



Facility Registry Service (FRS) New Facility Data Model

August 16, 2017

2017 Emission Inventory Conference

Matthew Kelly

**EPA's Office of Environmental Information
Data Management Services Division**

Topics

- FRS overview
- Drivers for new model
- New data model – the details
- Benefits/Impacts for stakeholders

FRS Overview

Main goals of FRS are to:

Integrate Data

Improve Data

Provide Data

FRS links facilities and geospatial data across Programs,
States, Tribes and other Federal Agencies

- Based on a consistent set of data elements (address, facility name, location)

FRS Overview

FRS consists of over four million facilities or places of environmental interest

- Allows users to identify...
 - Name, address and location of a facility
 - Permits/regulations that pertain to a facility to evaluate compliance
 - Regulated facilities within a particular sector
- Used for analysis, reporting, enforcement, rulemaking, and emergency response

FRS Overview

What does FRS integrate?

- 33 EPA program systems:

<http://www.epa.gov/enviro/frs-data-sources>

- 54 state systems:

<http://www.epa.gov/enviro/frs-exchange-network>

- 4 tribal systems

- 8 systems from other federal agencies

Related Topics: [Envirofacts](#)

[Contact Us](#) [Share](#)

Facility Registry Service (FRS)

Facility Registry Service (FRS)

The Facility Registry Service provides quality facility data to support EPA's mission of protecting human health and the environment. Learn more about facilities, sites, or places of environmental interest that are subject to regulation.

Search Data



- [FRS Query](#)
- [EZ Query](#)
- [Data Resources](#)
- [Geospatial Data Download Service](#)
- [MyPropertyInfo](#)

Technical Resources



- [Data Model](#)
- [Data Sources](#)
- [Documentation](#)
- [System of Registries](#)

Enter your ZIP to view facilities in your neighborhood:

FRS Contacts

[Matthew Kelly](#)
Kelly.matthew@epa.gov
[David Smith](#)
smith.davidg@epa.gov

FRS on the Exchange Network



- [FRS on the Exchange Network](#)
- [Facility Identification \(FacID v3.0\)](#)
- [Facility Identification \(FacID v2.3\)](#)
- [Central Data Exchange \(CDX\)](#)

Data Stewards



- [Facility Linkage Application](#)(Internal Only)
- [FRS Data Steward Contacts](#)
- [Who's Who in FRS?](#)
- [More Data Stewards Resources](#)

www.epa.gov/frs

[Contact Us](#) to ask a question, provide feedback, or report a problem.

Drivers for New Facility Data Model

- FRS treats everything as a facility, whether facility, well, outfall pipe, or other feature of interest
 - Programs already report sub-facility features to states, EPA
 - FRS only performed master data management for facility and geospatial coordinates - not other features
- Support of more granular facility reporting and analysis needs being requested by EPA Programs (e.g., Combined Air Emissions Reporting, RTR)
- Need more robust history data for facilities and features
 - Provide facility configuration at specific time
- Improved management of organization, contact, and facility relationships

Program “Components”

Stores program-specific version of a “component”

Storing similar information as Core Attributes, but includes Unique ID for Program records

Affiliations

Stores the association of Organizations, Contacts, and “Components”

Organization

- Includes name, DUNS, Mailing Address

Contacts

- Name, Address, Phone Number, Source of data

Associations

Manage and store relationship of “components”

“Component” Attribute tables

Emissions Release Point

Emissions Pollutant

Emissions Process

Permitted Features

Emissions Control

Tribal Entity Attributes

Emissions Unit

Core “Component” Attributes

Attributes that could apply to “Components”

- ID, Type, Name, Operating Status, Address, City, State, Zip, etc.

“Component” covers broad range of data

- Capacity to store complex facility data down to most granular levels

Flattened structure allows model to easily adjust to new relationship of “component” to “component”

Adding “components”, program-by-program, only requires the addition of new attribute tables above

Benefits of New Facility Data Model

- Management of sub-facility information
 - Users can track the relationship between stacks and pieces of equipment to facility
- Historical tracking for facility information
 - Configuration, facility name, ownership, contacts
- Ability to view a “facility profile” from multiple perspectives
 - Program-specific interests, “conceptual groups”
- Providing a context for regulatory requirements
 - Clarification on what the environmental interest is at a facility, program-by-program
- Capacity to better associate facility/components with organizations, contacts

New Data Model Impacts

- Residual Risk and Technology Review (RTR) project
- EIS – FRS integration
- Future state of Combined Air Emissions Reporting
- EPA's E-Enterprise – Facility team
 - Development and piloting of facility data management solutions with states
- Other EPA media (water, waste)

Questions?



Matthew Kelly

kelly.matthew@epa.gov

202-566-1597