April 29, 2025

ATTENTION:
Mr. Chris Celsi, Executive Director
Napa-Vallejo Waste Management Authority (NVWMA)
1195 Third Street, Room B-10
Napa, California 94559-3082

SUBJECT:
American Canyon Sanitary Landfill and Devlin Road Transfer Station Proposed FY 2025-2026 Scope of Services and Budget for Environmental Monitoring and Non-Routine Services

APTIM

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CONCORD, CALIFORNIA 94520

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Dear Mr. Celsi:

Aptim Environmental & Infrastructure, LLC (APTIM) is submitting this proposal to the Napa-Vallejo Waste Management Authority (NVWMA) to provide environmental monitoring, reporting services and non-routine services for the American Canyon Sanitary Landfill (ACSL) and the Devlin Road Transfer Station (DRTS) for NVWMA fiscal year (FY) 2025-2026 (i.e., July 1, 2025 through June 30, 2026). The scope of services and corresponding costs are broken down into Task 1 through 9 listed below.

SCOPE OF SERVICES

Task 1 – Semi-annual Monitoring of Groundwater, Surface Water, Leachate, and Quarterly Monitoring of Vadose Zone Gas

APTIM has teamed up with Confluence to provide semi-annual monitoring at ACSL. Confluence, located in Rio Linda, California, is a full-service field services provider committed to providing the highest level of sampling and technical field services. Confluence has been performing the field sampling for the ACSL for the past several monitoring events. Confluence is a State of California Certified Small Business (Certificate #51615), Woman-Owned Enterprise and Licensed California Contractor (Certificate #913194).

Groundwater Monitoring: In accordance with the ACSL's Waste Discharge Requirements (WDR) Order No. R2-2019-0010, Confluence will monitor fifteen (15) groundwater monitoring wells semi-annually. Groundwater monitoring includes field measurement of groundwater levels, pH, electrical conductivity, temperature, turbidity, and dissolved oxygen at each well. Further, groundwater monitoring includes environmental sampling at each well for analytical laboratory testing of the analytes required by the WDR (Table 1). The list of groundwater monitoring wells to be monitored and the parameters to be monitored for are summarized on Table 1. The required 5-year constituents of concerns (COC) analytes to be monitored are due in the third quarter of 2026, which is not included in this proposal.

Leachate Monitoring: In accordance with the ACSL's WDR, Confluence will monitor (i.e., measure and record) the leachate levels in the landfill gas (LFG) extraction wells, the dual extractions wells, and the leachate sumps semi-annually, prepare semi-annual leachate level contour maps with the corresponding field data and include the field data and contour maps in the semi-annual monitoring reports. The required leachate level monitoring points are shown on Table 1.

The ACSL's WDR requires semi-annual reporting of the monthly leachate volumes pumped in the Vallejo-Flood and Wastewater District (VFWD) – Wastewater Treatment Plant (WWTP). APTIM assumes the NVWMA will provide to APTIM these monthly volumes based on their monthly record leachate meter readings. APTIM will report these

monthly volumes in the semi-annual reports.

Surface Water: In accordance with ACSL's WDR, Confluence will monitor surface water from the slough located on the east side of the site, which flows into the Napa River. APTIM will monitor in two (2) locations – an upstream monitoring point (S-1), and a downstream monitoring point (S-2). Sampling and analytical laboratory testing will take place as the tide is receding to best show the effects of site recharge to the slough. Samples will be collected and tested on a semi-annual basis for the monitoring parameters listed in Table 1.

Vadose Zone Landfill Gas: Quarterly vadose zone landfill gas (LFG) probe monitoring will be conducted at the seven (7) LFG monitoring probes (MP-1 through MP-7), and the two (2) on-site facilities (maintenance building and LFG flare station). The monitoring of LFG (i.e., methane, carbon dioxide, oxygen, temperature) will be conducted in the field with a LANDTECH GEM landfill gas analyzer (or equivalent). The results will be included in the semi-annual reports as described in Task 3. Additional services for LFG monitoring and reporting or special assessments due to regulatory exceedances, if necessary, will be billed on a time and material basis to the Non-Routine Services Task 8 cost code, and will be performed only upon prior approval of scope and budges by the NVWMA.

Per and Polyfluoroalkyl Substances (PFAS): The San Francisco Bay Regional Water Quality Control Board (SFRWQCB) has required a sampling event for Per and Polyfluoroalkyl Substances (PFAS) at three (3) groundwater monitoring wells- an upgradient and two downgradient wells. This will be conducted by Confluence and submitted to PACE for analysis during the next semi-annual event.

Task 2 – Analytical Laboratory Testing of Task 1 Monitoring Samples

APTIM will submit the groundwater and surface water samples (collected under Task 1) to Pace Analytical for analytical laboratory testing of parameters required by the WDR, as shown on Table 1**.** APTIM will work closely with Pace Analytical to obtain high quality analytical test reports and results. In order to simplify the process, APTIM will incorporate the Pace Analytical laboratory costs into our monthly invoicing to the NVWMA at cost plus ten (10) percent to cover administrative services. The estimated laboratory costs are shown in Table 2**.**

Task 3 – Semi-annual Reporting of Monitoring Results

In accordance with the ACSL's WDR, results of the ACSL semi-annual environmental monitoring of groundwater, surface water, leachate and LFG, as well as on-site observations, are to be reported semi-annually to the SFRWQCB.

Semi-annual Monitoring Reports: Monitoring reports will be prepared semi-annually and submitted by April 30 and October 31, following the respective monitoring event period. The report will include the following, as required in the ACSL's WDR;

- Transmittal letter discussing compliance, noted violations, corrective actions taken
- Tables of the groundwater, surface water, leachate, and vadose zone gas monitoring results
- Tables of the monthly leachate discharge volumes
- Tables of the leachate analytical results for discharges to the VFWD
- Certified analytical reports including laboratory quality control reports
- Groundwater/leachate contour map
- Sampling, equipment, and purging details
- Map of observations and monitoring points
- An evaluation of the effectiveness of the leachate monitoring and extraction facilities which includes:
    - Evaluation of the leachate mound within the landfill, and
    - Summary of leachate volumes removed from the landfill
- Standard observations summary and certification (to be supplied by NVWMA staff).

Additionally, the second semi-annual report will include a summary narrative of annual monitoring results and performance from both first and second semi-annual monitoring events. The semi-annual monitoring reports will be submitted to the SFRWQCB and the Napa County Local Enforcement Agent (LEA) in PDF format and emailed to the NVWMA in pdf format. The semi-annual reports and data will be uploaded to the SFRWQCB GeoTracker website in conformance with the SFRWQCB GeoTracker requirements.

Groundwater and Surface Water Data Evaluation: The ACSL's WDR requires the comparison of groundwater and surface water analytical laboratory test data to the corresponding maximum contaminant levels (MCL's). APTIM

will use Federal and California MCL's to evaluate the data when MCL's exist. APTIM will use the Sanitas software program to statistically evaluate the inorganic data using concentration limits in accordance with the approved Water Quality Protection Standard.

The ACSL's WDR notes that if a concentration limit is exceeded, the NVWMA must immediately resample the compliance point and submit a report in writing to the SFRWQCB within seven (7) days of the exceedance. If the resampling confirms the exceedance, an Evaluation Monitoring Program (EMP) may be implemented by the direction of the Regional Water Board. Monitoring will continue per the DMP. If required by the Executive Officer, the EMP shall be implemented to determine the nature and extent of any release detected by the DMP.

Leachate Monitoring Evaluation and Reporting: APTIM will include the results of the leachate monitoring events and an evaluation of the effectiveness of the leachate extraction system. Specifically, the following information will be included in the semi-annual reports:

- A discussion of the leachate monitoring wells and collections sumps
- Leachate levels measure semiannually from the LFG extraction wells, the dual extraction wells, and the leachate sump.
- Leachate levels contour maps for the first and second semi-annual monitoring events.
- An evaluation of the effectiveness of the leachate extraction system.

APTIM will also include in the semi-annual reports, the analytical laboratory test results for the leachate samples collected from the five (5) on-site leachate tanks, as required by the Vallejo Flood and Wastewater District. Refer to the Task 4 scope of services below for the VFWD leachate tank sampling, testing, and reporting requirements.

Vadose Zone Landfill Gas Monitoring Results: APTIM will include the quarterly monitoring results for the seven (7) LFG monitoring probes (MP-1 through MP-7) and the two (2) on-site facilities (maintenance building and LFG flare station) in the semi-annual monitoring reports.

Task 4 – Special Leachate Monitoring (Sampling and Testing) Events Required by the VFWD

In accordance with the ACSL's VFWD Wastewater Discharge Permit, leachate sampling, analytical laboratory testing, and reporting to the VFWD is required prior to discharge of the ACSL leachate to the VDWD – Wastewater Treatment Plan (WTTP). The following leachate monitoring program was implemented to assure that the leachate from the landfill does not exceed the VFWD's discharge acceptance criteria limits.

- Environmental samples will be collected quarterly from each of the five (5) ACSL leachate storage tanks for analytical laboratory testing of the monitoring parameters required by the VFWD Discharge Permit, as shown on Table 1. In addition to the required quarterly monitoring, individual tanks will be sampled and tested whenever the tank is full/at capacity prior to its pump out and delivery to the VFQS-WWTP. Notes, the analytical laboratory testing fees are directly paid by the NVWMA.
- The analytical laboratory test results for the individual leachate tanks will be sent to the VFWD to gain permission/approval prior to discharging to the VFWD WTTP.

The VFWD monitoring program was developed to confirm that leachate from the ACSL stays within the VFWD's discharge acceptance criteria limits. The VFWD monitoring program is in addition to the routine semi-annual and reporting described in Task 2 and Task 3 respectively.

Task 5 – Quarterly Reporting to the VFWD of Leachate Test Results

The VFWD has established criteria for acceptance for leachate at the WWTP. The ACSL analytical laboratory test results for the leachate samples collected under Task 4 will be summarized in a letter report with the VFWD acceptance criteria, and submitted to the VDWD and the NVWMA. If the leachate analytical test results exceed the VDWD acceptance criteria, APTIM will call the NVWMA and the VFWD upon discovery. The results of the analytical laboratory tests for the individual leachate tanks will be sent to the VFWD to gain permission/approval prior to discharging leachate to the VFWD WTTP.

Task 6 – Minor Well Repairs (As Needed)

Normal wear and tear of wells from use and exposure requires periodic need for repairs. We have included costs for minor well repairs if needed during the year. If required, services will be billed on a time and expense basis only after receiving authorization to complete the work from the NVWMA. If a drill rig is required to replace or abandon a well, a separate cost estimate will be prepared under the non-routine contract.

Task 7 – Retest Events (As Needed)

In the event that one of more of the wells or leachate tanks need to be retested due to the exceedance of not on a concentration limit, costs for a retesting event are included in Task 7. These costs are based on a one-day sampling event and of a lump sum for analytical costs. If a retest event is required, it will be billed on a time and expense basis after receiving authorization from NVWMA.

Task 8 – Non-Routine Services (As Needed)

Non-Routine Services (Non-Emergency): Non-routine services may be identified during routine monitoring activities conducted by APTIM and during discussions between the NVWMA and APTIM. Non-routine services may include:

- Additional groundwater, surface water, or gas probe monitoring
- Sampling, analytical laboratory testing and evaluation of leachate seeps if they occur
- Preparation of work plans for groundwater, surface water, or landfill gas related issues requested by the SFRWQCB, the LEA, and/or CalRecycle.
- Maintenance, repair, and/or replacement of various site equipment, systems, and features that may be compromised:
    - Compressor Equipment
    - Conveyance piping
    - Leachate sumps
    - LFG electrical systems
    - Groundwater wells, extraction wells, and/or monitoring probes
    - Areas affected by localized settlement requiring regrading
    - LFG flare and/or blower equipment Leachate tank farm components

Non-Routine Emergency Services: Non-routine emergency services could consist of emergency situations requiring immediate response to restore the operation of one of the ACSL environmental controls systems for management of LFG, leachate, groundwater and/or surface water. These services are limited in nature by the assumption that the corrective actions required (labor, equipment, materials) per event to restore the system to operations are relatively minor in scope. If upon response to the site, during a call-out event, APTIM determines that the actions required are major in scope, we will perform the work with the NVWMA's personnel with respect to site-specific call out and personnel contact procedures required to effectively implement these services.

Task 9 – DRTS Stormwater Compliance Services (As Needed)

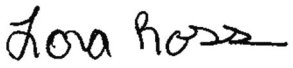
APTIM understands the DRTS contracts with another consultant to provide the regulatory required stormwater sampling, analytical laboratory testing services, SMARTS Data Entry, and routine compliance reporting. APTIM has included a budget to supplement these services, if needed – specifically to assist with the annual stormwater compliance reporting, amend the SWPPP, provide training, and complete exceedance response action reporting.

PROPOSED BUDGET

A cost estimate of $198,500 for the NVWMA's 2025-2026 Fiscal Year Budge for Tasks 1 through 9 services (as described above) is included on Table 2. If this proposal is acceptable to the NVWMA, please send us a new Professional Services Agreement (PSA) for the 2025-2026 FY to authorize the work. These services are subject to mutually negotiable terms and conditions.

If you should have any questions, please contact me at 941-800-8603. Thank you for the opportunity to serve you.

Sincerely,
Aptim Environmental & Infrastructure, LLC



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APTIM Environmental & Infrastructure, LLC
2025 Fee Schedule

Title	Rate
Director	$285.00
Principal	$270.00
Engineer / Geologist / Environmental Scientist	
Planner	
Designer	
Project Administrator	
Project Manager V	$225.00
Project Manager IV	$210.00
Engineer / Geologist / Environmental Scientist	
Planner	
Designer	
Project Administrator	
Project Manager III	$190.00
Engineer / Geologist / Environmental Scientist	
Planner	
Designer	
Project Administrator	
Project Manager II	$155.00
Engineer / Geologist / Environmental Scientist	
Planner	
Designer	
Project Administrator	
Project Manager I	$140.00
Engineer / Geologist / Environmental Scientist	
Planner	
Designer	
Project Administrator	
Professional Level III	$120.00
Engineer / Geologist / Environmental Scientist	
Planner	
Designer	
Project Administrator	
Professional Level II	$105.00
Engineer / Geologist / Environmental Scientist	
Planner	
Designer	
Project Administrator	
Professional Level I	$95.00
Engineer / Geologist / Environmental Scientist	
Planner	
Designer	
Project	
Administrator	
Technician	
Level IV	$75.00
Level III	$65.00
Level II	$55.00
Level I	$45.00
Administrative Assistant	$60.00

Depositions and expert witness testimony, including preparation time, will be charged at 1.5 times the above rates.

Table 1
American Canyon Sanitary Landfill
Environmental Monitoring Locations

Landfill Gas Monitoring Probes (7)	Groundwater Monitoring Wells Sampling (15)	Surface Water Sampling (2)	Leachate Sumps Field Mon.Only (14)	Liquid Levels Monitoring: LFG / Leachate Dual Extraction Wells (34)	Liquid Levels Monitoring: Landfill Gas (LFG) Extraction Wells (49)	Leachate Tank Sampling As Required by VFWD	
QUARTERLY	**SEMI-ANNUAL**			**SEIMI-ANNUAL**		**AS NEEDED**	**QUARTERLY**
January (1st Qtr) April (2nd Qtr) July (3rd Qtr) October (4th Qtr)	**January (1st SA) July (2nd SA)**			**January (1st SA) July (2nd SA)**		1 to 4 times per month Potentially weekly	**January (1st Qtr) April (2nd Qtr) July (3rd Qtr) October (4th Qtr)**
1/2- day per event	**2- days per event**			**2 days per event**		**1/4- day per event**	**1-day event**
GEM 2000	**Disp. Bailer / WQ + Multimeter**	**Dipped Bottle / WQ + Multimeter**	**Water Level Meter**	**Water Level Meter**	**Water Level Meter**	**See Below**	**Composite Sampler / WQ + Multimeter**
MP-1 MP-2R MP-3R MP-4R MP-5R MP-6R MP-7R Quarterly LFG Structure Monitoring **Flare Stack & Shed**	G-1 G-1D G-2 G-2DR G-3A G-3D G-4R G-6AR2 G-7A G-8 G-9R G-10 G-12 GW-4 GW-6 upgradient wells	S-1 S-2	GR-1 GR-2 GR-3 GR-4 GR-5 GR-6 GR-7 GR-8 GR-9 GR-10 GR-11 GR-12 GR-13 GR-14	L-1 L-29 L-2 L-30 L-3 L-31 L-4 L-32 L-5 L-33 L-6 L-34 L-35 L-8 L-36 L-9 L-10 L-11 L-12 L-13 L-14 L-15 L-16 L-17 L-18 L-19 L-20 L-22 L-23 L-24 L-25 L-26 L-27 L-28	EW-1 GS-2 GS-85 EW-5 GS-7 GS-88 GS-89 EW-7 GS-18 GS-90 EW-8 GS-19 EW-9 GS-93 EW-10 GS-21 GS-94 EW-11 EW-12 GS-23 GS-96 GS-97 EW-14 GS-25 GS-98 EW-15 GS-99 EW-16 GS-29 EW-17 EW-18 GS-41 EW-19 EW-20 GS-59 EW-21 EW-22 GS-61 EW-23 EW-24 GS-69 EW-25 GS-70 EW-26 EW-27 GS-76 EW-28 EW-29 GS-77	Sampling and testing required for individual tanks when full (Required by VFWD prior to discharge to VFWD WTTP) Sampling for Lab Testing of: Total Metals EPA 200.8 / 200.7 (Be, Cr, Cu,m Hg, Ni,, Ag, Zn,, As Se, Cd, Zn, Pb), Hg EPA 245.2 Testing done by CLS **Take totalizer readings for each tank on reporting form**	Five (5) Leachate Tanks (each 27,000 gallons) are sampled and tested quarterly using a composite sampler VOCs EPA 624.1 3:1 Composite by Lab (samples collected from composite sampler as grabs for alb to composite 3:1) Composite Sampler 10 times per hour at 140 ML per sample for 7.25 hours LABORATORY TESTING done by CLS (Numerous analytes see list) and PACE (for sulfide only) **pH, EC, Temp, Color, Turbidity**
Static Pressure, CH4, CO2, O2, balance	**Sampling for Lab Testiing, Water Levels, Purge Vols, pH, EC, Temp, Color, Turbidity (visual + reading), DO**	**Sampling for Lab Testing, pH, EC, Temp, Color, Turbidity (visual + reading), DO**	**Liquid levels only**				

Source: APTIM Environmental & Infrastructure, LLC - Monitoring Work Plan, and VFWD Leachate Tank Sampling / Testing Requirements.

Notes:

1. Seven (7) landfill gas probes are monitored QUARTERLY for methane, oxygen, and static pressure using GEM™2000 equipment in field.
2. Groundwater levels are measured SEMI-ANNUALLY at fifteen (15) groundwater monitoring wells, and groundwater samples are collected for analytical laboratory testing.
3. Leachate levels are monitored SEMI-ANNUALLY at thirthy-four (34) dual extraction wells ("L-"), forty-eight (49) gas extraction wells ("EW-" and "GS-"), and fourteen (14) leachate sumps ("GR-"). **Total of 97 points are monitored for Liquid Levels.**
4. Surface water samples are collected at two locations (S-1 and S-2) for analytical laboratory testing SEMI-ANNUALLY.

Table 2
Proposed Cost Estimate Fiscal Year 2025-2026
American Canyon Sanitary Landfill and Devlin Road Transfer Station

Labor Titles / Rates		American Canyon Sanitary Landfill (ACSL)														Devlin Road Transfer Station (DRTS) Stormwater Compliance As-Needed Services		TOTAL LABOR COSTS	
		Semiannual Field Monitoring & Sampling Events		Semiannual Analytical Laboratory Testing		Semiannual Reporting		VFWD Leachate Tank Field Monitoring & Sampling Events		VFWD Reporting		Minor Well Repairs		Resampling / Retesting Events		Non-Routine Services					
		TASK 1		TASK 2		TASK 3		TASK 4		TASK 5		TASK 6		TASK 7		TASK 8		TASK 9			
Labor Title	2025-2026 Labor Rate	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
Engineer V (Stephanie Hamilton)	$ 210	-	$ -	-	$ -	-	$ -	-	$ -	-	$ -	-	$ -	-	$ -	2	$ 420	-	$ -	2	$ 420
Geologist V (Mattew Curtis)	$ 190		$ -	-	$ -	25	$ 4,750	-	$ -	-	$ -	-	$ -	-	$ -	12	$ 2,280	-	$ -	37	$ 7,030
Scientist IV (Jim Teo)	$ 190	-	$ -	-	$ -	-	$ -	-	$ -	-	$ -	-	$ -	-	$ -	-	$ -	30	$ 5,700	30	$ 5,700
Project Manager III / Scientist III (Lora Ross)	$ 140	10	$ 1,400	-	$ -	26	$ 3,640	10	$ 1,400	50	$ 7,000	-	$ -	-	$ -	72	$ 10,080	-	$ -	168	$ 23,520
Project Scientist III (Pat Flynn)	$ 140	30	$ 4,200	-	$ -	40	$ 5,600	300	$ 42,000	-	$ -	8	$ 1,120	16	$ 3,040	20	$ 2,800	-	$ -	414	$ 57,960
Staff Engineer (Jordan Cabras)	$ 95		$ -	-	$ -	120	$ 11,400	30	$ 2,850	130	$ 12,350	4	$ 380	4	$ 380	24	$ 2,280	-	$ -	312	$ 29,640
Administrative Assistant III (Kathy Ditore)	$ 75	-	$ -	-	$ -	-	$ -	8	$ 600	-	$ -	-	$ -	-	$ -	-	$ -	-	$ -	8	$ 600
TOTAL LABOR COSTS:		**40**	**$ 5,600**	**-**	**$ -**	**211**	**$ 25,390**	**348**	**$ 46,850**	**180**	**$ 19,350**	**12**	**$ 1,500**	**20**	**$ 3,420**	**130**	**$ 17,860**	**30**	**$ 5,700**	**971**	**$ 124,870**

Direct Expenses	Semiannual Field Monitoring & Sampling Events	Semiannual Analytical Laboratory Testing	Semiannual Reporting	VFWD Leachate Tank Field Monitoring & Sampling Events	VFWD Reporting	Minor Well Repairs	Resampling / Retesting Events	Non-Routine Services	DRTS Stormwater Compliance Services	TOTAL DIRECT EXPENSES
	TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8	TASK 9	
Pace Analytical Laboratory, Confluence - Field Equipment Rentals & Supplies, Sanitas Statistical Software Annual Renewal, Pine Environmental (Composite Sampler Rental), Other Subcontractors	$ 14,000	$ 19,000	$ -	$ -	$ -	$ -	$ 500	$ 31,210	$ -	$ 64,710
Field Expenses: Truck, Fuel, Ice, Other)	$ 2,500	$ -	$ -	$ 4,800	$ -	$ 150	$ 120	$ -	$ 550	$ 8,120
TOTAL DIRECT EXPENSES:	**$ 16,500**	**$ 19,000**	**$ -**	**$ 4,800**	**$ -**	**$ 150**	**$ 620**	**$ 31,210**	**$ 550**	**$ 72,830**

TOTAL COSTS:	**$ 22,100**	**$ 19,000**	**$ 25,390**	**$ 51,650**	**$ 19,350**	**$ 1,650**	**$ 4,040**	**$ 49,070**	**$ 6,250**	**$ 198,500**

APTIM