Com. & Ind. Worker	Dermal	--	2.06E-07	--	--	2.08E-03	--				
	Current/Future		Surface Water/Sediment	Stream or Pond	Com. & Ind. Worker	Ingestion	--	4.20E-07	--	--	6.63E-03	--	--	3.70E-07	3.70E-07	--
	Current/Future		Outdoor Air - Vapors	Stream or Pond	Com. & Ind. Worker	Inhalation	--	--	--	--	--	--				
	Current/Future		Surface Water/Sediment	Stream or Pond	Construction Worker	Dermal	--	6.23E-08	--	--	2.46E-02	--				
	Current/Future		Surface Water/Sediment	Stream or Pond	Construction Worker	Ingestion	--	7.42E-09	--	--	1.87E-03	--	--	1.33E-08	1.33E-08	--
	Current/Future		Outdoor Air - Vapors	Stream or Pond	Construction Worker	Inhalation	--	--	--	--	--	--				
	Current/Future		Surface Water/Sediment	Stream or Pond	Agricultural Worker	Dermal	--	1.87E-06	--	--	2.46E-02	--				
	Current/Future		Surface Water/Sediment	Stream or Pond	Agricultural Worker	Ingestion	--	2.23E-07	--	--	1.87E-03	--	--	3.99E-07	3.99E-07	--
	Current/Future		Outdoor Air - Vapors	Stream or Pond	Agricultural Worker	Inhalation	--	--	--	--	--	--				

TABLE 7.1
SUMMARY OF RISKS FOR COMPLETE EXPOSURE PATHWAYS
Westinghouse Electric Co. Hematite Site

EPC Set#	Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Exposure Route	Cancer Risk			Hazard Quotient			Cancer Risk Radioactive Materials			Ra
							Child	Adult	Composite Adult (1)	Child	Adult	Composite Adult (1)	Child	Adult	Composite Adult (1)	Child
4	Current/Future	Surface Soil	Surface Soil	Outdoors	Resident	Dermal	7.70E-06	4.70E-06	1.24E-05	2.70E-01	4.13E-02	3.12E-01				
	Current/Future		Surface Soil	Outdoors	Resident	Ingestion	5.32E-05	2.28E-05	7.60E-05	1.27E+00	1.36E-01	1.40E+00	4.32E-05	8.73E-06	5.19E-05	3.41E+00
	Current/Future		Surface Soil	Outdoors	Resident	External	--	--	--	--	--	--	7.77E-04	2.57E-03	3.35E-03	1.84E+02
	Current/Future		Outdoor Air - Vapors	Outdoors	Resident	Inhalation	2.91E-09	2.06E-09	4.97E-09	0.00E+00	0.00E+00	0.00E+00				
	Current/Future		Outdoor Air - Particulates	Outdoors	Resident	Inhalation	1.53E-08	1.08E-08	2.61E-08	1.53E-03	2.70E-04	1.80E-03	1.25E-06	7.74E-06	8.98E-06	2.92E+00
	Current/Future		Indoor Air - Vapors	Foundation Cracks	Resident	Inhalation	--	--	--	--	--	--				
	Current/Future		Surface Soil	Outdoors	Com. & Ind. Worker	Dermal	--	5.79E-06	--	--	4.88E-02	--				
	Current/Future		Surface Soil	Outdoors	Com. & Ind. Worker	Ingestion	--	1.70E-05	--	--	9.71E-02	--		6.50E-06	6.50E-06	
	Current/Future		Outdoor Air - Vapors	Outdoors	Com. & Ind. Worker	Inhalation	--	1.15E-09	--	--	0.00E+00	--				
	Current/Future		Surface Soil	Outdoors	Com. & Ind. Worker	External	--	--	--	--	--	--		1.78E-04		
	Current/Future		Outdoor Air - Particulates	Outdoors	Com. & Ind. Worker	Inhalation	--	6.04E-09	--	--	1.45E-04	--		2.00E-07		
	Current/Future		Indoor Air - Vapors	Foundation Cracks	Com. & Ind. Worker	Inhalation	--	--	--	--	--	--				
	Current/Future		Surface Soil	Outdoors	Construction Worker	Dermal	--	2.73E-07	--	--	2.64E-02	--				
	Current/Future		Surface Soil	Outdoors	Construction Worker	Ingestion	--	1.78E-06	--	--	2.26E-01	--		7.72E-07	7.72E-07	
	Current/Future		Outdoor Air - Vapors	Outdoors	Construction Worker	Inhalation	--	4.38E-10	--	--	0.00E+00	--		2.25E-06		
	Current/Future		Outdoor Air - Particulates	Outdoors	Construction Worker	Inhalation	--	2.34E-09	--	--	1.40E-03	--				
	Future		Surface Soil	Outdoors	Recreational	Dermal	3.74E-06	2.29E-06	6.03E-06	1.35E-01	2.06E-02	1.55E-01				
	Future		Surface Soil	Outdoors	Recreational	Ingestion	1.40E-06	1.40E-06	2.80E-06	8.41E-03	8.41E-03	1.68E-02	2.41E-05	4.87E-06	2.90E-05	1.90E+00
	Future		Outdoor Air - Vapors	Outdoors	Recreational	Inhalation	2.13E-10	7.01E-10	9.14E-10	0.00E+00	0.00E+00	0.00E+00				
	Future		Outdoor Air - Particulates	Outdoors	Recreational	Inhalation	1.14E-09	3.74E-09	4.88E-09	1.14E-04	9.34E-05	2.07E-04		1.15E-08		
	Current/Future		Surface Soil	Outdoors	Visitor/Trespasser	Dermal	--	2.81E-07	--	--	2.53E-03	--				
	Current/Future		Surface Soil	Outdoors	Visitor/Trespasser	Ingestion	--	1.72E-07	--	--	1.03E-03	--		5.99E-07	5.99E-07	
	Current/Future		Outdoor Air - Vapors	Outdoors	Visitor/Trespasser	Inhalation	--	1.25E-10	--	--	0.00E+00	--				
	Current/Future		Outdoor Air - Particulates	Outdoors	Visitor/Trespasser	Inhalation	--	6.65E-10	--	--	1.66E-05	--				
	Current/Future		Surface Soil	Outdoors	Agricultural Worker	Dermal	--	8.18E-06	--	--	5.89E-02	--				
	Current/Future		Surface Soil	Outdoors	Agricultural Worker	Ingestion	--	5.02E-05	--	--	2.41E-01	--		1.40E-05	1.40E-05	
	Current/Future		Outdoor Air - Vapors	Outdoors	Agricultural Worker	Inhalation	--	1.31E-08	--	--	0.00E+00	--				
	Current/Future		Outdoor Air - Particulates	Outdoors	Agricultural Worker	Inhalation	--	7.02E-08	--	--	1.40E-03	--				
5	Current/Future	Subsurface Soil	Indoor Air - Vapors	Foundation Cracks(2)	Resident	Inhalation	--	4.89E-05	--	--	3.55E-02	--				
	Current/Future		Outdoor Air - Vapors	Outdoors	Resident	Inhalation	1.67E-07	7.80E-08	2.45E-07	2.02E-03	2.35E-04	2.25E-03				
	Current/Future		Indoor Air - Vapors	Foundation Cracks(2)	Com. & Ind. Worker	Inhalation	--	3.64E-05	--	--	2.54E-02	--				
	Current/Future		Outdoor Air - Vapors	Outdoors	Com. & Ind. Worker	Inhalation	--	4.35E-08	--	--	1.26E-04	--				
	Current/Future		Outdoor Air - Vapors	Outdoors	Construction Worker	Inhalation	--	2.78E-08	--	--	1.67E-03	--				
	Current/Future		Outdoor Air - Particulates	Outdoors	Construction Worker	Inhalation	--	1.44E-10	--	--	3.88E-09	--				
	Future		Outdoor Air - Vapors	Outdoors	Recreational	Inhalation	1.35E-08	4.45E-08	5.80E-08	1.36E-04	1.11E-04	2.47E-04				
	Current/Future		Outdoor Air - Vapors	Outdoors	Visitor/Trespasser	Inhalation	--	7.90E-09	--	--	1.98E-05	--				
	Current/Future		Outdoor Air - Vapors	Outdoors	Agricultural Worker	Inhalation	--	8.34E-07	--	--	1.67E-03	--				
	Current/Future		Outdoor Air - Particulates	Outdoors	Agricultural Worker	Inhalation	--	4.32E-09	--	--	3.88E-09	--				
6	Current/Future	Subsurface Soil to depth of 15 feet	Subsurface Soil	Outdoors	Construction Worker	Dermal	--	3.74E-10	--	--	6.11E-03	--				
	Current/Future		Subsurface Soil	Outdoors	Construction Worker	Ingestion	--	4.40E-07	--	--	6.79E-02	--		9.15E-07		

(1) Composite adult is the risk of an individual for 30 years: 6 years as a child and 24 years as an adult.
(2) Risk is based on a slab on grade foundation. The risk calculations show the slab on grade foundation is more conservative than the basement foundation. The basement foundation calculations are shown on the calculation sheets. The models used for this pathway only calculate risk for the adult, since RFCs and URFs are based on the adult receptor.

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ıdiation TEDE mrem/yr		Calculation Worksheets
Adult	Composite Adult [1]	
		7.1-7.4
1.20E+00	2.93E+00	, 7.5, 7.6, 7.84, 7.8
		3.1, 7.7-7.8
		8.1, 8.5-8.18
		3.3, 7.9-710
		7.11
4.28E-01	4.28E-01	3.1, 7.12, 7.86
		8.2, 8.19-8.32
		3.3, 7.13
		7.14
		3.3, 7.15
		3.3, 7.16-7.17
		3.3, 7.18
		3.3, 7.19
		7.20-7.23
1.01E+00	1.93E+00	7.24, 7,.25, 7.87, 7.
		3.2, 7.26-7.27
		7.28
3.60E-01	3.60E-01	3.2, 7.29, 7.89
		7.30-7.31
3.05E-01	5.73E-01	7.32, 7.33, 7.90, 7.!
		--
		7.34
1.09E-01	1.09E-01	3.3, 7.35, 7.93
		--
		7.36
9.81E-02	9.81E-02	3.3, 7.92
		--
		7.38
9.81E-02	9.81E-02	3.3, 7.39, 7.94
		--

TABLE 8.1 SUMMARY OF RISKS FOR COMPLETE EXPOSURE PATHWAYS BY RECEPTOR
Westinghouse Electric Co. Hematite Site

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Receptor Population	Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Exposure Route	Cancer Risk			Hazard Quotient		
						Child	Adult	Composite Adult	Child	Adult	Composite Adult
Resident	Current/Future	Groundwater from overburden wells	Groundwater	Tap Water/Shower	Dermal	5.66E-03	1.16E-02	1.73E-02	1.15E+02	5.89E+01	1.74E+02
		Groundwater from overburden wells	Groundwater	Tap Water	Ingestion	1.80E-02	3.08E-02	4.88E-02	7.52E+02	3.22E+02	1.07E+03
		Groundwater from overburden wells	Indoor Air - Vapors	Showerhead/Bath	Inhalation	9.16E-01	9.26E-01	1.84E+00	6.97E+03	1.76E+03	8.73E+03
		Groundwater from bedrock wells	Groundwater	Tap Water/Shower	Dermal	2.43E-03	4.99E-03	7.42E-03	8.14E+01	4.17E+01	1.23E+02
		Groundwater from bedrock wells	Groundwater	Tap Water	Ingestion	9.61E-03	1.65E-02	2.61E-02	5.48E+02	2.35E+02	7.83E+02
		Groundwater from bedrock wells	Indoor Air - Vapors	Showerhead/Bath	Inhalation	6.53E-01	6.60E-01	1.31E+00	3.55E+03	8.96E+02	4.44E+03
		Groundwater	Indoor Air - Vapors	Foundation Cracks	Inhalation	1.50E-03	2.96E-03	4.46E-03	1.06E+01	5.23E+00	1.59E+01
		Groundwater	Outdoor Air - Vapors	Outdoors	Inhalation	8.80E-06	6.22E-06	1.50E-05	6.22E-02	1.10E-02	7.32E-02
		Surface Water/ Sediment	Surface Water/Sediment	Stream or Pond	Dermal	3.51E-07	2.85E-07	6.35E-07	3.73E-02	2.99E-03	4.03E-02
		Surface Water/ Sediment	Surface Water/Sediment	Stream or Pond	Ingestion	3.32E-07	8.19E-07	1.15E-06	1.42E-02	2.15E-02	3.57E-02
		Surface Water/ Sediment	Outdoor Air - Vapors	Stream or Pond	Inhalation	--	--	--	--	--	--
		Surface Soil	Surface Soil	Outdoors	Dermal	7.70E-06	4.70E-06	1.24E-05	2.70E-01	4.13E-02	3.12E-01
		Surface Soil	Surface Soil	Outdoors	Ingestion	5.32E-05	2.28E-05	7.60E-05	1.27E+00	1.36E-01	1.40E+00
		Surface Soil	Surface Soil	Outdoors	External	--	--	--	--	--	--
		Surface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	2.91E-09	2.06E-09	4.97E-09	0.00E+00	0.00E+00	0.00E+00
		Surface Soil	Outdoor Air - Particulates	Outdoors	Inhalation	1.53E-08	1.08E-08	2.61E-08	1.53E-03	2.70E-04	1.80E-03
		Surface Soil	Indoor Air - Vapors	Foundation Cracks	Inhalation	1.94E-07	1.37E-07	3.31E-07	0.00E+00	0.00E+00	0.00E+00
		Subsurface Soil	Indoor Air - Vapors	Foundation Cracks	Inhalation	3.19E-05	6.29E-05	9.49E-05	2.29E-01	1.13E-01	3.42E-01
		Subsurface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	1.67E-07	7.80E-08	2.45E-07	2.02E-03	2.35E-04	2.25E-03
					Total	**1.61E+00**	**1.65E+00**	**3.26E+00**	**1.20E+04**	**3.32E+03**	**1.53E+04**

Receptor Population	Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Exposure Route	Cancer Risk			Hazard Quotient		
						Child	Adult	Composite Adult	Child	Adult	Composite Adult
Commercial/Industrial Worker	Current/Future	Groundwater from overburden wells	Groundwater	Tap Water	Dermal	--	4.71E-04	--	--	2.32E+00	--
		Groundwater from overburden wells	Groundwater	Tap Water	Ingestion	--	1.08E-02	--	--	1.15E+02	--
		Groundwater from bedrock wells	Groundwater	Tap Water	Dermal	--	2.02E-04	--	--	1.64E+00	--
		Groundwater from bedrock wells	Groundwater	Tap Water	Ingestion	--	5.80E-03	--	--	8.39E+01	--
		Groundwater	Indoor Air - Vapors	Foundation Cracks	Inhalation	--	1.07E-03	--	--	1.82E+00	--
		Groundwater	Outdoor Air - Vapors	Outdoors	Inhalation	--	3.46E-06	--	--	5.90E-03	--
		Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Dermal	--	2.06E-07	--	--	2.08E-03	--
		Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Ingestion	--	4.20E-07	--	--	6.63E-03	--
		Surface Water/Sediment	Outdoor Air - Vapors	Stream or Pond	Inhalation	--	--	--	--	--	--
		Surface Soil	Surface Soil	Outdoors	Dermal	--	5.79E-06	--	--	4.88E-02	--
		Surface Soil	Surface Soil	Outdoors	Ingestion	--	1.70E-05	--	--	9.71E-02	--
		Surface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	--	1.15E-09	--	--	0.00E+00	--
		Surface Soil	Surface Soil	Outdoors	External	--	--	--	--	--	--
		Surface Soil	Outdoor Air - Particulates	Outdoors	Inhalation	--	6.04E-09	--	--	1.45E-04	--
		Surface Soil	Indoor Air - Vapors	Foundation Cracks	Inhalation	--	7.65E-08	--	--	0.00E+00	--
		Subsurface Soil	Indoor Air - Vapors	Foundation Cracks	Inhalation	--	8.35E-06	--	--	1.44E-02	--
		Subsurface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	--	4.35E-08	--	--	1.26E-04	--
					Total		**1.84E-02**			**2.05E+02**	

Receptor Population	Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Exposure Route	Cancer Risk			Hazard Quotient		
						Child	Adult	Composite Adult	Child	Adult	Composite Adult
Construction Worker	Current/Future	Groundwater	Groundwater	Outdoors	Dermal	--	7.00E-05	--	--	8.51E+00	--
		Groundwater	Outdoor Air - Vapors	Outdoors	Inhalation	--	1.31E-06	--	--	4.98E-02	--
		Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Dermal	--	6.23E-08	--	--	2.46E-02	--
		Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Ingestion	--	7.42E-09	--	--	1.87E-03	--
		Surface Water/Sediment	Outdoor Air - Vapors	Stream or Pond	Inhalation	--	--	--	--	--	--
		Subsurface Soil	Subsurface Soil	Outdoors	Dermal	--	3.74E-10	--	--	6.11E-03	--
		Subsurface Soil	Subsurface Soil	Outdoors	Ingestion	--	4.40E-07	--	--	6.79E-02	--
		Subsurface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	--	2.78E-08	--	--	1.67E-03	--
		Subsurface Soil	Outdoor Air - Particulates	Outdoors	Inhalation	--	1.44E-10	--	--	3.88E-09	--
		Surface Soil	Surface Soil	Outdoors	Dermal	--	2.73E-07	--	--	2.64E-02	--
		Surface Soil	Surface Soil	Outdoors	Ingestion	--	1.78E-06	--	--	2.26E-01	--
		Surface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	--	4.38E-10	--	--	0.00E+00	--
		Surface Soil	Outdoor Air - Particulates	Outdoors	Inhalation	--	2.34E-09	--	--	1.40E-03	--
					Total		**7.39E-05**			**8.91E+00**	

(1) Composite adult is the risk of an individual for 30 years: 6 years as a child and 24 years as an adult.

Receptor Population	Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Exposure Route	Cancer Risk			Hazard Quotient		
						Child	Adult	Composite Adult	Child	Adult	Composite Adult
Recreational	Future	Groundwater	Outdoor Air - Vapors	Outdoors	Inhalation	6.40E-07	2.10E-06	2.74E-06	4.04E-03	3.32E-03	7.36E-03
		Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Dermal	3.51E-07	2.85E-07	6.35E-07	3.73E-02	2.99E-03	4.03E-02
		Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Ingestion	3.32E-07	8.19E-07	1.15E-06	1.42E-02	2.15E-02	3.57E-02
		Surface Water/Sediment	Outdoor Air - Vapors	Stream or Pond	Inhalation	--	--	--	--	--	--
		Subsurface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	1.35E-08	4.45E-08	5.80E-08	1.36E-04	1.11E-04	2.47E-04
		Surface Soil	Surface Soil	Outdoors	Dermal	3.74E-06	2.29E-06	6.03E-06	1.35E-01	2.06E-02	1.55E-01
		Surface Soil	Surface Soil	Outdoors	Ingestion	1.40E-06	1.40E-06	2.80E-06	8.41E-03	8.41E-03	1.68E-02
		Surface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	2.13E-10	7.01E-10	9.14E-10	0.00E+00	0.00E+00	0.00E+00
		Surface Soil	Outdoor Air - Particulates	Outdoors	Inhalation	1.14E-09	3.74E-09	4.88E-09	1.14E-04	9.34E-05	2.07E-04
					Total	**6.48E-06**	**6.94E-06**	**1.34E-05**	**1.99E-01**	**5.70E-02**	**2.56E-01**

Receptor Population	Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Exposure Route	Cancer Risk			Hazard Quotient		
						Child	Adult	Composite Adult	Child	Adult	Composite Adult
Visitor/Trespasser	Current/Future	Groundwater	Outdoor Air - Vapors	Outdoors	Inhalation	--	3.74E-07	--	--	5.90E-04	--
		Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Dermal	--	2.85E-07	--	--	2.99E-03	--
		Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Ingestion	--	8.19E-07	--	--	2.15E-02	--
		Surface Water/Sediment	Outdoor Air - Vapors	Stream or Pond	Inhalation	--	--	--	--	--	--
		Subsurface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	--	7.90E-09	--	--	1.98E-05	--
		Surface Soil	Surface Soil	Outdoors	Dermal	--	2.81E-07	--	--	2.53E-03	--
		Surface Soil	Surface Soil	Outdoors	Ingestion	--	1.72E-07	--	--	1.03E-03	--
		Surface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	--	1.25E-10	--	--	0.00E+00	--
		Surface Soil	Outdoor Air - Particulates	Outdoors	Inhalation	--	6.65E-10	--	--	1.66E-05	--
					Total		**1.94E-06**			**2.87E-02**	

Receptor Population	Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Exposure Route	Cancer Risk			Hazard Quotient		
						Child	Adult	Composite Adult	Child	Adult	Composite Adult
Agricultural Worker	Current/Future	Groundwater	Outdoor Air - Vapors	Outdoors	Inhalation	--	3.93E-05	--	--	4.98E-02	--
		Surface Water/Sediment	Surface Water/Sediment	Stream or Pond	Dermal	--	1.87E-06	--	--	2.46E-02	--
		Surface Water/ Sediment	Surface Water/Sediment	Stream or Pond	Ingestion	--	2.23E-07	--	--	1.87E-03	--
		Surface Water/ Sediment	Outdoor Air - Vapors	Stream or Pond	Inhalation	--	--	--	--	--	--
		Subsurface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	--	8.34E-07	--	--	1.67E-03	--
		Subsurface Soil	Outdoor Air - Particulates	Outdoors	Inhalation	--	4.32E-09	--	--	3.88E-09	--
		Surface Soil	Surface Soil	Outdoors	Dermal	--	8.18E-06	--	--	5.89E-02	--
		Surface Soil	Surface Soil	Outdoors	Ingestion	--	5.02E-05	--	--	2.41E-01	--
		Surface Soil	Outdoor Air - Vapors	Outdoors	Inhalation	--	1.31E-08	--	--	0.00E+00	--
		Surface Soil	Outdoor Air - Particulates	Outdoors	Inhalation	--	7.02E-08	--	--	1.40E-03	--
					Total		**1.01E-04**			**3.80E-01**	

(1) Composite adult is the risk of an individual for 30 years: 6 years as a child and 24 years as an adult.

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ıdiation TEDE mrem/yr		Calculation Worksheets
Adult	Composite Adult [1]	
		7.40-7.41
8.96E-01	4.31E+00	7.42, 7.43, 7-95, 7.
1.74E+02	3.58E+02	RAD 321004, 3210
		3.4, 7.44-7.45
5.61E+00	8.53E+00	3.4, 7.46-7.47
		--
		7.48
6.40E-01	6.40E-01	3.4, 7.97
		3.4, 7.5
9.99E+00		--
1.24E-01		3.5, 7.51
		--
		7.52
1.90E+00	1.90E+00	7.53, 7.98
1.63E+00		3.4, 7.54
		3.4, 7.55
		7.56-7.57
4.99E-01	2.40E+00	8-7.59, 7.99, 7.100
		3.4, 7.60-7.61
8.35E-03		3.5, 7.62-7.63
		7.64
6.14E-02	6.14E-02	7.65, 7.101
		3.4, 7.66
		3.4, 7.67
		7.68
1.15E+00	1.15E+00	7.69, 7.102
		3.4, 7.7
		3.4, 7.71
		8.3, 8.33-8.36
		3.6, 7.72-7.73
		8.4, 8.37-8.40
		3.6, 7.74
		3.6, 7.75
		3.5, 7.76
		3.6, 7.77-7.78
		3.6, 7.79
		3.6, 7.8
		3.5, 7.81
		7.82
6.72E+00		3.6, 7.83, 7.103