Agency Roles and Access Control

New AQS Security Model

Background

- Part 58 – Ambient Air Quality Surveillance defines a number of agency/organizations and their responsibilities.

- AQS associates agencies with both sites and monitors with specific named roles for the site or monitor.

- However, AQS has historically not utilized these agency roles for access control, but instead used an artificial entity, Screening Group, that does not correlate with agencies.

Part 58 Agency Definitions

- Monitoring Organization: A state, local, or other monitoring organization responsible for operating a monitoring site for which the quality assurance regulations apply

- PQAO (Primary Quality Assurance Organization): A monitoring organization or other organization that is responsible for a set of stations that monitor the same pollutant and for which data quality assessments can be pooled.

- Reporting Organization: An entity, such as a State, local, or Tribal monitoring agency, that collects and reports (submits) air quality data to EPA.

- State Agency: The air pollution control agency primarily responsible for development and implementation of a plan under the (Clean Air) Act.

AQS Agency Roles

- Supporting: Site – Identifies the agency responsible for the operation of the site.

- Collecting: Monitor – Indicates the agency responsible for collecting the samples from a Monitor.

- Reporting: Monitor – Indicates the agency responsible for submitting the samples to AQS.

- PQAO: Monitor – Agency Responsible for Quality Assurance of the monitor.

- Analyzing: Monitor – Indicates the agency responsible for analyzing samples (i.e. laboratory) from a monitor.

- Audit: Monitor – Agency responsible for conducting independent audits of a monitor (e.g. PEP & NPAP)

- Certifying: Monitor – Indicates the agency authorized to certify the data for a monitor.

Legacy Access Control (1)

- Screening Groups: An administrative grouping of users with no consistent real-world equivalent.

- Users assigned to one or more screening groups.

- Ownership:
  - Monitors: Owned by a Screening Group
  - Sites: No defined owner.

- Access Control:
  - Monitors: Screening Group of monitor has full access. All others read-only access.
  - Sites: Users assigned to screening group of any monitor at site have full access. All others read-only access.
  - Raw and P&A Data: Users assigned to screening group of monitor have full access. All others read-only access.

Legacy Access Control (2)

- Problems:

  - Inflexible: Monitor may be assigned to screening group of contractor to allow contractor to submit raw data. The actual real-world owner (State, Tribe, or Local agency) not allowed to access to either monitor metadata or to submit Precision and Accuracy data, or correct/invalidate raw data.

Agency Based Access Control

- Concept:
  - Use the defined roles at sites and monitors to control access.
  - Users: A user is assigned to exactly one agency. (Agencies have responsibilities to fulfill roles, and users work for an agency.)
  - Definition: Parent Agency: For any agency, allow a "Parent" to be defined for that agency. Example: A local or district agency might have a State Agency listed as their parent agency.

- Status: Implemented for QA transactions and Certification. Planned for all other access.

Ownership

- Monitors: New monitor field, Monitoring Agency, that owns monitor.
- Sites: New site field, Owning Agency.

Site Metadata Access (planned)

- Site Owning Agency has full access
- Site Support Agency has full access
- Parent of either above: Full Access
- All others: read only access
- Applies to:
  - All site metadata
  - Site Sampler
  - Creation of first monitor at site

Monitor Metadata Access (planned)

- Monitoring Agency: Full access
- Parent of Monitoring Agency: Full Access
- All others read-only
- Applies to: All monitor metadata records

Raw Data Access (Planned)

- Monitoring Agency: Full access

- Reporting Agency: Full Access

- Analyzing Agency: Full Access (Intermittent method monitors only?)

- Parent of any above: Full Access

- All others: Read-only access

- Note: PQAOs presently have full access. It is expected that this should be dropped in favor of Monitoring and Reporting agency access when the new access control is fully implemented.

Routine QA Data Access (Implemented)

- Definition: This is all of the new QA Assessments except PEP and NPAP
- Monitoring Agency: Full Access
- Reporting Agency: Full Access
- PQAO: Full Access
- Parent of above: Full Access (planned)

Independent QA Access (Implemented)

- Definition: This includes PEP and NPAP Audits

- Audit Agency assigned to monitor: Full Access

- EPA Regional and Headquarters: Full Access

Certification

- Certifying agency: Full Access
- Question: When parent agencies are implemented, does a separate certifying agency add value? (i.e. Should rights to certify a monitor be granted to the PQAO and its parent (e.g. State Agency) instead?)

Questions and Answers: