

DRAFT

TABLE 1
ESTIMATED INVESTIGATION + REMEDIATION SCHEDULE AND CASH FLOW PROJECTION
WHITEFISH BAY LANDFILL
5201 W. GOOD HOPE ROAD, MILWAUKEE
SIGMA PROJECT #14411
APRIL 2025

	2025				2026				2027				2028				2029				2030				2031				2032				2033				2034 & ONWARD
	\$70,000				\$70,000				\$80,000				\$80,000				\$180,000				\$180,000				\$200,000				\$250,000				\$350,000				\$350,000/YR FOR 2 YRS THEREAFTER \$30,000/YR.
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
1. REPORT DOCUMENTING INDOOR AIR SAMPLING AT THE SCHOOL BUILDING, SOIL VAPOR AND GROUNDWATER SAMPLING AT THE RESIDENTIAL AREA, AND EMERGING CONTAMINANTS SAMPLING AT THE LANDFILL (AS REQUESTED BY WDNR) ^(a)	\$5,500																																				
2. WDNR LANDFILL VISIT WDNR Coordination, Clearing Site Access for WDNR Visit & Project Meeting ^(b)	\$2,500																																				
3. WDNR REVIEW AND RESPONSE OF THE REPORT (ITEM 1) (WDNR review and technical assistance response time minimum 60 days.)			60 DAYS																																		
4. SUB-SLAB VAPOR SAMPLING WITHIN THE RESIDENTIAL NEIGHBORHOOD (IF REQUIRED BY THE WDNR BASED ON THEIR REVIEW OF THE REPORT) ^(c) (Prepare a vapor sampling plan, coordinate with three residences for sampling request and collect three sub-slab passive vapor samples twice (winter and summer seasons). Activities includes meeting with WDNR and client to present the results.)				\$25,000																																	
5. LANDFILL CAP EVALUATION & REPORTING ^(d) (Evaluate northern 1/3 flat area to determine if existing cover material is suitable as landfill cap, includes sampling for WDNR required analysis of RCRA metals & PAH)				\$50,000				\$50,000 ^(d)																													
6. SOIL & GROUNDWATER REMEDIAL ACTION OPTION REPORT AND CONCEPTUAL LANDFILL CAP PLAN (Prepare RAOR per NR 722 for remediation of the CVOC impacted soil & groundwater and a conceptual plan for the landfill cap.)					\$20,000																																
7. WDNR REVIEW AND COMMENTS (ITEM 6) (WDNR review and technical assistance response time minimum 60 days.)								60 DAYS																													
8. REMEDIAL ACTION DESIGN PLAN AND DETAILED CAP DESIGN PLAN (Design details for In-Situ Treatment of Shallow Soil & Groundwater Remediation and a Cap Construction Plans. Activities will include collection of site-specific data for design input and detailed survey of the landfill for cap plan.)									\$40,000																												
9. WDNR REVIEW AND PLAN APPROVAL (ITEM 8) (WDNR review and providing a technical assistance response time minimum 60 days.)													60 DAYS																								
10. SOIL & GROUNDWATER REMEDIATION (Bidding and contractor selection, material procurements, implementation of the source area soil & groundwater treatment, 8 rounds of groundwater monitoring and reporting. The treatment activities may be implemented over a period of two to three years. Select groundwater monitoring will be performed during the treatment phase followed by periodic monitoring.)														\$50,000	\$150,000	\$150,000	\$100,000	\$50,000	\$50,000																		
11. LANDFILL CAP PLACEMENT (Landfill cap construction planning & coordination will begin following receipt of the WDNR approval concurrent with the active remediation. Final Capping work may require 5 to 7 years to complete. Plan assumes WDNR will approve a prolonged cap construction timeframe.)																																					
12. REMEDIAL ACTION COMPLETION REPORT & LANDFILL CLOSURE PLAN (It is assumed a remedial action completion report need to be prepared at the completion of site remediation and cap construction activities requesting no further remediation activities.)																																			\$30,000		
13. LONG-TERM LANDFILL GROUNDWATER MONITORING & CAP MAINTENANCE (Landfill groundwater monitoring and cap maintenance plan will required to be implemented per NR 514.08.)																																			\$30,000 / YR.		
14. PROJECT MANAGEMENT & REGULATORY COORDINATION (A contingency fund for project management activities, responding to regulatory communications & Village coordination/meetings)	\$10,000				\$10,000				\$10,000				\$10,000		\$10,000		\$10,000		\$10,000		\$10,000		\$10,000		\$10,000		\$10,000		\$10,000		\$10,000						

FUTURE CIP →

INITIATE SITE PREPARATION & COORDINATE SOIL SOURCE (\$20,000 PER YEAR) ^(e) 5 TO 7 - YEAR IMPLEMENTATION PLAN
 \$1,000,000 TO \$1,500,000 ^(f)

NOTE:
 (a) Estimate assumes WDNR will not require additional PFAS or VOC sampling.
 (b) WDNR requested to visit the site sometime this spring or early summer to assess the site conditions.
 (c) Item 4 will be implemented if WDNR requires sub-slab vapor sampling at the residences. The vapor samples will be collected in two different seasons to account for seasonal variability per WDNR guidance document (RR-800). The estimate assumes no follow-up vapor sampling or installation of vapor mitigation systems.
 (d) A contingency second phase of cap evaluation sampling is included to define if highly impacted areas are encountered.
 (e) Activities may include source site evaluation, reviewing WDNR database for site history & soil and GW quality information, if available. A Phase I ESA may be performed, if not available.
 (f) The low end cost assumes soil for landfill cap will be available free of charge from sites with no soil impacts and suitable for cap. The high end cost assumes soil for cap will be procured from sources with non-impacted soil. The cap construction costs could be reduced if low impacted soil is allowed to be placed at the landfill prior to capping. WDNR low-haz exemption for each source of low-level impacted soil will be needed.
 (g) The cost estimate assumes 2025 dollars. Future costs need to be adjusted based on inflation rate.
 (h) The cost estimate presented herein is intended for budgeting purpose. The scopes of work may be modified based on findings and or WDNR requirements. Actual costs may vary by 15 to 30 percent depending on the market economic conditions.