

**SOBKOWIAK PROPERTY
ESTIMATED COSTS FOR POTENTIAL
SOIL/GROUNDWATER REMEDIAL ALTERNATIVES**

DESCRIPTION	Soil: Off-Site Landfilling	GW: Accelerated Natural Attenuation
Additional Delineation Activities	NA ⁽¹⁾	NA ⁽¹⁾
Preparation of Work Plans	\$10,000	Included ⁽²⁾
Site Remedial Activities	\$24,000	\$293,000
Confirmatory Sampling	\$10,000	\$33,000
Preparation of Corrective Action Completion Report	\$10,000	Included ⁽²⁾
Contingency (10%)	\$6,000	\$33,000
Total Estimated Cost	\$60,000	\$359,000

Notes: Assumptions for these cost estimates are attached.
(1) Delineated by others
(2) Cost included in soil remedial alternative.

SOBKOWIAK PROPERTY
ASSUMPTIONS FOR POTENTIAL SOIL/GROUNDWATER REMEDIAL ALTERNATIVES

General Assumptions for each of the Potential Remedial Alternatives

- All site work will be conducted in Level D Personal Protective Equipment.
- All underground utilities are moved and relocated by others (if required).
- Storm water will not be generated/encountered or require treatment.
- All necessary permits will be obtained.
- Laboratory result turn-around-time for confirmatory samples will be 10 days.
- IDEM VRP oversight costs are not included in the cost estimates.
- Soil and groundwater contamination at the Sobkowiak Property has been delineated by others.
- Following the completion of corrective actions, impacts to Trail Creek are negligible.
- IDEM will approve the initial submittal of the Remediation Work Plan and Remediation Completion Report.

Specific Assumptions for Potential Soil Remedial Alternative

Off-Site Landfilling

- 300 tons of soil exceeding the IDEM's RISC Policy default closure concentration for the residential land use scenario will require remediation.
- All contaminated soil will be excavated with mechanical equipment (i.e., no hand digging).
- Site activities will be completed within 3 days.
- 16 confirmatory soil samples will be collected and analyzed for site closure.
- Per the requirements for VRP QA/QC samples, 1 field blank, 1 trip blank, 1 duplicate and 1 MS/MSD sample will be analyzed for site closure.
- All soil closure samples will be analyzed for VOCs, semi-VOCs and RISC metals (under Level 4 QA/QC requirements).
- Soil compaction will be conducted with excavation equipment.
- Contaminated soils will be determined to be a special waste (non-hazardous waste).
- If impacted soils exist below site buildings, the buildings will be razed (by others) prior to the initiation of remedial activities.

Specific Assumptions for Potential Groundwater Remedial Alternative

Accelerated Natural Attenuation

- Site contaminants are amenable to bioremediation.
- Estimated cost is for two applications of ORC Advanced[®].
- Groundwater will be remediated in 12 months to below IDEM's RISC commercial/industrial standards.
- For site closure, 6 monitoring wells will be sampled on a quarterly basis for 8 consecutive quarters.
- Per the requirements for VRP QA/QC samples, 1 field blank, 1 duplicate sample and 1 MS/MSD sample will be analyzed for site closure per sampling event.
- Groundwater closure samples will be analyzed for semi-VOCs (under Level 4 QA/QC requirements).