

Environmental Information



EN2015

EMISSIONS INFORMATION EXCHANGE NETWORK (EIEX)

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2015 Exchange Network National Meeting

Supporting the Business of Environmental Protection

September 29–October 1, 2015
Sheraton Philadelphia Society Hill Hotel
Philadelphia, Pennsylvania

<http://www.exchangenetwork.net/en2015>



ABSTRACT



EPA is requiring facilities using Part 60 & 61 Test Methods to report results electronically using the Electronic Reporting Tool (ERT) to submit to the Central Data Exchange (CDX). The EIEX solution provides a single point of access for facilities, regulatory agencies and data users to report, transfer, query, and share source test report emissions data created from the ERT. During this presentation, we will provide background on the project, discuss the EIEX solution, and detail next steps.



EIEX Project



Presentation Agenda

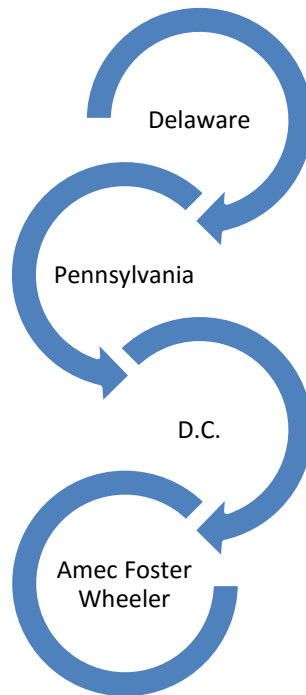
- Background
- Our Solution
- Project Status
- Next Steps



EIEX: Background



Who Are We?

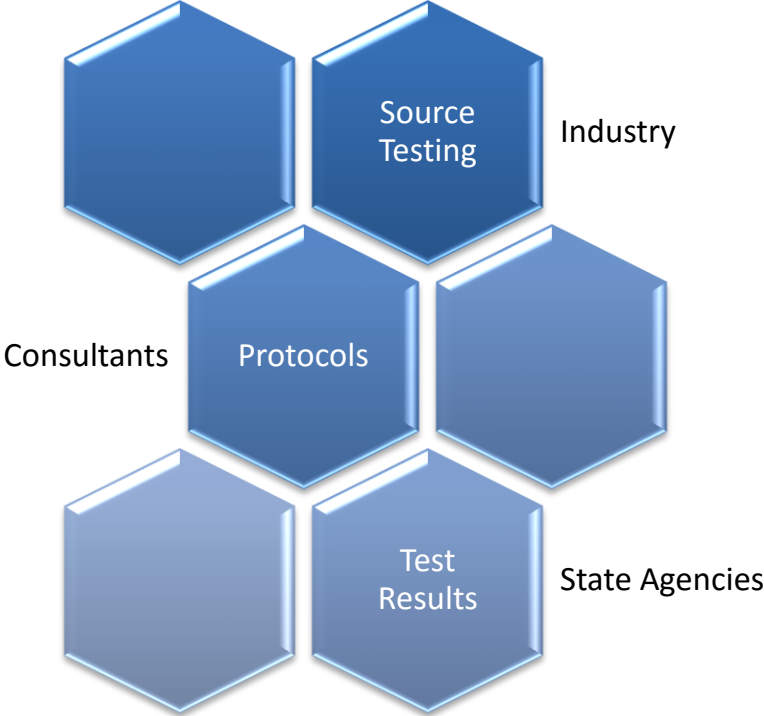




EIEX: Background



What We Do





EIEX: Background



Stack Testing Components

Protocols

On-Site
Inspections

Lab Reports

Digital/Analog

Quality
Assurance

Test Reports

Permit
Compliance
Determinations

Research



EIEX: Background



- Opportunity
 - **Current State:**
 - Project partners information flow process of stack testing information:
 - Paper documents
 - PDFs, Excel spreadsheets, Word documents (e-mailing or very specific system to the agency, i.e. PSIMS).
 - **Future State:**
 - EPA is requiring Facilities using Part 60 & 61 Test Methods report results electronically using the Electronic Reporting Tool (ERT) to submit to the Central Data Exchange (CDX)
 - **Need:**
 - To provide a single point of access for facilities, regulatory agencies, and data users to report, transfer, query, and share source test report emissions data created from the ERT.



EIEX: Background



Electronic Reporting Tool (ERT)

ERT

- Electronically create and submit sampling test plans and reports to regulatory agencies
- Provide a means for regulatory agencies to give comments on a test plan after approval
- Calculate results
- Submit the test results to an electronic report to the regulatory agency



EIEX: Background



ERT Components

ERT Application

- Microsoft Access Database

Project Data Set

- PDS, Microsoft Access Database file generated by ERT application

Excel Spreadsheet

- Can be used as an option for entering manual test data into the ERT.



EIEX: Background



ERT PDS

Contains

Test Plan

Test Reviews

Test Report Data

Test Report Assessment

Exchange

Source test contractor

Facility

State Agency

EPA (CDX)



EIEX: Background



Delaware submitted a proposal to the Exchange Network and was awarded a grant to implement an electronic solution for source testing data





EIEX: Our Solution



Needs

Single Point of Access to transfer information

Versioning

Query Data

Track Metrics

Automate Workflows



EIEX: Our Solution



EIEX Project

Phase 1: Business Case Analysis ✓

Phase 2: Solution Requirements Analysis ✓

Phase 3: Solution Design and Prototype ✓

Phase 4: Construct EIEX Solution ✓

Phase 5: Testing and Implementation ✓

Phase 6: Training ✓

Phase 7: Post Implementation Support

Phase 8: Project Debriefing



EIEX: Our Solution



EIEX Design Solution

Platform

- Amazon Cloud (Amazon Web Services)
- A cost effective platform
- Flexibility of resizable compute capacity
- Backup capabilities
- Site management tools.

Software

- Microsoft SharePoint 2013
- Designed for document tracking projects
- Lends itself to the primary EIEX functions.

Hardware

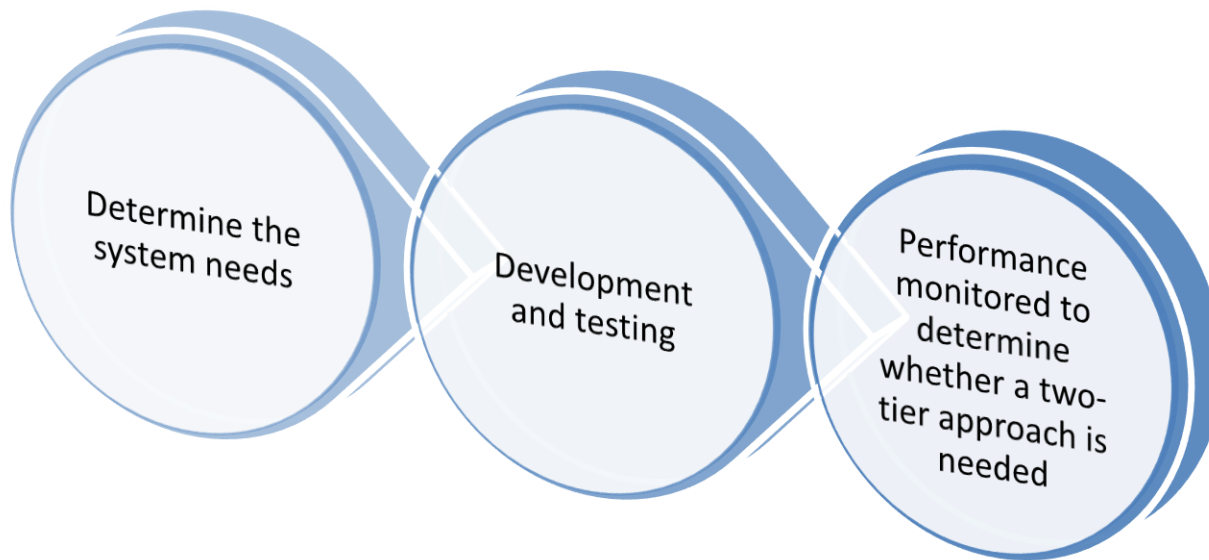
- Single server – Amazon Web Services EC2 server instance, Intel Xeon CPU ES-2670x2@2.49 GHz, 15.3 GB RAM, 32 GB SSD attached storage and Amazon Elastic Block Store(EBS) storage
- Specification may be adjusted depending on requirements of the Agency.



EIEX: Our Solution



Single Server





EIEX: Our Solution





EIEX: Our Solution



Measuring
Performance

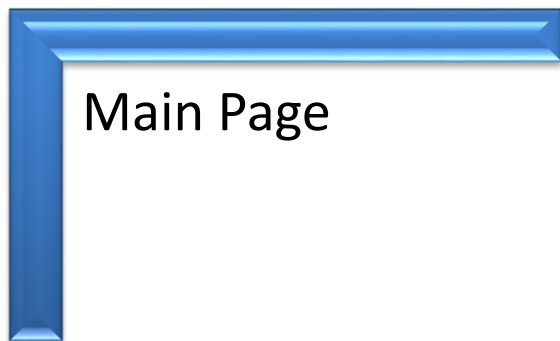




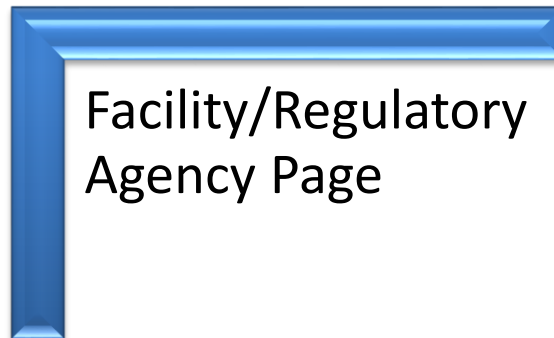
EIEX: Our Solution



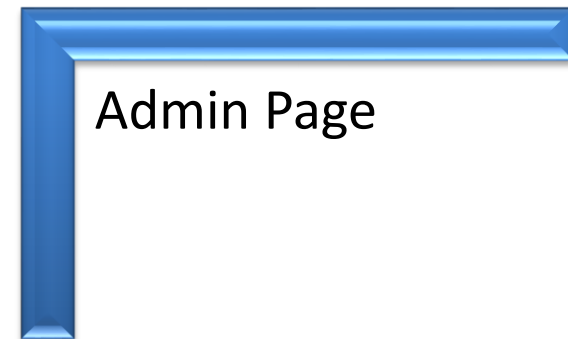
System composed of three primary page types



Main Page



Facility/Regulatory Agency Page



Admin Page



EIEX: Our Solution



3 Sites

- Delaware Regulatory Agency Site
- District of Columbia Regulatory Agency Site
- Pennsylvania Regulatory Agency Site



EIEX: Next Steps



Item	Remark
Identify enhancements to base solution to assist project partners with easy transition to system.	PA and DC provided list of suggestions
Prioritize list of enhancements	
Add other agencies to solution	Communications with EPA
Complete Phases 7 & 8	

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