Table 5: Conceptual Site Model (CSM) - Evaluation of Exposure Pathways (MT DEQ PTCS 03/22/2018)

Consultant: | **Date:** | **DEQ PM:**

Facility Name:

Facility ID: | **Release:** | **WP ID:**

Required: Complete Description of the Source(s) of Petroleum or other Contaminants

Petroleum Source(s)	Affected Medium	Exposure Medium / Point	Exposure Route	Receptor	Describe for each Receptor: contaminant(s) and whether a non-threat, threat or impact
→	Surface Soil (0 - 2 ft bgs)	→ Soil	→ Ingestion Dermal	→ Resident and/or Worker	
		→ Soil	→ Leaching	→ Groundwater	
		→ Dust/Vapors	→ Inhalation	→ Resident and/or Worker	
		→ Surface Erosion to Surface Water and Sediment	→ Ingestion Dermal	→ Recreator, Ecological Receptor [1]	
→	Sub-Surface Soil (> 2 ft bgs)	→ Soil	→ Ingestion Dermal	→ Construction Worker [2]	
		→ Soil	→ Leaching	→ Groundwater	
		→ Indoor Air	→ Inhalation	→ Commercial or Residential Indoor Air	
		→ Dust/Vapors	→ Inhalation	→ Construction Worker	
		→ Buried Water Line	→ Ingestion Dermal	→ Resident and/or Worker	
		→ Buried Utility Line	→ Inhalation of Indoor Air	→ Indoor Resident and/or Worker	
→	Groundwater	→ Groundwater	→ →	→ State water [3]	
		→ Indoor Air [4]	→ Inhalation of Indoor Air	→ Resident and/or Worker	
		→ Groundwater and Vapors	→ Ingestion Dermal Inhalation	→ Construction Worker [2]	
		→ Drinking Water	→ Ingestion Dermal	→ Resident and/or Worker	
		→ Surface Water and/or Sediment	→ Ingestion Dermal Inhalation	→ Recreator, Ecological Receptor	
		→ Buried Water Line	→ Ingestion Dermal	→ Resident and/or Worker	
		→ Buried Utility Line	→ Inhalation of Indoor Air	→ Indoor Resident and/or Worker	

Data Gaps:	
Recommendations:	

Footnotes:

1. Ecological Receptors (e.g. plants and animals) can be added as a separate line associated with surface soil but it is not common for PTC sites.
2. Construction worker covers excavations conducted for building construction, utility installation and repair, as well as residents planting trees, etc.
3. Standard or RBSL exceedence are a complete pathway to a receptor, which is state water (or groundwater).
4. Indoor Air is the exposure medium for a potential or known vapor intrusion setting where a resident or an employee of a business may breathe petroleum vapor from the release.