# Data Standards EPA's Direction





Oscar Morales
Director Collections Strategies Division
Office of Environmental Information

July 24, 2002



#### Purpose



To provide an introduction to the EPA information exchange efforts that are facilitated by data standards and open web-base registries.



#### Overview









- Mission
- Environmental Health Tracking Network
- National Environmental Information Exchange Network
- Data Standards
- Environmental Data Registry
- Environmental Information Management System
- Grants



The mission of the U.S. Environmental Protection Agency (EPA) is to protect human health and to safeguard the natural environment – air, water, and land...

Ten Strategic Goals
#7 Improve Environmental
Information



# Environmental Health Tracking Network (EHTN)









#### Purpose

- national health tracking system for chronic diseases such as asthma, birth defects, cancer and developmental disorders
- Lead agencies
  - Centers for Disease Control (CDC)
  - Agency for Toxic Substances and Disease Registry (ATSDR)
- Participating Agencies
  - Environmental Protection Agency
  - others



#### **EPA & the EHTN**







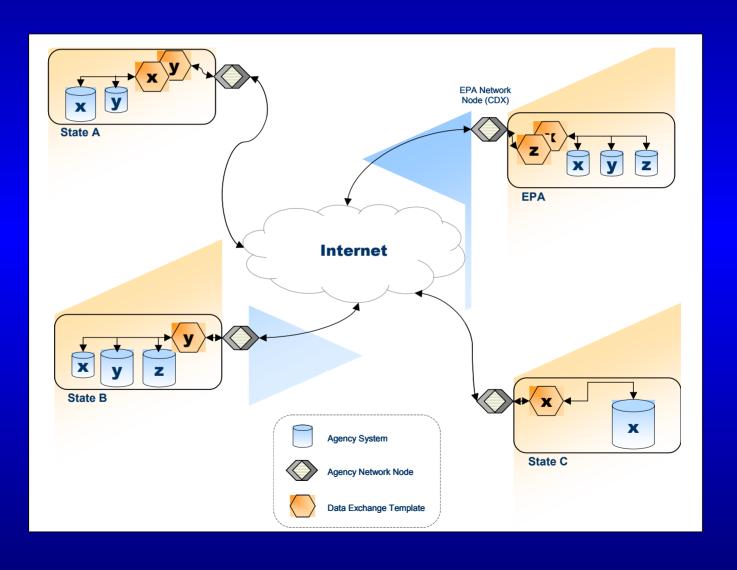


- HHS and EPA are formalizing a partnership with a Memorandum of Understanding
- EPA has regulatory and ambient environmental information for the network
- EPA has experience in partnering with States to build a National Network



## National Environmental Information Exchange Network







# NEIEN Organizational Framework Components









- State/EPA Information Management Workgroup
- Environmental Data Standards Council (EDSC) and other Action Teams
- Network Steering Board
- Trading Partner Agreements
- Internal Organizational Policies
- Resource Contributions



# NEIEN Technical Framework Components









- Network security
- The end-to-end information exchange process
- Connections between the Network and existing information systems
- Network Flows
- Data Exchange Templates
- Data standards
- The Network Registry
- Network Nodes
- Network Technologies
- Network Pilot Projects



#### Why Are Standards Important?

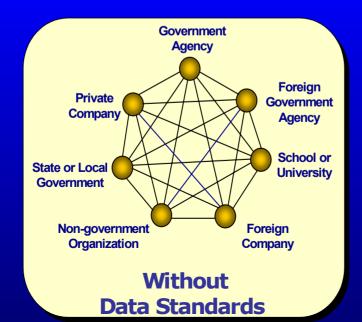


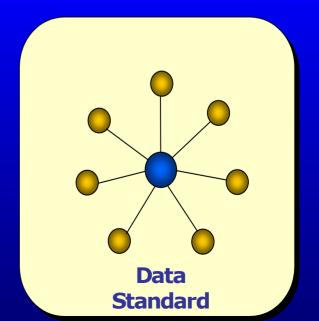






- Support coordination of data development, use, sharing (exchange), and dissemination
- Help to provide accurate, consistent and precise (meaningful) data
- Facilitate information collection
- Provide the basis for an Enterprise Architecture







#### Status of EDSC Standards



#### EDSC Final Standards

- Biological Taxonomy
- Chemical Identification
- Date
- Facility Identification
- Latitude/Longitude
- SIC/NAICS Business Classification
- Permitting
- Enforcement and Compliance
- Standards Under Development
  - Tribal Identification
  - Contact
  - Water Quality Monitoring



#### **Standards Process**









- Environmental Data Standards Council establishes an Action Team
- Team composed of EPA, State, and Tribal representatives
- Team develops a standard containing a core set of elements for broadest applicability
- Standards are closely linked to other data standards
- Standards include XML tags



#### Barriers to Implementation









#### Internal legacy data

- Vast amounts of widely divergent, sometimes overlapping, data
- Complex and fragmented systems environment
- Inconsistent data collection and documentation practices
- External interchange data
  - Lack of standards implementation among data exchange partners



### Environmental Data Registry (EDR)









#### What is a Data Registry?

A place to keep facts about characteristics that are necessary to clearly describe, inventory, analyze, and classify data.

#### What is the EDR?

A comprehensive, authoritative source of reference information about environmental data. It provides information on the definition, origin, source, and location of environmental data. It is a set of related Web-based tools that provide information on metadata, data standards, chemicals, biological organisms, and terminology.



# Environmental Information Management System (EIMS)









- Descriptive information (metadata)
  - data sets
  - databases
  - documents
  - models
  - multimedia
  - projects
  - spatial information



#### **EPA Grants**









- Science to Achieve Results (STAR) Program
- National Information Exchange Network Grant Program
- Small Business Innovation Research (SBIR) Program

We hope the CDC-EPA collaboration is the first of many efforts.

Oscar Morales
U.S. EPA
morales.oscar@epa.gov