

OAQPS Unified Platform Project



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U.S. Environmental Protection Agency

Outline of Talk

Background

What is a Unified Platform?

Guiding principles

Benefits of the project

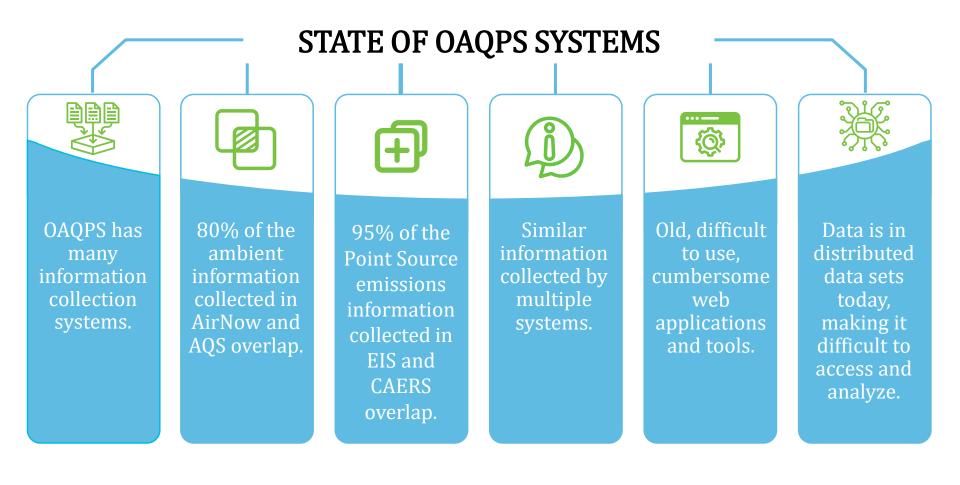
Process and timeline

What it means for you

Q&A

Background State of QAQPS Systems

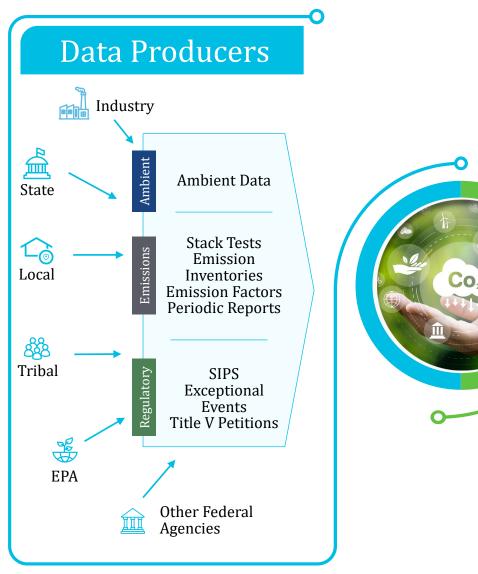




- ENVIRONMENTAL PROTECTION
- A single architecture that accepts, processes, stores, and distributes OAQPS programmatic information.
 - Information is provided by regulated/non-regulated entities through one central mechanism.
 - Information, regardless of the program, is processed and stored in the same "place."
 - Information, regardless of the program, is accessible from the single data store.

What is in Scope?





Existing Systems

Ambient

- AirNow (incl. AirNow Tech, AirNow App, AirNow.gov)
- Air Quality System (AQS) (includes AQS DataMart)

Emissions

- Combined Air Emissions Reporting System (CAERS)
- Compliance and Emissions Data Reporting Interface (CEDRI)
 - Electronic Reporting Tool (ERT)
 - Web and Factor Information Retrieval Database (WebFIRE))
- Emissions Inventory System (EIS)

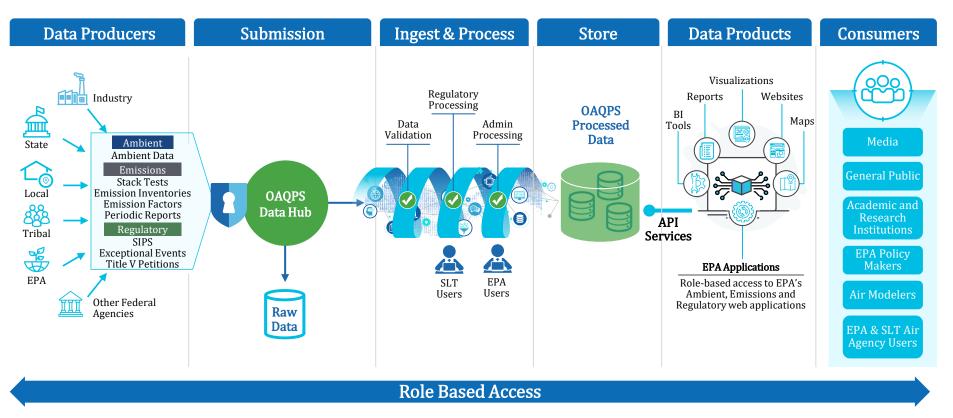
Regulatory

- State Planning Electronic Collaboration System (SPeCS) for SIPS
- SPeCS for Exceptional Events (EE)
- Petitions to Object to Title V Permits (POTVP)
- SPeCS for Emissions Guideline Plans (EGPs)

What is a Unified Platform?



UNIFIED PLATFORM YOUR AIR. YOUR DATA. YOUR WAY.



Project Guiding Principles

UNITED STATES

- Ensure stakeholder communication and engagement throughout the life of project.
- Follow the Agency's digital strategy.
- Adopt
 - a cloud-first approach.
 - an API/microservices-oriented architecture approach.
 - an open-source software first approach.
 - where possible, a low code/no code development approach.
- Focus on using Agency shared services that add value to the project.
- Legacy systems will be gradually phased out in favor of the new Unified Platform.

Benefits of the Project

- Modernize data submission and retrieval.
- Modern applications to interact with data.
- Streamlined user experience.
- Reduce the burden on SLTs and EPA.
- Faster application development and updates.
- Lower overall costs of operations for EPA.

This work includes the development of a unified platform to incorporate programmatic and community air quality information, to improve accessibility of the information for permitting authorities and communities so that EPA can better monitor air quality improvements over time.

Process



IMPLEMENT

DISCOVERY

- Communicate and receive input from stakeholders.
- Evaluate all data collection to remove redundancy.
- Rationalize business
 processes.
- Ensure anything built in the future system brings value to the EPA mission.
- Focus on the information and processes needed for OAQPS programs and EPA stakeholders.
- Baseline the scope of the "must haves" in version 1.0 of the unified platform; Minimal Viable Product.



- Continue to communicate to stakeholders and gather inputs on designs.
- Leverage user experience experts to design user interfaces.
- Design unified platform using modern data approaches.
- Select modern technology stack leveraging opensource software.

 Multiple development teams build and test unified platform.

BUILD

- Early and often demo to gather feedback as needed.
- Stakeholder communication and training.
- Rollout new user authentication.
- Phased cutover plan.

Timeline



	2024	2025		2026		2027
Discover	Data Inventory Data Ingest Prototyping System Feature Inventory Business Process Mapping	User	orint Sprint	Sprint User Stories	Sprint User Stories	
Design	Design Future State Vision & Architecture, Define Scope of MVP, Plan for Build Phase		etail Detail Design	Detail Design	Detail Design	
Build		Build B	uild Build	Build	Build	
Test		Test	'est Test	Test	Test	
Data Migration		Processing Proc	ata Data ressing uild Build	Data Processing Build	Data Processing Build	Data Quality Assurance
UAT			lser Sting User Testing	User Testing	User Testing	Final User Acceptance Testing
Training	Create Training Material End User Training					
Implement						
Impl	🚔 🏛 😤 Continuous Stakeholder Communication & Engagement 😽					
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- Legacy systems will be gradually phased out in favor of the new Unified Platform.
- Use Login.Gov to authenticate and manage passwords.
- Consistent modern user interface.
- Streamlined access to information.
- Take advantage of what is working well today while leveraging more modern technologies.
- Look for Unified Platform.
- User training and training guides will be provided.

Questions and Contact Information

Primary Point of Contact

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