



Introduction to Environmental Information Exchange Network

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State/EPA Information Trends

- High demand for access to environmental information among partners
- Current stove-pipe approaches to information exchanges are inefficient and burdensome
- States modernizing information systems and migrating away from use of EPA national systems
- Use of integrated information technologies and approaches is on the rise



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States and EPA Partner to Address Trends and Challenges

- States and EPA were dealing with issues in a splintered and non-cohesive manner
- The State/EPA Information Management Workgroup (IMWG) formed in 1998
- IMWG priority issues:
 - Use information technology to increase the effectiveness of environmental management programs internally
 - Improve access
 - Share and use information efficiently and effectively



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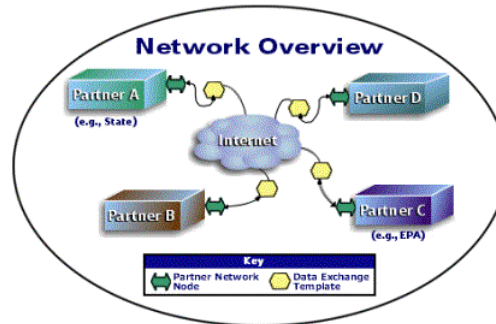
State/EPA Shared Vision

The States and EPA are committed to a **partnership** to build locally and nationally accessible, cohesive and coherent environmental information systems that will ensure that both the public and regulators have **access** to the information needed to document environmental performance, understand environmental conditions, and make sound decisions that ensure environmental protection.



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What is the Exchange Network?



An Internet and standards-based method for exchanging environmental information between partners.



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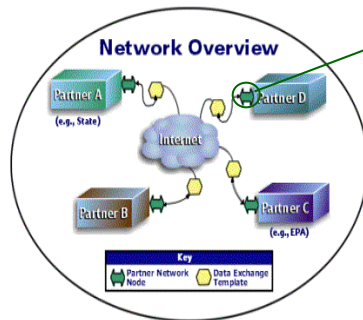
Exchange Network Foundations

- Data standards
- Partners agree on exchange data type, frequency, and method
 - Trading Partner Agreements
 - Registered XML schema
 - Partners exchange data over a secure network via each partner's data transfer point, or "Node"



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Data Transfer Nodes (Web Services)



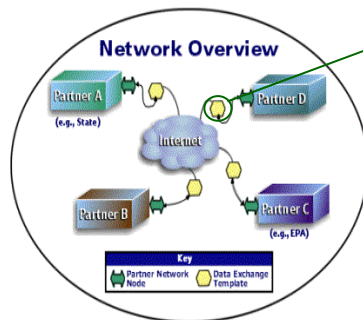
Nodes

- Hardware and software used to exchange information on the Network
- Use the Internet, a set of protocols, and appropriate security to respond to authorized requests for information
- Send the requested information in a standard format, XML
- Each partner has only one Node



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Data Exchange Templates/ XML Schema



Data Exchange Templates

- Describe format of data being exchanged
- Consist of XML schema
- Draw upon data standards
- Potential to reuse XML schema modules

Schema are developed for each exchange type (e.g., Discharge Monitoring Report data)



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Trading Partner Agreements (TPAs)

- TPAs are made between exchange partners
- Identify data exchange frequency
- Identify exact data types/fields exchanged
- Uses XML schema

TRADING PARTNER AGREEMENT

Between the Nebraska Department of Environmental Quality hereinafter referred to as NDEQ and the U.S. Environmental Protection Agency Region VII acting as a representative for the U.S. Environmental Protection Agency and hereinafter referred to as EPA for their participation in sharing data as part of the Facility Identification Integration Activities. The use of the term Agency will refer to both partners.

I. PURPOSE

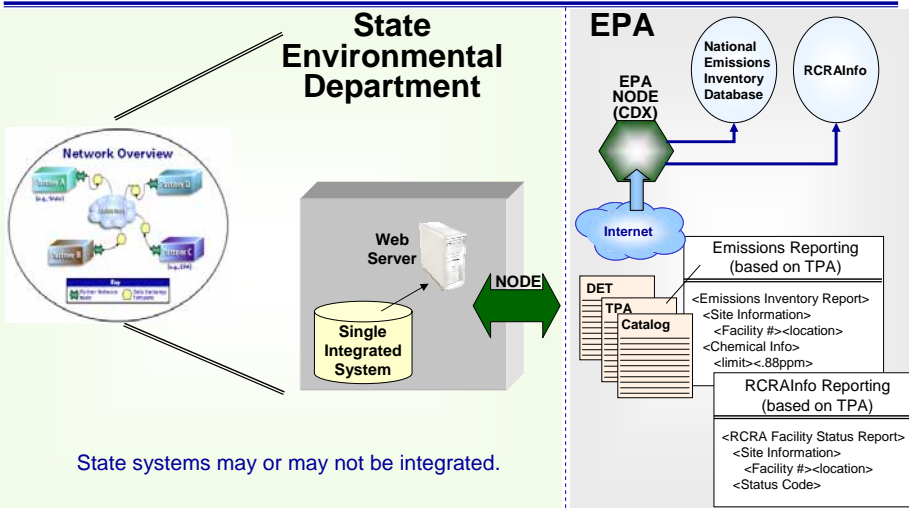
The purpose of this Trading Partner Agreement (TPA) is to identify the activities that NDEQ and EPA will undertake as partners of the Facility Identification Integration Activities. As partners, each will work cooperatively to implement an exchange of facility identification data pertaining to Nebraska sites/facilities for incorporation into the Nebraska Integrated Information System (NIS) and the EPA Facility Registry System (FRS). Each partner will provide internet access to the data, making it available for use by each partner, businesses, interest groups, and the public in general.

II. BACKGROUND

The partners represent Federal and State Government whose responsibilities in general are for the protection of the environment. As part of their responsibilities, the partners collect and maintain data to support their agency's environmental program interest activities. The consistent identification of facilities within each agency and between agencies is key to the proper use of other data collected by agency environmental programs. It ensures that NDEQ and EPA recognize the same universe of regulated facilities in Nebraska and how these facilities relate to environmental program interests, and their associated data.



How the pieces fit together



What Kind of Data or Information Exchanged?

- Driven by partners
- EPA/State environmental partners to establish data flows for all reporting data (e.g., PCS data)

There are three types of data flows identified

- State-EPA Regulatory (e.g., PCS data flow)
- Routine bilateral
- Ad hoc or interactive flows



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Breadth of Exchange Network

water examples

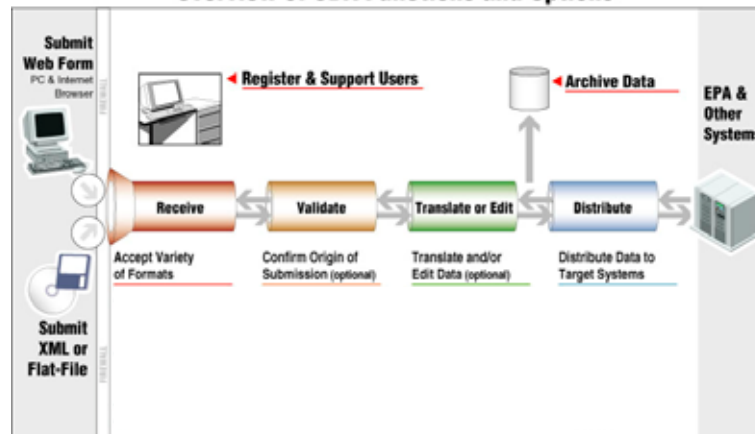
- **eDMR Challenge Grant**
Using the EN to develop electronic Discharge Monitoring Reports with States and EPA
 - MI, WI, FL, IN, PA, MN
- **Beaches Challenge Grant**
Exchanging Beach Monitoring Data with EPA
 - NJ, DE, NH, GA, CA, NC
- **Pacific Northwest Surface Water Quality Exchange Challenge Grant**
Exchanging surface water monitoring data between States
 - OR, WA, AK, ID
- **Drinking Water Laboratory Challenge Grant**
Exchanging drinking water laboratory results between Laboratories and States using the EN
 - NH, ME, RI, VT, NJ



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Central Data Exchange (CDX)

Overview of CDX Functions and Options



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CDX Data Flow Priorities

- Facility Registry System (FRS)
- National Emission Inventory (NEI)
- Resource Conversation and Recovery Act Info (RCRAInfo)
- Permit Compliance System (PCS)
- AIR Quality Subsystem (AQS)
- Discharge Monitoring Reports (DMRs)
- Safe Drinking Water Information System (SDWIS)
- Toxics Release inventory (TRI)
- Toxic Substances Control Act (TSCA)
- Unregulated Contaminant Monitoring Regulation (UCMR)

<http://www.epa.gov/cdx/projects/>



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Benefits

- Delivers timely reliable, standardized, and consistent data between partners
- Reduces reporting burden
 - States will no longer be required to “feed” EPA national systems
- Enhances potential for data integration



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Benefits (continued)

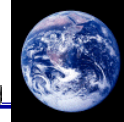
- Sets the stage for the broader exchange of information
 - Between and amongst other States, Tribes, and/or federal agencies (e.g., environment and health departments)
- Realizes cost savings, cost avoidance, and streamlined processes



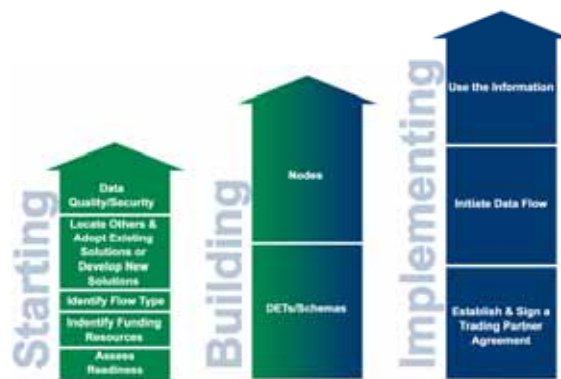
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Changing Roles!

- Partners assume increased data stewardship responsibilities
- Partners collaborate to develop data/transaction standards and Trading Partner Agreements
- EPA has responsibility for getting data into its own program systems
- Partners have responsibility to map internal system data to Data Exchange Templates or schema



How do I get involved?



www.exchangenetwork.net

For More Information



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