



March 8, 2024

Heath Cobb, B.S.
Deputy Associate Director
Division of Environmental Quality / Office of Air Quality
Arkansas Department of Energy and Environment

Subject: Additional Air Quality Assessment in Springdale, AR

Dear Mr. Cobb,

Thank you for the opportunity to provide this proposal and cost estimate to perform an additional air quality assessment near the Waste Management (WM) landfill in Springdale, Arkansas. On February 5-8, 2024, CTEH conducted an air quality assessment at 6 locations near the WM landfill on Arbor Acres Avenue in Springdale, Arkansas. As summarized in the CTEH report provided to ADEQ for this assessment, dated February 26, 2024, air monitoring and sampling performed by CTEH did not detect sulfur dioxide, hydrogen sulfide, or methane (measured via real-time air monitoring as %LEL).

Air sampling did detect the presence of acrolein and benzene at concentrations above their respective U.S. Environmental Protection Agency (EPA) Resident Air Regional Screening Levels (RSLs). According to the U.S. EPA, the RSLs are chemical-specific concentrations that, if exceeded, may warrant further investigation.

Overview and Scope

To support ADEQ's further investigation of the air sampling detections of acrolein and benzene, CTEH proposes to conduct an additional air quality assessment for volatile organic compounds (VOCs; e.g., benzene and acrolein) and hydrogen sulfide at locations around the WM landfill. The proposed 12 air sampling locations are illustrated in **Attachment A**. Sampling at each location will be performed over a three-day period. Collected air samples will be submitted under chain of custody for analysis of VOCs and hydrogen sulfide by an accredited, third-party laboratory at standard turnaround time.

As acrolein and benzene may have other potential sources in the area, 4 of the 12 sampling locations proposed are located away from the WM landfill site, at locations discussed with ADEQ. Real-time air monitoring instruments will also be utilized for field-screening purposes. CTEH will monitor windspeed and direction during the air quality assessment period to add additional context to the data collected at the sampling locations.

A cost estimate for the additional air quality assessment is attached as **Attachment B**. CTEH estimates that this additional air quality assessment project can be completed with a budget of \$94,285.

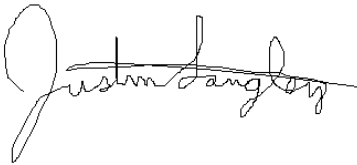
The results of the air quality assessment will be summarized in a report to be submitted to ADEQ for review. Air sampling results will be evaluated by comparison to human health-based screening criteria (e.g., U.S. EPA RSLs). Additional work to address comments from ADEQ, to conduct additional testing, or provide human health risk assessment support will be outlined in another cost estimate.

CTEH appreciates the opportunity to present this estimate for work on this project and can begin work as soon as necessary. Please let us know if you have any questions.

Kind Regards,

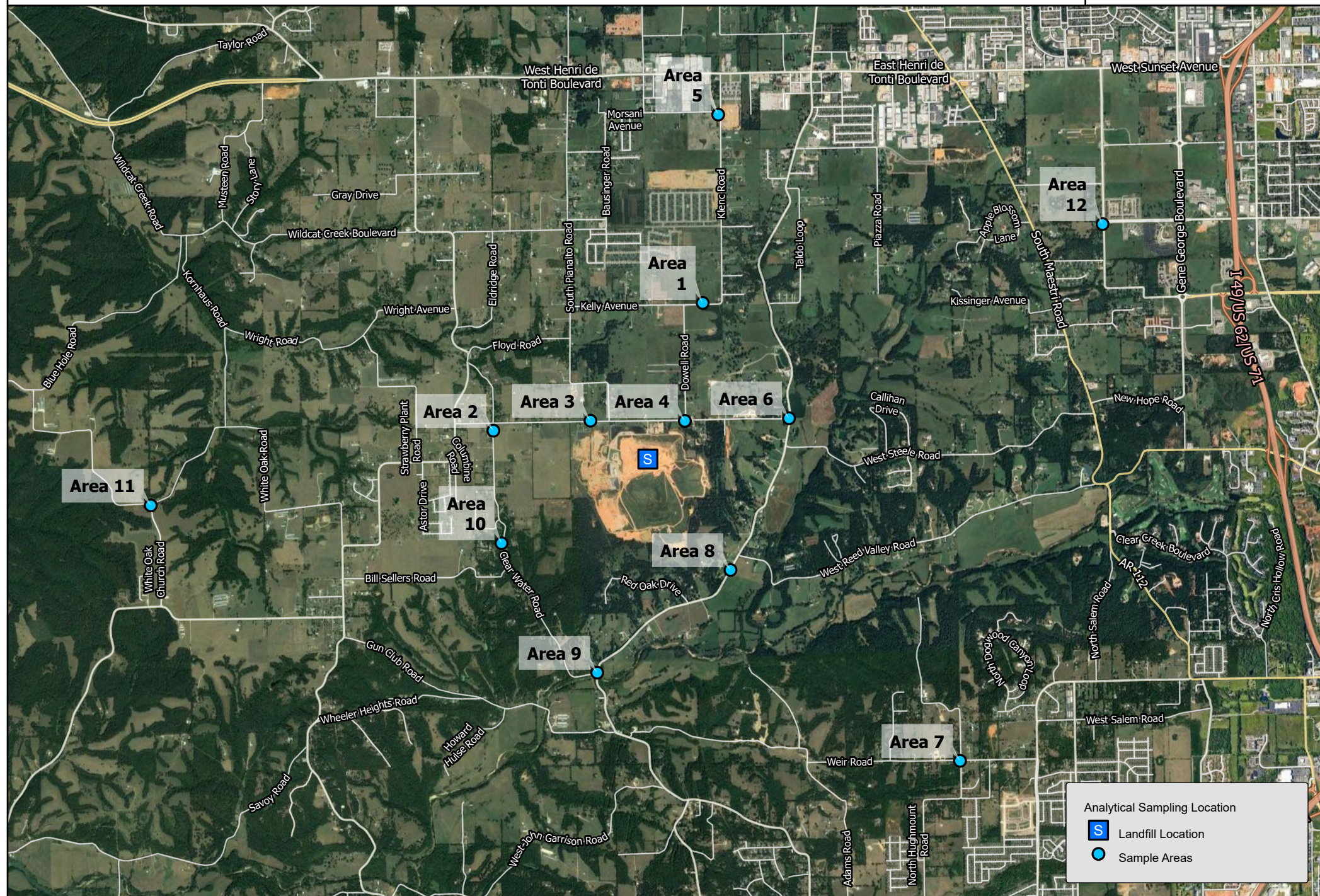
A handwritten signature in black ink that reads "Chris Kuhlman". The signature is fluid and cursive, with a long horizontal line extending from the end.

Chris Kuhlman, PhD, CIH, DABT
Director, ER Sciences
Senior Toxicologist
CTEH, LLC

A handwritten signature in black ink that reads "Justin Langley". The signature is cursive and somewhat stylized, with a large initial "J" and a long horizontal line.

Justin Langley, MS
Senior Project Manager
CTEH, LLC

Attachment A:
Proposed Air Sampling Locations



Attachment B:
Cost Estimate

Client: ADEQ
Project Location: Springdale, AR
Project Manager: Justin Langley

Scope of Work: Analytical Sampling and Air Monitoring

Travel	Personnel Description	# of People	Days	Hours/day	Rate/Hour	Hours/day	Rate/Hour	Total
Mobilization	Environmental Scientist II	1	1	4	\$120.00	0	\$180.00	\$480.00
Mobilization	Project Manager	1	1	4	\$210.00	0	\$315.00	\$840.00
Demobilization	Project Manager	1	1	4	\$210.00	0	\$315.00	\$840.00
Demobilization	Environmental Scientist II	1	1	4	\$120.00	0	\$180.00	\$480.00
Sub total								\$2,640.00

Labor	Personnel Description	# of People	Days	Hours/day	Rate/Hour	Hours/day	Rate/Hour	Total
Onsite Monitoring	Environmental Scientist II	1	4	8	\$120.00	5	\$180.00	\$10,140.00
Onsite Project Management	Project Manager	1	4	8	\$210.00	5	\$315.00	\$33,100.00
Offsite Logistics	Operations Support	1	4	0.25	\$139.00	0	\$208.50	\$139.00
Offsite Accounting	Finance Coordinator	1	4	0.25	\$100.00	0	\$150.00	\$100.00
Offsite Toxicologist	Toxicologist	1	4	2	\$300.00	0	\$450.00	\$2,400.00
Offsite Data QA/QC	Environmental Scientist II	1	2	3	\$120.00	0	\$315.00	\$720.00
Offsite Data Management	IT Project Manager	1	4	1	\$206.00	0	\$309.00	\$824.00
Sub total								\$47,423.00

Reporting	Personnel Description	# of People	Days	Hours/day	Rate/Hour	Hours/day	Rate/Hour	Total
Report Writing	Project Manager	1	1	6	\$210.00	0	\$315.00	\$1,260.00
Map/Table Generation	IT Project Manager	1	1	2	\$206.00	0	\$309.00	\$412.00
Report Writing/Review	Toxicologist	1	1	3	\$300.00	0	\$450.00	\$900.00
Report Review	Quality Assurance Manager	1	1	2	\$238.00	0	\$357.00	\$476.00
Sub total								\$3,048.00

Analytical Method	Units	Turn Time	Cost/Unit	Itemized Cost	15% Markup	Analytical Cost
Suma Canister EPA TO15+TICs	36	Standard	\$437.00	\$15,732.00	\$2,359.80	\$18,091.80
Radiello H2S WET-SOP-13	12	Standard	\$123.00	\$1,476.00	\$221.40	\$1,697.40
20% Data Validation & Package				\$3,957.84	\$593.68	\$4,551.52
Sub total						\$24,340.72

Equipment	Activity	Quantity	Days	Cost/Day	Total
MultiRAE Pro	On-Site Work	2	4	\$150.00	\$1,200.00
UltraRAE	On-Site Work	2	4	\$275.00	\$2,200.00
Data Collection Fees	On-Site Work	1	4	\$700.00	\$2,800.00
Kestrel Weather Monitor	On-Site Work	1	4	\$50.00	\$200.00
Personal PDA	On-Site Work	2	4	\$130.00	\$1,040.00
Sub total					\$7,440.00

Personal Expenses	Duration	# of People	Days	Cost/Item	Units	Total
Project Expenses	Per Day	2	4	\$50.00	1	\$300.00
Shipping	Per Unit	1	3	\$500.00	1	\$1,500.00
Vehicle	Per Person	2	4	\$225.00	1	\$1,800.00
Fuel	Per Day	2	4	\$75.00	1	\$450.00
Hotel	Per Person	2	4	\$150.00	1	\$1,200.00
Per Diem	Per Person	2	2	\$44.25	1	\$177.00
Per Diem	Per Person	2	2	\$59.00	1	\$236.00
Sub total						\$5,663.00

*All expenses and costs subject to change per site location, timetable, and client discretion. Rates above are a reasonable approximation.

**Consumables such as colorimetric tubes, calibration gas, site supplies, etc. are not reflected in this estimate.

***Quote is valid for 90 days after issue date.

15% Administration Overhead Fee \$3,731.25

Total Estimated Costs \$94,285.97