Facility Data Integration Integrated Project Team: The Next Generation—Collaborating to Improve Data Quality and Our Services

Lee Kyle, *US EPA*, and Kimberly Hoke, *Missouri DNR*

2015 Exchange Network National Meeting
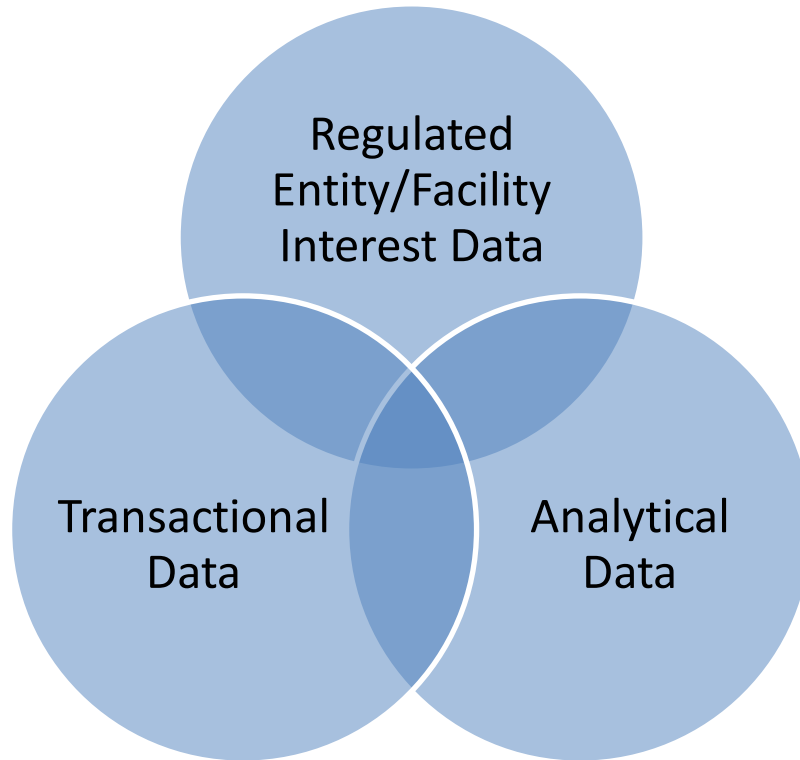Supporting the Business of Environmental Protection

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

http://www.exchangenetwork.net/en2015

ABSTRACT

Our ability to effectively protect human health and the environment often comes down to where regulated entities are – facilities, sites, and the activities occurring at those locations. Many states still struggle with effectively integrating all of their facility information to get an accurate and complete picture of a facility's potential impact on the environment. This integration is even more complicated when we try to share information among and between multiple states and EPA. The Facility Data Integration IPT was created to figure out how we can collaboratively address this issue. This presentation will introduce the purpose of the Facility Data Integration IPT and outline the IPT efforts to-date.
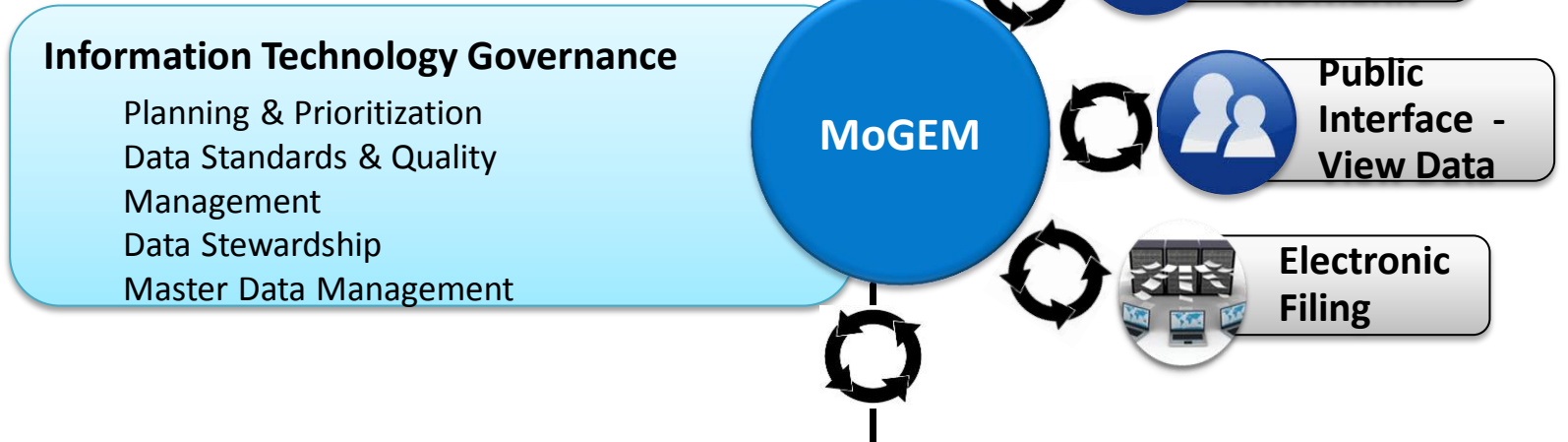
Environmental/Regulatory Data

Regulated Entity Information/Facility Interest Information - Current State

| Clean Water Data | Drinking Water Data | Solid Waste Management Data | Hazardous Waste Data | Air Pollution Control Data | Environmental Services Data | Underground Storage Tank Data | Other State-Specific Data |

Are we speaking the same language?

Missouri Gateway for Environmental Management

Information Technology Governance

Planning & Prioritization
Data Standards & Quality Management
Data Stewardship
Master Data Management

MoGEM

Public Interface - View Data

Electronic Filing

Program Applications

Water Protection Data	Geological Survey Data	Solid Waste Management Data	Hazardous Waste Data	Air Pollution Control Data	Environmental Services Data	Land Reclamation Data

Shared Services

Fees & Billing → Permitting → Registration → Inspection → Enforcement

MISSOURI DEPARTMENT OF NATURAL RESOURCES

EPA

FRS and E-Enterprise – EPA's Approach

1. Build a network of data stewards, provide them with data quality tools, and gather their complex business requirements

    FLA. 140 data stewards at EPA, states and municipalities

2. Enter high quality data at the source

    FRS/CDX services for direct reporters

3. Share core facility "profile" information with states

    Use case: reporter at a facility

    Facility IPT with States, new data model

4. Harmonize core facility data elements

5. Link facilities and contacts with their corporate parent organizations

What Does FRS Need in the Facility "Profile?"

"Things" (objects of interest/facilities)

regulated & non-reg. business processes, including emission points, boilers, storage facilities, mobile sources, sampling points, etc. [Need permanent IDs]

- Where they are

point locations, polygons, on a complex site/campus. [Sites need permanent IDs]

- Why we care about them (Environmental Interests)

regulation, permit, Emergency response, etc.

- Attributes about them

equipment/process details, NAICS & SCC codes, additional attributes for determining regulatory requirements. Also, contacts [IDs] and parent companies [IDs]

- Associations between them

'Thing 2 is a component of Thing 1', 'Thing 3 flows to Thing 4', 'Company X owns Thing 1', 'Contact A is from Company X', and 'reports for Thing 1', etc.

E-Enterprise

FACILITY DATA INTEGRATION IPT

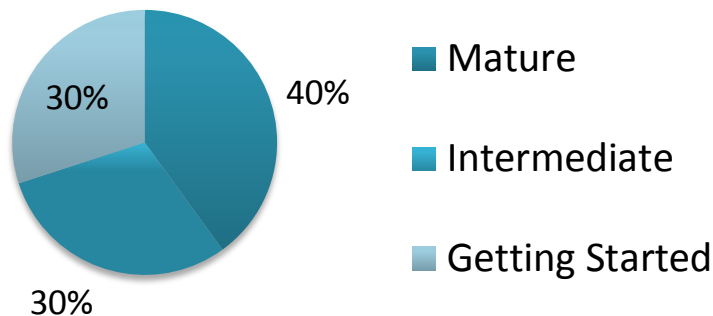**HOW DO WE DO THIS ACROSS THE ENTIRE ENVIRONMENTAL REGULATORY ENTERPRISE?**

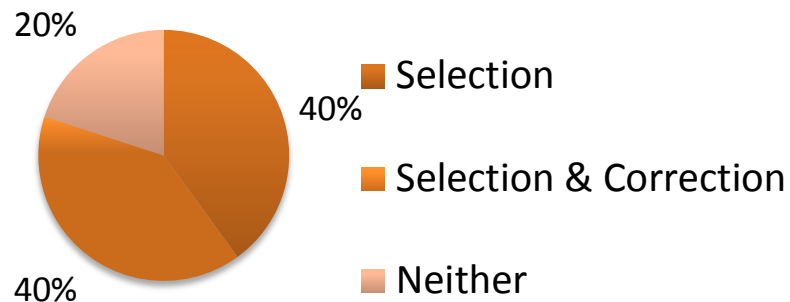# Facility Data Integration IPT (Integrated Project Team)
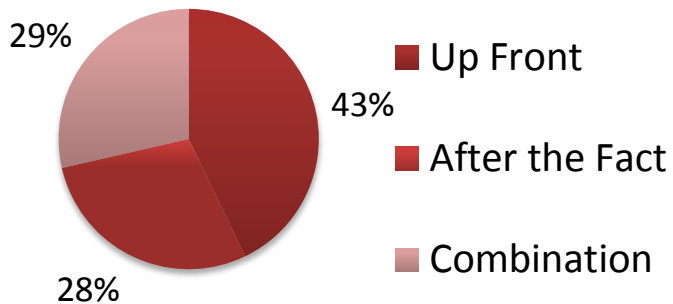
Array of Experience - IPT Survey Results

Maturity Level

- Mature — 40%
- Intermediate — 30%
- Getting Started — 30%

Data Presented

- Selection — 40%
- Selection & Correction — 40%
- Neither — 20%

Reconciliation Stage

- Up Front — 43%
- After the Fact — 28%
- Combination — 29%

Formal Policies & Processes

- Exist — 22%
- Do Not Exist — 33%
- Exist But Limited — 45%
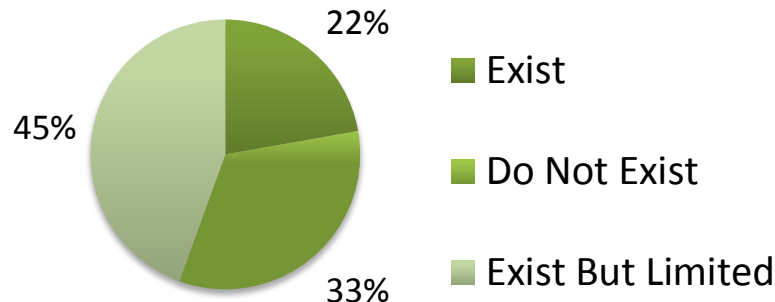
Array of Experience - IPT Survey Results

- Lessons Learned
  - Management of historical data and campus style facilities
  - Communications between programs is key
  - Address regulatory constraints
  - Minimize number of data elements that are common across divisions
  - Understanding of what is on the ground is fundamental
  - Buy-in from management is essential
  - Engage staff that have an interest in data integration and reconciliation
  - Include related tasks in job descriptions
  - Agree upon common definitions
  - This is an ongoing and long-term process

- Challenges
  - Reconciling and understanding the differing purposes and interest in data
  - Providing flexibility for unique circumstances
  - Regulatory differences in how facilities are defined
  - Training staff
  - Aligning information technology with established business rules
  - Determining authoritative source
  - Defining how information should be shared and used
  - Eliminating duplicate data
  - Getting all parties to look at the big picture
  - Making participation easy
  - Fear of losing control of data and implications at the program level

EPA

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

12

Join Us For Our Next Call
October 8, 2pm Eastern

Kimberly Hoke, IT Policy Director

Missouri Department of Natural Resources

573-751-6621/573-645-8904

Kimberly.hoke@dnr.mo.gov

Lee Kyle, Chief

Information Services and Support Branch, IESD, OIC, OEI, EPA

202-564-4622

Kyle.lee@epa.gov