



Portable Air Monitoring Station Fact Sheet

Fort Air Partnership (FAP) added a portable air quality monitoring station to its network in 2018 in order to monitor air quality in areas of our Airshed that were previously underserved, and to respond to emerging issues. How long the portable station stays in one place is determined on a case-by-case basis but generally the station monitors and collects data at one location for approximately six months. Following each stay, a project summary report is prepared and made public.

The station is capable of measuring oxides of nitrogen (NO/NO_x/NO₂), ozone (O₃), fine particulate matter (PM_{2.5}), sulphur dioxide (SO₂) and hydrogen sulphide (H₂S) along with weather information such as wind speed, wind direction, ambient temperature and relative humidity. The measurement of other substances can be added depending on the objectives for the particular project. Data produced by the portable station enables calculation of an Air Quality Health Index (AQHI) for the local area where the station is placed.

The portable station provides an opportunity for public awareness and educational outreach. With each placement, FAP routinely promotes that local air monitoring is occurring, offers station tours, makes presentations to local officials and school classes, and communicates air monitoring information to area residents, the media and others. As is FAP's policy with all of its stations, data collected by the portable station is available in several ways:

- FAP's website fortair.org has a current and forecast AQHI, a near real-time live data feed for un-validated data, and weekly, quarterly and annual summary reports of validated data.
- Live, un-validated data is collected and retained for one year by the Government of Alberta at maps.srd.alberta.ca/AQHI. Validated historical data, suitable for use in analysis and reports, is available from the Air Data Warehouse at airdata.alberta.ca

Site Selection

FAP uses a Portable Site Selection Process to rank prospective sites for the portable. FAP pays for the cost of installing and operating the portable station within the Airshed. It will consider placing the station outside of its Airshed on a fee for service basis. Seven key factors are used to determine station locations:

1. **Spatial data gap:** Add continuous air monitoring to a part of the Airshed currently underserved.
2. **Temporal data gap:** Continue monitoring at a previous location to fill in information gaps.
3. **Transboundary:** Identify airborne substances coming into the Airshed from major emission sources.
4. **Population exposure:** Measure air quality where people live.
5. **Permanent station scoping:** Identify suitability of locations for placement of a permanent air monitoring station.
6. **Public input:** Respond to issues or concerns brought forward by the public, municipalities or community groups.
7. **FAP input:** Respond to issues or concerns identified by the FAP Board, committees and key stakeholders.

Contact

To learn more, contact us at info@fortairmail.org or call 1-800-1-800-718-0471.