The EPIC Air Quality Fund Open Data Sharing Requirements

Last updated: 5 August 2025

<u>The EPIC Air Quality Fund</u> has specific requirements for sharing air quality data generated from awarded projects. Contractually, the data must be shared in a fully open manner. Specifically:

- The data must be provided programmatically and be findable and accessible to a broad audience at no cost to the public (e.g. via an Application Programming Interface; API). This also means the data are able to be shared on a platform with a CC-BY-4.0 license.
- The data must be provided in a well-structured format, such as a CSV file or any other variety of formats that are machine-readable and include, at minimum:
 - o PM2.5 information in raw units (e.g. micrograms per cubic meter) as opposed to an "Air Quality Index"
 - Timestamp for each measurement (including timezone information)
 - Time average of collection (e.g. 15 minutes, 1 hour, etc.) the data must be provided in a granular, timely manner (e.g. sub-daily frequency reported in near-real time, not sub-daily frequency reported months after collection).
 - Geographic coordinates the data must be provided at the 'station' or 'monitor' level and with coordinates to match (5 places past the decimal for latitude and longitude), not aggregated to a larger geospatial area.

Note: These criteria above are inline with the "Four Key Criteria for Fully Open Data" on Page 7 of OpenAQ's 2024 report, "Open Air Quality Data: The Global Landscape"

Resultant Requirements for Data Ownership and Data Sharing Policies For Air Quality Monitoring Organizations Utilized by EPIC Air Quality Fund Applicants

In addition to the criteria above, applicants must select monitors from air quality (AQ) monitoring organizations that have policies that legally allow consumers who purchase their equipment to both own the data they generate, as well as be able to legally share the data on a public platform where it can be shared with a CC-BY-4.0 license. Note: The EPIC Air Quality Fund will support the use of several types of AQ monitors - from low cost sensors to reference grade monitors, depending on the purpose and proposed application.

To assist applicants in selecting air quality monitoring devices that comply with the required open data sharing policies for the EPIC AQ Fund Awards, we have reviewed the publicly available data ownership and sharing policies of several major AQ monitoring organizations, compiled the information in the table below, and assessed whether it meets our criteria. Kindly note:

- Applicants need not limit themselves to this list when selecting AQ monitors they prefer to use in their application. AQ monitors can be procured from organizations not listed below, provided they meet the criteria of sharing data publicly and openly. At the time of one's application, if an AQ monitoring organization is not listed below, the onus of proof for a given AQ monitoring organization meeting these criteria will be on the applicant to provide, in the form of website documentation or email from the AQ monitoring organization, articulating their data ownership and public data sharing on third party platform policies.
- Do you know of an AQ monitoring organization device that would be helpful to include in the table below? Do you notice an error or know if there is an update to the information below? If so, please contact us at clean-air-info@uchicago.edu.

Table last updated: Fall 2024

ORGANIZATION	A. DATA OWNERSHIP*	B. DATA SHARING*	C. COMPLIANCE WITH EPIC AIR QUALITY FUND OPEN DATA CRITERIA
	Do consumers own the data? Consumers must own the data in order to be able to share it freely (at no cost) and publicly downstream of themselves.	Can a consumer share data beyond the organization platform, publicly with a CC-BY-4.0 (or more permissive) license?	Does it meet the selection criteria for the EPIC Air Quality Fund Application of open data sharing, as defined by columns A and B? Note: Compliance with the Fund's open data criteria does not mean endorsement by the Fund or represent a partnership.
<u>AirGradient</u>	YES	YES	YES
	Refer to their terms and conditions	Refer to their <u>terms and</u> <u>conditions</u>	

<u>AirScan</u>	YES	YES	YES
	Refer to their data policies	Refer to their <u>data policies</u>	
<u>Airveda</u>	YES	YES	YES
	This information was provided directly to us by the company.	This information was provided directly to us by the company.	
AirQo	AirQo co-owns the data with consumers	YES	YES
	This information was provided directly to us by the company.	This information was provided directly to us by the company.	
airqoon	YES	YES	YES
	This information was provided directly to us by the company.	This information was provided directly to us by the company.	
<u>Aurassure</u>	YES	YES	YES
	This information was provided directly to us by the company.	This information was provided directly to us by the company.	
AQMesh	YES	YES	YES
	This information was provided directly to us by the company	This information was provided directly to us by the company	
Clarity	YES	YES	YES

	Refer to the data promise on their <u>Air Quality Monitoring</u> <u>Solution page</u>	Refer to the data promise on their <u>Air Quality Monitoring</u> <u>Solution page</u>	
<u>IQAir</u>	YES	YES	YES
	Refer to point 25. User Data of their terms and conditions.	Refer to point 25. User Data of their terms and conditions	
Persium	YES	YES	YES
	This information was provided directly to us by the company.	This information was provided directly to us by the company.	
<u>PurpleAir</u>	NO	NO	NO
	Refer to point 4.1 Ownership and License Grants on their website	Refer to point 2.6 of The Service And Data on their website	
QuantAQ	NO Refer to point 16.1 Ownership of data of their terms and conditions	NO The data can be shared downstream, but is restricted to non-commercial purposes and the policy is not compliant with a CC-BY-4.0 license.	NO
Respirer	YES	YES	YES
	This information was provided directly to us by the company.	This information was provided directly to us by the company.	

SENSIT technologies	YES This information was provided directly to us by the company.	YES This information was provided directly to us by the company.	YES
<u>Senstate</u>	YES Refer to their Open Data Service conditions	YES Refer to their Open Data Service conditions	YES
<u>SmartSense</u>	YES	YES	YES
TELLUS	Users need to request ownership of Raw Data, whereas processed data is exclusively owned by Tellus.	YES	Depends on ownership status (refer to column A)
	Refer to their terms and conditions	This information was provided directly to us by the company.	
TSI Blue Sky	To be determined.	Information not disclosed	Cannot be determined at this time.
	Refer to the section on data ownership under their terms and conditions		

^{*}The information was last accessed from the organization websites on 27 June 2024. We have cross-checked the information by reaching out to each organization. To report any errors or changes to the table, please contact us at clean-air-info@uchicago.edu.