Town Council

Board Meeting Date: 5/11/2021

File #: 21-186, **Version:** 1

SUBJECT:

Air Quality Monitoring Program and Consideration of Two Resolutions:

1. A Resolution of the Board of Trustees of the Town of Erie Approving an Agreement for Professional Services with Boulder A.I.R. LLC for Air Quality Monitoring
2. A Resolution of the Board of Trustees of the Town of Erie Approving an Agreement for Professional Services with Ajax Analytics and Colorado State University for Air Quality Monitoring

DEPARTMENT: Administration

PRESENTER: Malcolm Fleming, Town Administrator

TIME ESTIMATE: 30 minutes

STAFF RECOMMENDATION:

Provide any additional direction needed to clarify desired details on a coordinated air quality monitoring program, and then approve two separate Resolutions authorizing the Town Administrator to execute agreements for Professional Services with Boulder A.I.R. LLC and with Ajax Analytics / Colorado State University.

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

During the Board's March 9 meeting, the Board asked staff to secure proposals for air quality monitoring in Erie to address concerns over oil and gas emissions. In response, staff conducted detailed reviews of the air quality monitoring being conducted by the City and County of Broomfield, the City of Longmont, Boulder County and Weld County. Based on information gained from these reviews and follow-up discussions, Town staff solicited proposals and cost estimates from the contractors currently providing air quality monitoring for Broomfield, Longmont and Boulder County, which are Ajax Analytics and Boulder A.I.R. Staff's solicitation asked for different levels and approaches to air quality monitoring in Erie so the Board could consider options.
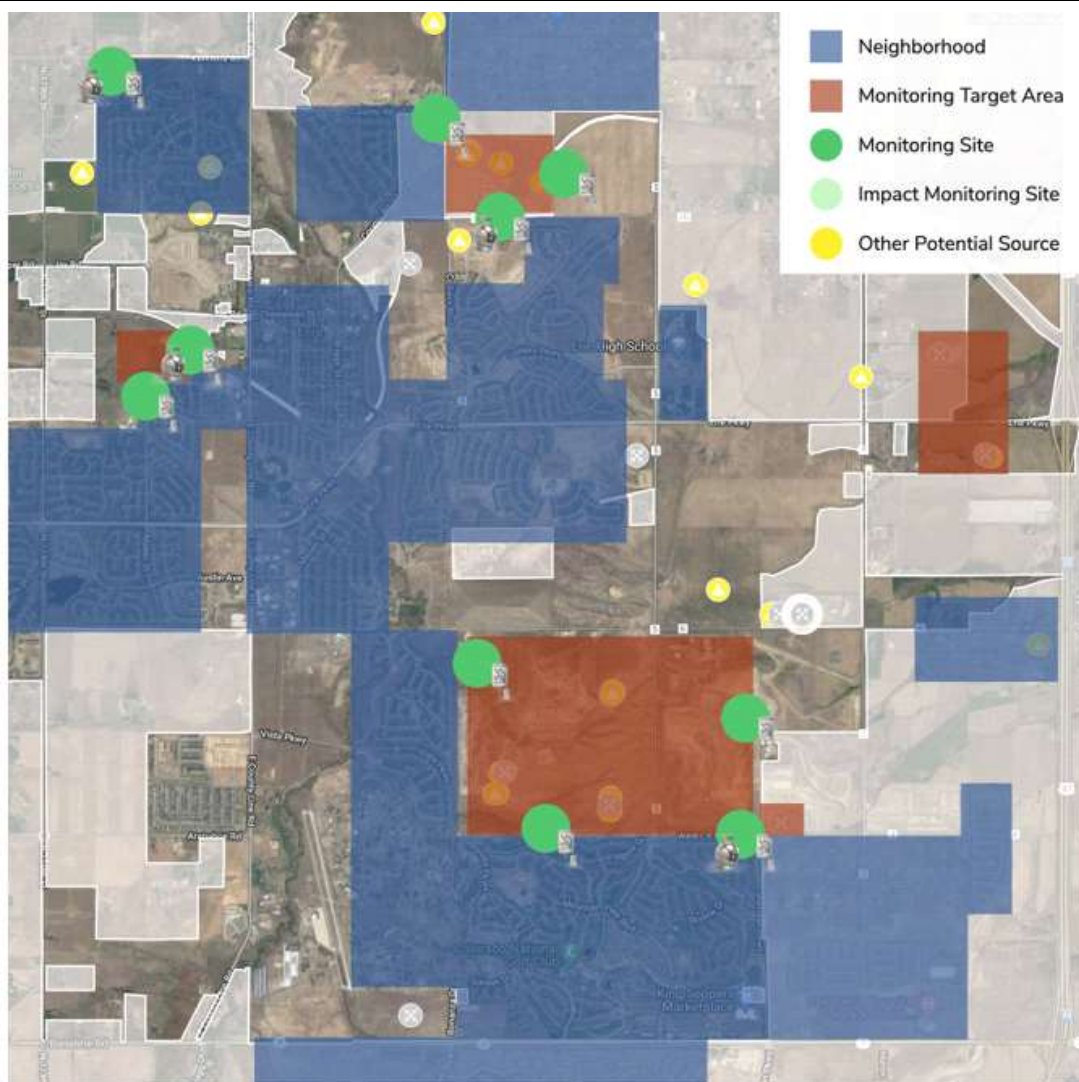
During the Board's April 20 meeting, staff and representatives from Ajax/CSU and Boulder A.I.R. presented several options for establishing an air quality monitoring program and addressed the Board's questions. Based on that discussion, a majority of the Board appeared to favor a mid-range program with services provided by both contractors.

Based on the Board's direction, staff worked with Boulder A.I.R. and Ajax to further refine their individual proposals and incorporate the desired elements into a coordinated program for Erie that will also compliment and coordinate with air quality monitoring programs conducted by the City and County of Broomfield, City of Longmont and Boulder County.

The combined program for Erie using both contractors would consist of the following elements:

- An Anchor Site operated by Boulder A.I.R. providing reference grade continuous monitoring of Ozone, specific VOCs, Methane, particulates, and meteorological variables. This link <https://www.bouldair.com/NoCoFrontRange.htm> connects to reporting from Boulder A.I.R.'s AirLive Combined Northern Colorado Front Range website and illustrates how the data for Erie would be reported.
- Ten apis <https://www.apis-aq.com/product-information/> sensors operated by Ajax/CSU and deployed at locations reflected in the illustration on the next page, with sensors located north of the Colliers Hill neighborhood, around the Front Range Landfill and near the Coyote well pad, and near Red Hawk Elementary School. These are suggested locations based on current activity, but the ten monitors could be deployed in other locations. These monitors will provide continuous monitoring of total VOCs and auto-triggered canister sampling if total VOCs exceed specified levels. These stations would also provide continuous monitoring of particulates and NO/NO2. Ajax/CSU would also operate a mobile plume tracking vehicle that could be deployed up to 12 times each year to identify and track specific emission plumes. Finally, Ajax/CSU will also supply the Town with up to 2 grab canisters per month to deploy in other locations and analysis of samples taken with those canisters. To see how Ajax reports data from their monitoring stations in Broomfield, go to <https://broomfield.ajax-analytics.com/dashboard/datagraphs>.

The apis TVOC sensors detect increases and decreases of a group of over 900 volatile organic compounds. This indicator measurement does not identify which compounds are in the air, nor exactly how many parts per billion (ppb) are in the air at any given point. What these sensors do show are how VOC levels change on a minute-by-minute basis during different types of activities happening in an area. If the TOVC Indicator detects total VOCs above certain levels, it triggers a sample that is then analyzed for specific compounds at the ppb level.

The Boulder A.I.R. program provides reference grade data from stationary (but movable) monitoring trailers that are also linked with the wider area monitoring network including the Boulder Reservoir, and Longmont's Airport and Union Reservoir monitoring stations. The Ajax sensors and trigger canisters allow for air quality assessments around target well pads from consistent locations during the different stages of drilling, fracking, and production. These sensors would be supplemented by the mobile plume tracker and the "grab sample" canisters deployed by City staff or residents. The combination of the Boulder A.I.R. and Ajax/CSU approaches will provide real time data useful for helping address concerns of residents living near oil and gas facilities, and the ability to correlate that data with reference grade monitoring data that may be actionable in pursuing regulatory compliance and help with longer term efforts to identify the sources and magnitude of emissions and prevent degradation of air quality.

Fiscal Impact:

Boulder A.I.R. Anticipating a project start date of June 1, 2021, and including equipment acquisition and mobilization costs, but not charging for the anticipated three months while the station is being set up, first year (2021) costs under a three-year commitment would be $209,056 in 2021; $223,869 in 2022, and $219,596 in 2023.

Ajax/CSU. Also anticipating a project start date of June 1, 2021, and including equipment acquisition and mobilization costs, and anticipating the system would be operational by June 1, 2021, first year (2021) under a three-year commitment annual prepayment discounts would be $320,000 for 7 months of service, and $480,000 in both 2022 and 2023 for 12 months of service.

The combined program costs would be $529,056 in 2021, $703,869 in 2022, and $699,596 in 2023. Additional program details and cost breakout are included in the attached cost proposals from both contractors and the Statement of Work from Ajax/CSU.

Board Priority(s) Addressed:
- ✓ Safe and Healthy Community
- ✓ Effective Governance
- ✓ Environmentally Sustainable

ATTACHMENTS:
1. Resolution 21-062 authorizing the Town Administrator to execute an agreement with Boulder A.I.R.
2. Boulder A.I.R. Cost Proposal
3. Resolution 21-063 authorizing the Town Administrator to execute an agreement with Ajax/CSU
4. Ajax Analytics Cost Proposal
5. Ajax Analytics Statement of Work