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Overview of the Regulatory Landscape

- Federal laws typically apply to "significant" sources
- Most states regulate a bigger universe of sources than federal law requires (non-Title V sources, no-discharge systems, solid waste facilities, hydraulic fracturing)
- Federal database contain sub-sets of info on "significant" sources for most programs (UST does not have one that track regulated UST)
- States are all over the map on the existence of state systems or reliance on federal systems to manage delegated programs

Overview of the Regulatory Landscape

- Some states have integrated systems by facility, some don't, EPA has stove pipe systems and relies on Facility Registry System data (voluntary reporting) from states to created facility views or mashes data from EPA systems to create this view
- Most states and EPA are GPSing facilities
- No good way to manage a "corporate" view of facilities
- Once you build them, you have to maintain them and keep upgrading them (disaster recover planning and system reliability obligations)

Regulated Entity to Regulator Reporting

- Reporting requirements established via state and federal statutes, regs and/or permits
- Some goes to delegated/authorized states, some goes directly to EPA (GHGs, fuels), some data comes to both
- Some data comes in by paper, some via email, some truly electronically via web applications (GHGs)
- So… Regulator dealing with multiple mechanisms (CROMERR , pins, passwords and smart questions) and duplicative reporting obligations

State Regulator to EPA Reporting

- Reporting obligations in grant workplans
- Reporting obligations can apply to activities not funded by grant workplans
- States either direct enter data into EPA system or use EN to flow data from server to server (pushed by states to eliminate duplicate data entry into state and federal databases)
- Still some paper reports in some programs

Data Mining

- **Use state(s) and federal databases and websites**
- Timely permit renewals
- Violation determination for enforcement (discharges vs permit limits; the company has same permits at other facilities)
- Identify facilities that are not permitted but should be (NAICS codes and other regulated activity)
- Emergency response
- Validation of permit variations (i.e. other states write permits differently)

Data Mining

- Upstream dischargers and downstream impacts (spills that could affect PWSs)
- Identify surface water impairment sources
- Emissions inventory for air permitting and non-attainment SIPs (across state lines and involve typically unregulated sources)

Glimpse into the Future
E-Enterprise

- Joint state/federal partnership
- More electronic reporting ultimately to a federal database (NPDES Electronic Reporting
- Better interoperability between state and federal systems – easier for regulated community
- Shared services and solutions (build once use many times; Virtual CROMERR; eDMR; data mining tools, EN pushes and pulls data)
- Better customizable data access for the public
- Policy issues – which datasets and why; streamlined or consolidated; response to data (particularly violation determinations) in delegated states
- Deployment of real-time advanced monitoring tools (cameras that detect VOC emissions)
- Hopefully state and federal budgets will support the upfront development costs to realize the long-term cost savings