



**EPA Office of Compliance
Enforcement Targeting and Data Division**

AFS National Workshop

Washington, DC

July 24-28, 2006

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Creating Partnerships and Making Commitments

OECA - OEI
Building Relations

Take Away Message

- EPA's Building an Enterprise Architecture
- States and EPA have Built an Exchange Network
 - Grant Awards in 2006
 - Grant Program in 2007
- Facility Plays a Key Role in Both

We Want You to Know Where We Are Going!

EA Components

- **Technology**

- **Data**

- **Service**

OEI ENTERPRISE TOOLS

Identity & Access Management Technologies

Portal Technologies

Geospatial Technologies

**Business Intelligence
& Analytical Tools**

Central Data Exchange (CDX)

**Extract, Transform
& Load Tools**

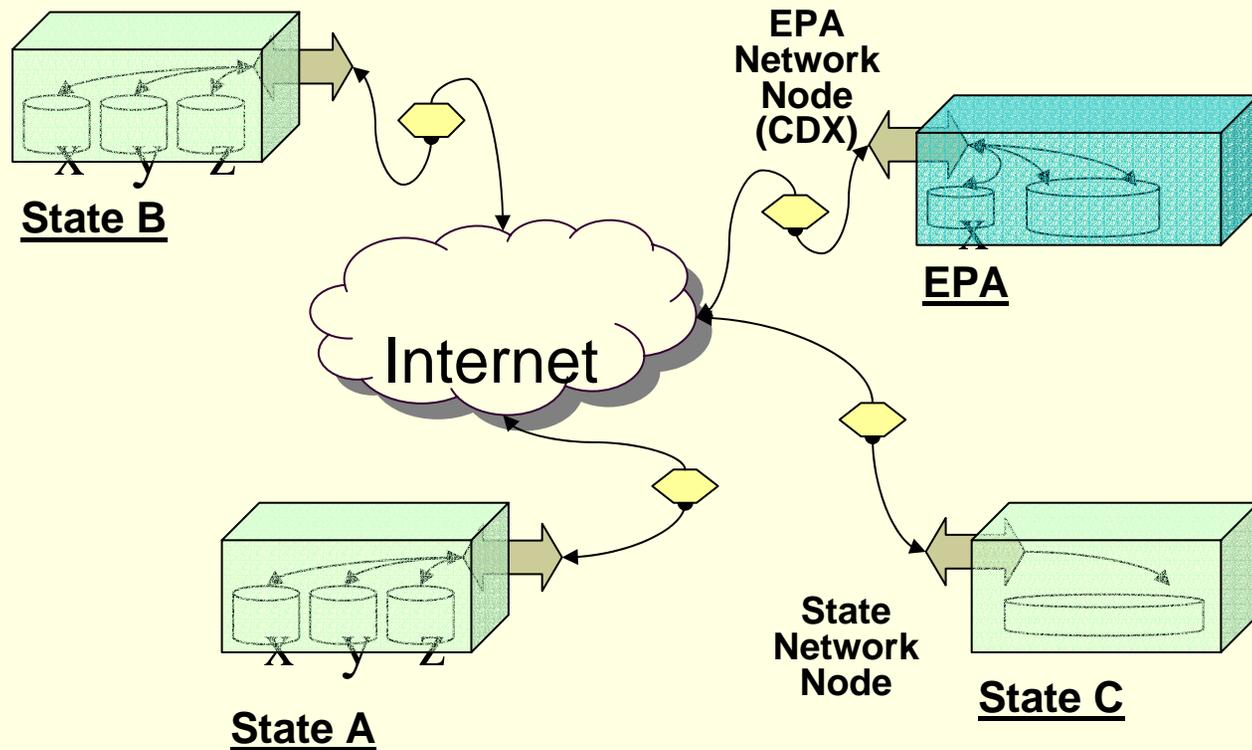
System of Registries

Enterprise Content Management Tools

EnviroFlash

Web Services Publishing House

The Exchange Network for Environmental Information



↔ Agency Network Node

◇ Data Exchange Template

Types of Data Exchanges Currently Occurring on the EN

State-to-EPA

- Facility Data to EPA's FRS database
- Drinking Water Data to EPA's SDWIS database
- Hazardous Waste Data to EPA's RCRAInfo Database
- Air Emissions Data to EPA's NEI Database

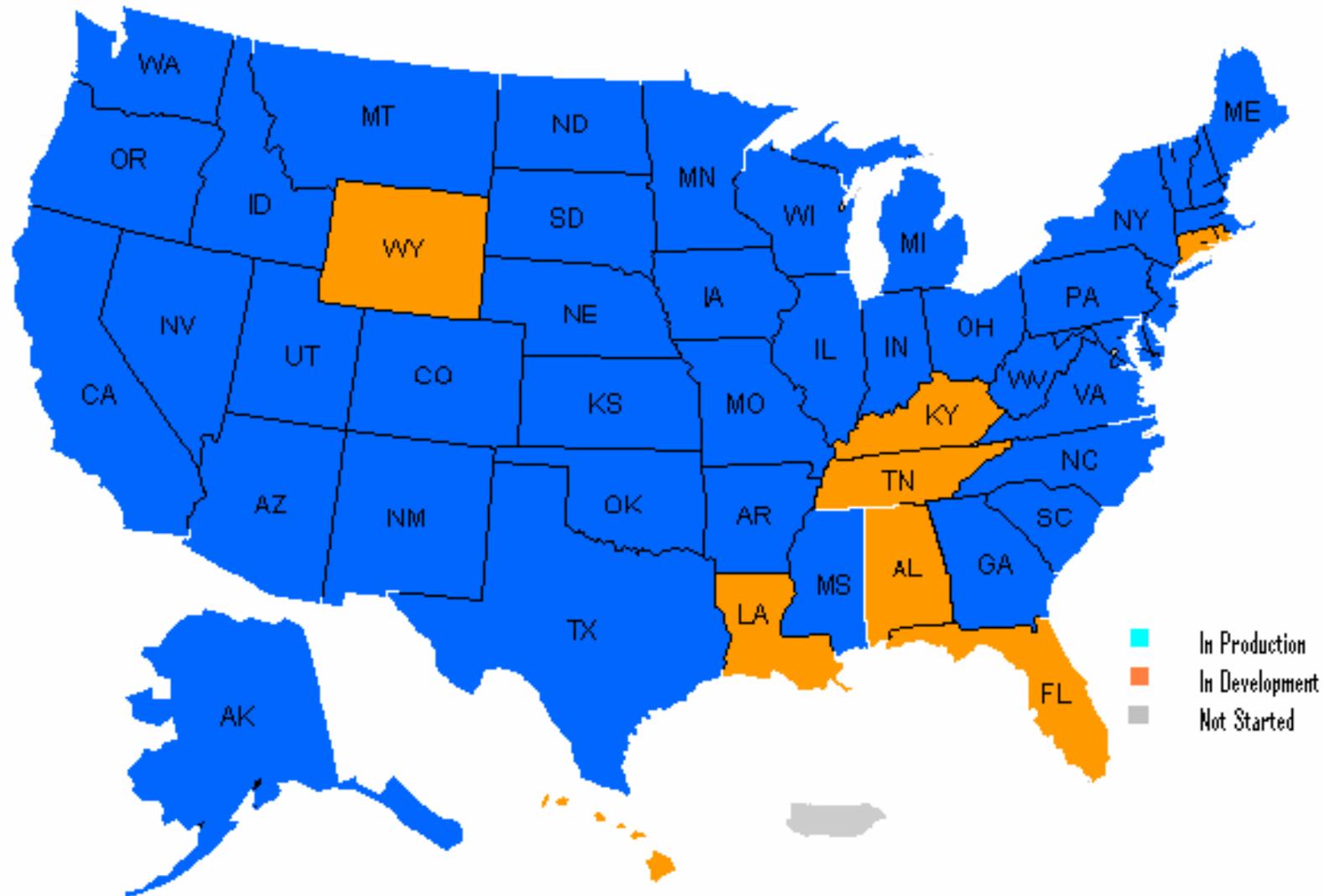
State-to-State

- Environmental Data to Health Departments
- Water Quality Data
- Hazardous Waste Transporter Data

Others:

- State Beach Data to Earth911 for public access
- Drinking Water Laboratories to States
- TRI Data from EPA to States
- Substances and Chemicals data from EPA to States

Exchange Network Nodes



October 2005 Exchanges' Implementation Progress



■ Traditional Exchanges from States to EPA

AFS - Air Permits/Compliance

AQS - Ambient Air Quality **AZ DE KS NC NJ PA VA WI TR**

NEI - Air Emissions Inventory **NE DE MA TX NJ IL NV NM OR VA KS NC OK PA**

PCS - Water Permits/Compliance **MI VA IA DE WV OR WA**

RCRAInfo - Hazardous Waste **MS KY MA DE OR PA NH MD AZ KS MT NJ NC WI**

SDWIS - Drinking Water Quality **LA ME NY MD IL NE DE KS PA SD ND OH OK UT WI**

STORET - Water Quality **MI OR TX**

FRS - Facility Identification **WA OR WI WV MS SC NH KS OH PA AZ CA DE ID IL IN MI NJ NE NC ND SD IA NY CO VA OK NV TX VT NM MO MT MN ME UT MD**

● New Exchanges

Ambient Water Quality **WA OR ID AK**

Haz. Waste Shipments **WA OR MI NJ MN MA**

Drinking Water Quality **NH NJ ME VT RI**

Toxic Release Inventory **VA IN SC MI OR DE PA**

Beach Monitoring **DE NH NJ GA CA NC OH**

Ambient Air **NJ NY OR WA**

Health **WA OR NY CA AZ MD NE**

TBD

▲ Nodes

**OR WV MI WI MS SC NH WA KS DE NE AZ ID IL MN NC
NV GA KY OK TX UT VT OH NJ PA IN LA ME MD MA NM
MO CA NY ND CO MT VA WY IA AK SD**

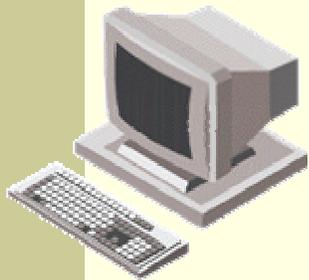
COLOR KEY
 In Development
 Operational

CDX

- CDX is the single gateway to/from EPA data, provides the ability for EPA to collaborate on a national level
 - **Comprised of two distinct variants**
 - CDX Web
 - CDX Node
- Is the EPA point of entry on the Exchange Network
- Provides Central Services

Functions and Services Provided by CDX

PC & Internet
Browser



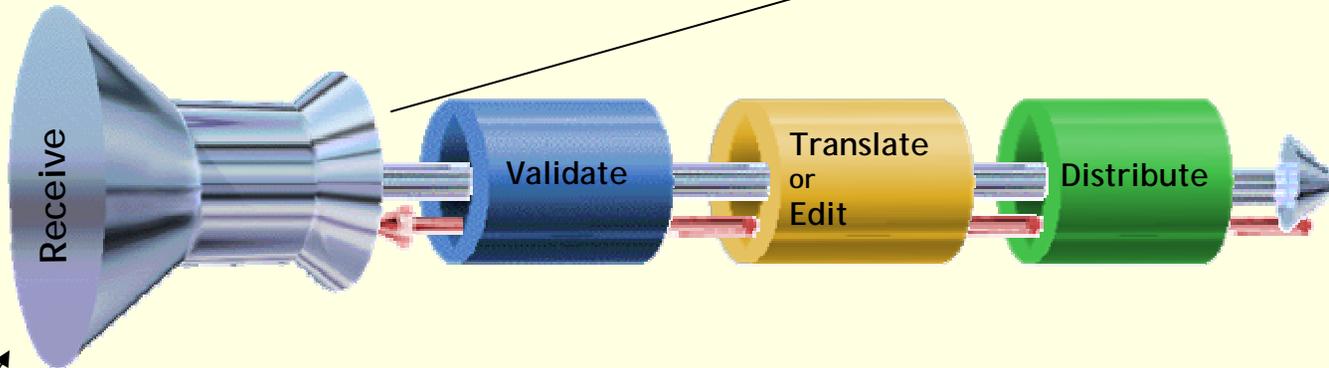
Register & Support
Users



Archive
Data



CDX Web
Submits
Web Forms
XML, Binary
or Flat-File



EPA
& Other
Systems

CDX Node
Web Services



CDX Central Services

- **Enables submissions to the Exchange Network including EPA.**
 - **Security**
 - **Directory and Application Repository**
 - **Records Management**
 - **Test Environment and Help Desk**
- **Enables environmental stakeholders to reduce time and money spent on reporting and/or publishing Data.**

Now Lets Talk Data



Facility Registry System

The Agency Repository of Places of Environmental Interest

- Creates a single, integrated set of facility identification information
 - Environmental Interests
 - Locational Coordinates
 - Affiliation
- Provides links to EPA's media information systems
- Conforms to the Data Standard
- Verifies the quality of data, including the linkages to EPA and State systems

FRS – *All about key identifiers*

- Name and Location
- Contact and Organization / Mailing Address
- Program Identifiers
- Latitude / Longitude
- Other key informational elements
 - HUC,
 - Tribal Lands,
 - Federal Facilities
 - Environmental Justice
 - Environmental Interest Type
 - Industrial Codes

FRS Initiatives

- Locational Improvement
- New Data Sets
- Tribal Land Indicator
- Federal Facility Repository
- TRI and AIR Program Analysis
- New State Data Flows

Locational Improvement

- Geo Coding
 - Deriving Lat/Long through street address

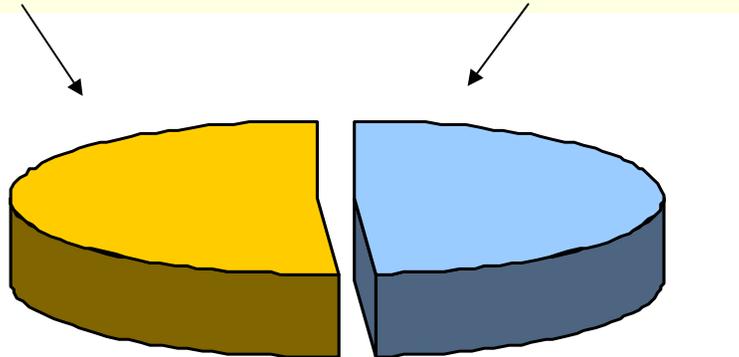
- Bounding Boxes
 - Eliminating Lat/Longs lying outside of the records state and county

FRS Universe

May 2005 Baseline

51% without
latitude/longitude
859,042 records

49% with
latitude/longitude
825,854 records

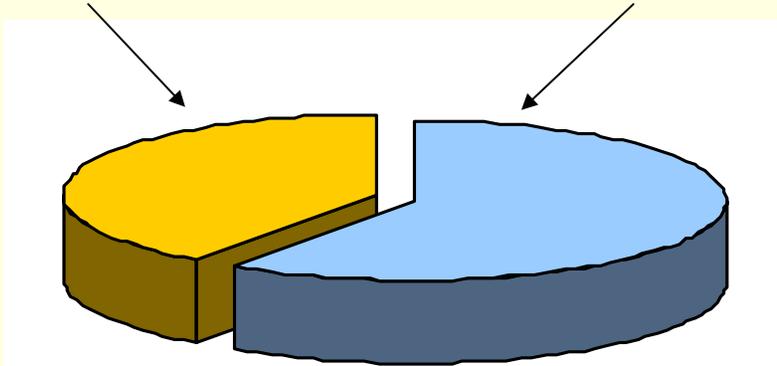


1,684,896 FRS

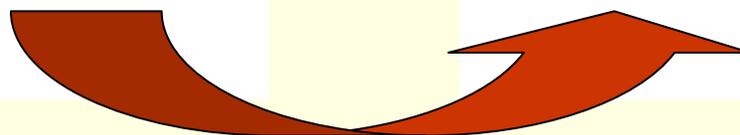
July,6 2006 Baseline

39.5% without
latitude/longitude
777,925 records

60.5% with
latitude/longitude
1,157,041 records



1,913,469 FRS



MASS CLEAN UP

Removed locational points outside of U.S.
Land/Territories and Zip Code centroid points
previously entered by contractors

AFS

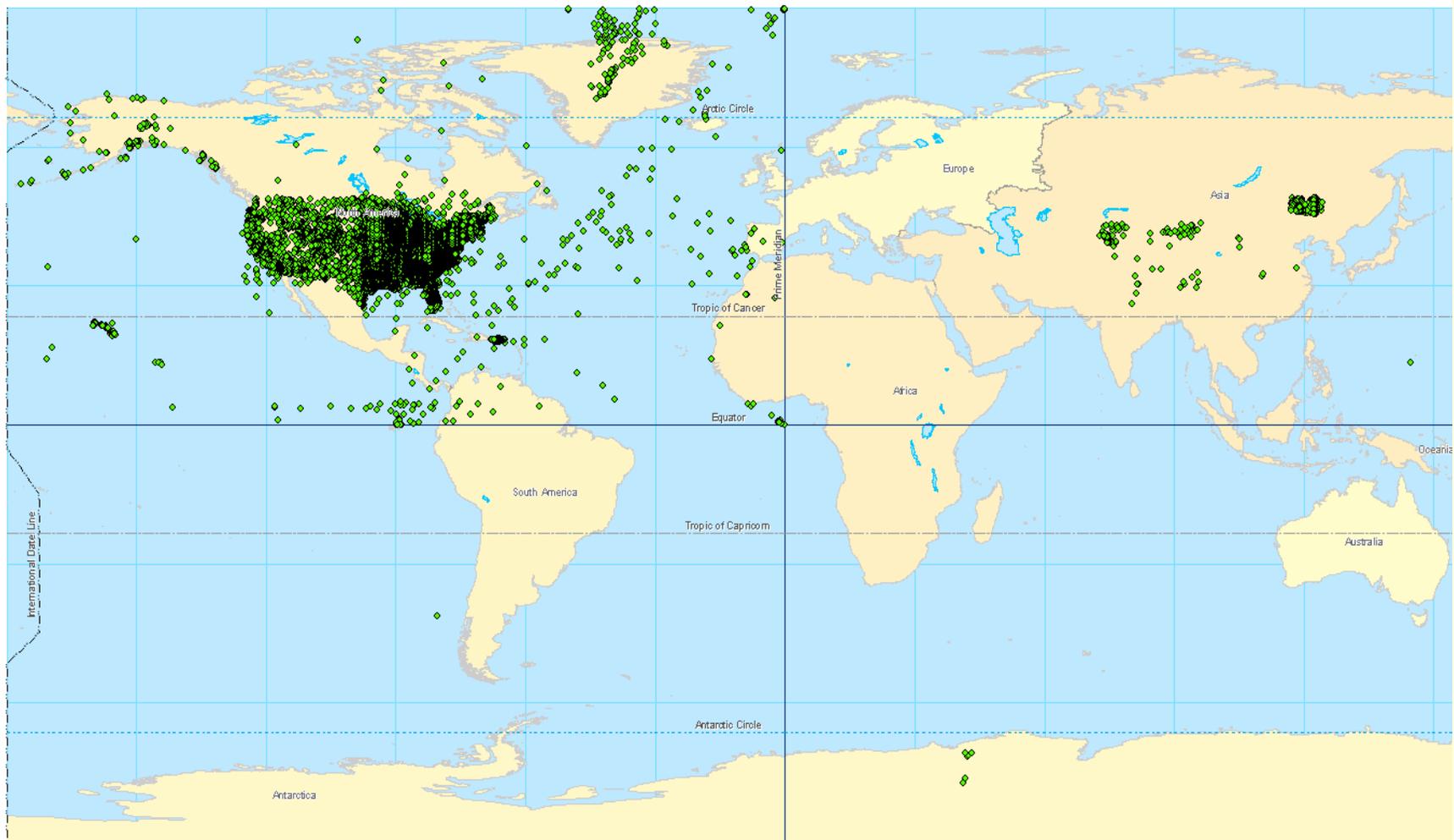
Locational Data		
	With	Without
Air Majors	18015	4258
Air Minors	0	39421
Air Synthetic Minor	20715	6313

Only 84.2% of AFS Major records have locational data. Most Major Programs (Superfund-NPL, RCRA-TSD, CAA-RMP, TRI, PCS-NPDES Majors) have percentages in high 90s.

The data gap needs to be corrected by working with states so that locational data can come in through the Facility data flows.

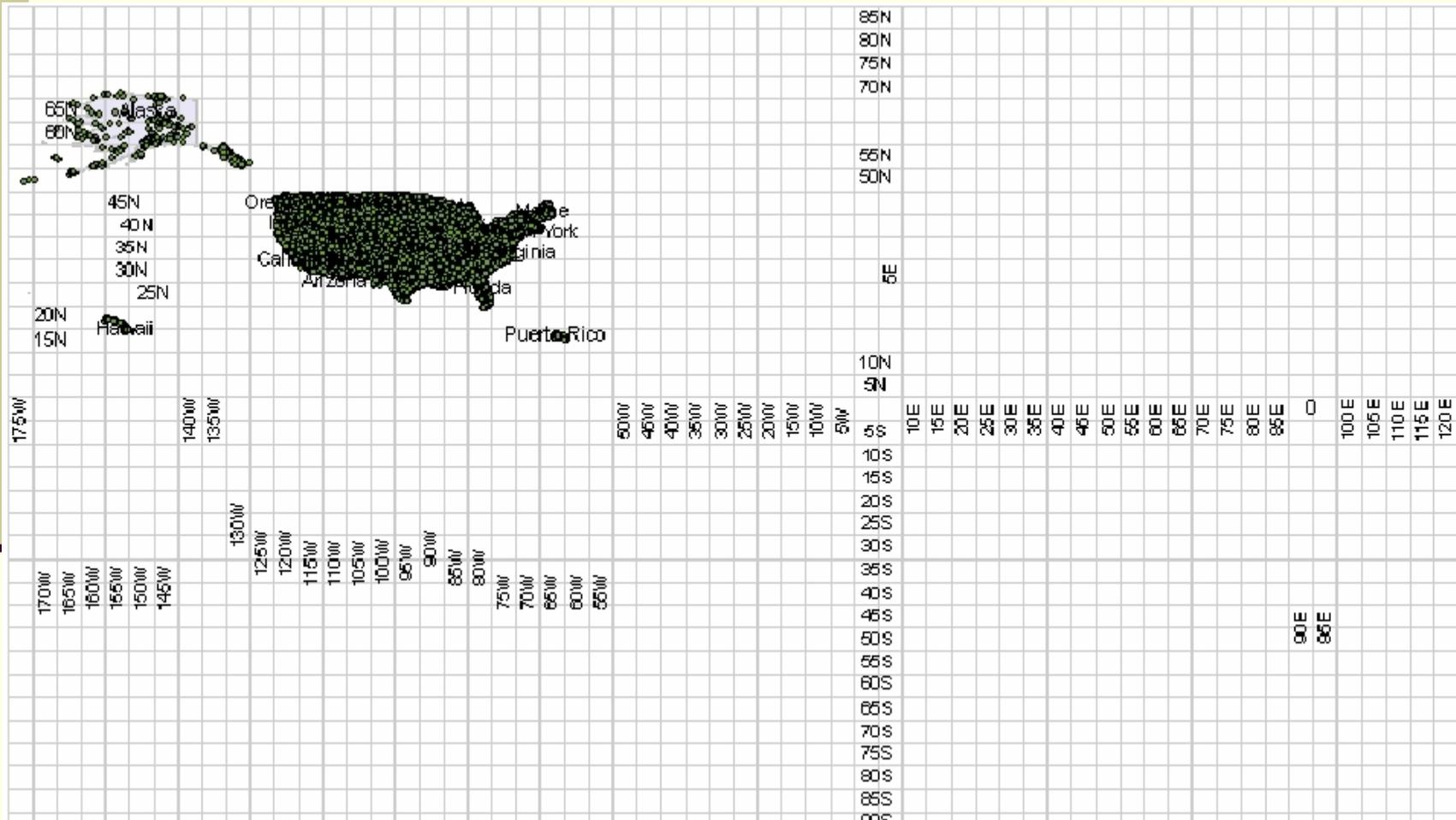
Locational Improvement

March 2006



Locational Improvement

July 2006



Site Locator Tool

Your goal: Get the center of your facility's production area centered in the map/photo window at the maximum zoom level. This will allow you to get the most precise coordinates.

Zoom-in/out: Select Zoom In, Zoom Out Bar on the right side.

Recenter: When you are not at the maximum zoom-in level, click on the map/photo to center.

Move map/photo: Click the arrow controls around the map/photo window to move in the direction you choose (North, South, East or West or NW, NE, SW, SE).

Mark site: Once you are at the maximum zoom-in level, select from **Site Description**, click the corresponding location on the photo. This will mark the coordinates in the Latitude and Longitude fields.

Confirm site: Once you are satisfied with marked coordinates for your facility, you can click **Confirm new site** button to submit the latitude and longitude data into EPA facility database. You can also confirm the existing coordinates value by selecting a facility from the list to the right on the map and click **Confirm existing site** button.

New Data Sets

- FRP - Facility Response Plan
- UIC – Underground Injection Containment
- UST – Underground Storage Containers
- E-Grid
- Brownfields Properties
- School

Tribal Lands

- FRS is working with all 10 regions and American Indian Environmental Office to database tribal facilities.
 - Key Identifiers
 - Tribal Land Indicator
 - Tribal Name
 - Tribal Land/Reservation
 - Without Good Lat/Long, it is hard to correctly flag the Facilities! Are AFS properly accounted for?

Federal Facilities

- Enterprise Architecture positions FRS as the enterprise repository of Federal Facility data.
- FRS has over 7,800 Federal Facilities Listed, we need to ensure AFS is Properly accounted for.

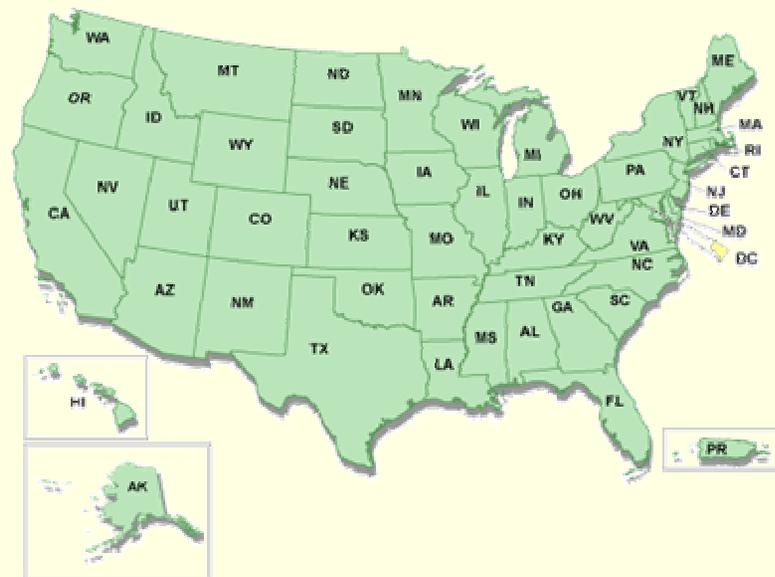


What is the FRS Relationship between TRI and AFS?

- Is there Opportunity for Compliance if we Shared the Data among the 2 or 3 Air Programs?
- We Need to Assist the Agency's Analysis among all the AIR/Emission Data!
- What should FRS be Looking At? What can FRS Do?
- What Can You in AFS Do to Help Us?
 - Improve Addresses,
 - Be Come Part of Your State's Master Record
 - Work on Defining all Data to Data Standards

New States

- CY 2006 - FL, AL, KY, WY, GA and HI
- Cy 2007 – All the rest!



Cross-Media Electronic Reporting Rule (CROMERR)



CROMERR

- Cross Media Electronic Reporting Rule
 - legal framework for electronic reporting under all of EPA's environmental regulations.
 - Ensures that electronic reporting of environmental information does not hinder compliance activities by ensuring that electronic signatures have the same legal force as their “wet ink” counterparts.

What Rule Does - 1

- Removes regulatory obstacles to e-reporting;
- Sets requirements for e-reporting to EPA;
- For EPA-authorized state, tribal and local government programs:
 - Sets mandatory standards for e-reporting;
 - Goal is to preserve program enforceability.
 - EPA will also meet these standards.
 - Requires EPA approval to implement e-reporting;
 - Creates streamlined approval process for e-reporting implementations.

What Rule Doesn't Do

- Does not set requirements for e-record-keeping;
- Does not make e-reporting mandatory;
- Does not prohibit mandatory e-reporting;
- Does not affect reporting on magnetic/optical media;
- Does not affect most state-to-EPA data transfer.
- Does not set specific requirements for e-reporters to authorized state, tribal or local government programs.

Impact on Affected Primacy Programs

- Technology-neutral performance standards for systems that receive E-reports:
 - to maintain e-document integrity, and
 - to ensure enforceable e-signatures (if there are signatures).
- Current e-reporting will not be disrupted.
- Specific requirements for e-reporters (water systems and labs) are still set by the program.
- Current transfers of data to EPA are generally not affected.

Take Away Message

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- States and EPA have Built an Exchange Network
 - Grant Awards in 2006
 - Grant Program in 2007
- Facility Plays a Key Role in Both
- Are you CROMERR?

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We Are Going!

Questions?

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