Boulder A.I.R. L.L.C; 2820 Lafayette Dr., Boulder, CO 80305, U.S.A.; dh.bouldair@gmail.com

April 7, 2025

To: Town of Erie 645 Holbrook Street Erie, CO 80516

Attn: David Frank

<u>Budget Proposal and Scope of Services for July 1, 2025, to June 30, 2026, Air Quality Monitoring in the Town of Erie, Colorado</u>

Dear Mr. Frank,

Please find below our cost proposal and scope of work for the continuation of the air quality monitoring at the Erie Community Center that is under contract with the Town of Erie.

The proposed work will continue the monitoring of all variables and pollutants, with the same real-time data reporting that was implemented at the beginning of the program in the summer of 2021.

We have again quoted the monitoring of ozone and Particulate Matter (PM) following 'regulatory-grade' protocols. This entails following the instrument configuration, calibration, and maintenance protocols as mandated by the EPA, and followed by the Colorado Department of Public Health and Environment (CDPHE). Both measurements have been audited by CDPHE and were found to fully meet regulatory quality requirements.

The monitoring of volatile organic compounds (VOCs) relies on operation of a gas chromatography-flame ionization instrument. This will provide sensitive and VOC-specific monitoring of a series of the primary oil and natural gas hydrocarbons. A minimum of thirty species of the most prominent VOCs observed in ambient will be reported. Quantification of VOCs will follow the protocol and be based on the calibration scale of the World Meteorological Organization Global Atmospheric Watch program with calibration standards from the U.K. National Physics Laboratory.

This bid includes automated data processing and reporting to the dedicated Erie project web portal that was implemented and is maintained by Boulder AIR (https://www.bouldair.com/erie.htm). In addition, data from the Erie monitoring will be included in the AirLive Combined Northern Colorado Front Range website (https://www.bouldair.com/NoCoFrontRange.htm). All historical data can be viewed and analyzed at the Boulder AIR Interactive Data Analysis Tool (https://bouldairtools.com/interactive/). Final, fully quality-controlled VOCs data will be submitted to AMTIC, the EPA Ambient Monitoring Archive for Hazardous Air Pollutants (https://www.epa.gov/amtic/amtic-ambient-monitoring-archive-haps); data for all other chemical measurements will be submitted to the EBAS (https://ebas.nilu.no/) archive.

The cost for all monitoring and associated services for July 1 - December 31, 2025, will be the same as for the current January 1 - June 30, 2025, contract (\$113,600). Rates for 2026 will increase by 3% to adjust for inflation. However, Boulder AIR will drop the rate for methane monitoring by 20% starting January 1, 2026. Consequently, the January 1 - June 30, 2026, budget comes in slightly lower at \$113,338. The total cost for a full year contract spanning July 1, 2025 to June 30, 2026, accounts to \$226,958.

Site access, electrical power, and internet communication will be provided by the Town of Erie at no cost to Boulder A.I.R.

We request quarterly payments of the full contract costs.

Invoicing Schedule for 2025 and 2026:

- 25% of 2025 charges (\$56,810) by September 30, 2025
- 25% of 2025 charges (\$56,810) by December 31, 2025
- 25% of 2026 charges (\$56,668) by March 31, 2026
- 25% of 2026 charges (\$56,668) by June 30, 2026

We appreciate this opportunity to continue this air quality monitoring for the Town of Erie.

Thank you,

Detlev Helmig, PhD Boulder A.I.R. LLC

## Town of Erie Air Quality Monitoring Proposal, 2025-2026

Item	Variable	2025 rate, full year US\$		2025, Jan 1 - Jun 30, US\$		2026, Jan 1 - Jun 30, US\$	Total July 1, 2025 - Jun 30, 2026
1	Ozone, TEI_49, regulatory-grade	17,918	18,456	8,959	8,959	9,228	18,187
2	Volatile Organic Compounds (including ethane, ethene, acetylene, propane, propene, i-butane, n-butane, i-pentane, n-pentane, cyclopentane, isoprene, n-hexane, cyclohexane, benzene, n-heptane, toluene, n-octane, o-xylene, ethylbenzene, o-xylene, m-xylene, p-xylene); WMO-grade by gas chromatography - flame ionization detection	105,665	108,835	52,833	52,833	54,417	107,250
3	Methane, PICARRO G2301, WMO-grade	35,837	29,530	17,919	17,919	14,765	32,683
4	PM_2.5, regulatory-grade, PM_10, GRIMM EDM180	30,102	31,005	15,051	15,051	15,503	30,554
5	Meteorological variables (wind speed, wind direction, temperature, relative humidity, radiation),	3,584	3,692	1,792	1,792	1,846	3,638
6	Webcam for public website images	2,150	2,215	1,075	1,075	1,107	2,182
7	Security system with multiple webcams	1,985	2,044	992	992	1,022	2,014
8	Website data reporting, data management, data archiving, event reports	30,000	30,900	15,000	15,000	15,450	30,450
Total:		227,241	226,675	113,620	113,620	113,338	226,958