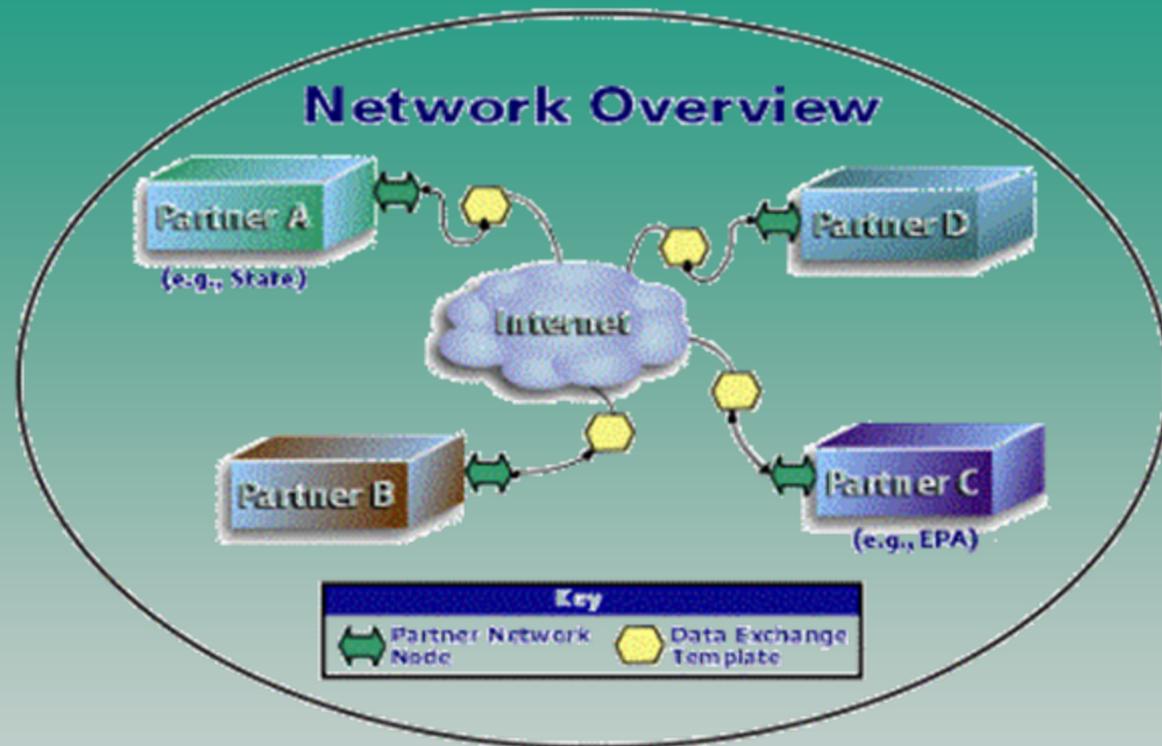# National Environmental Information Exchange Network Program
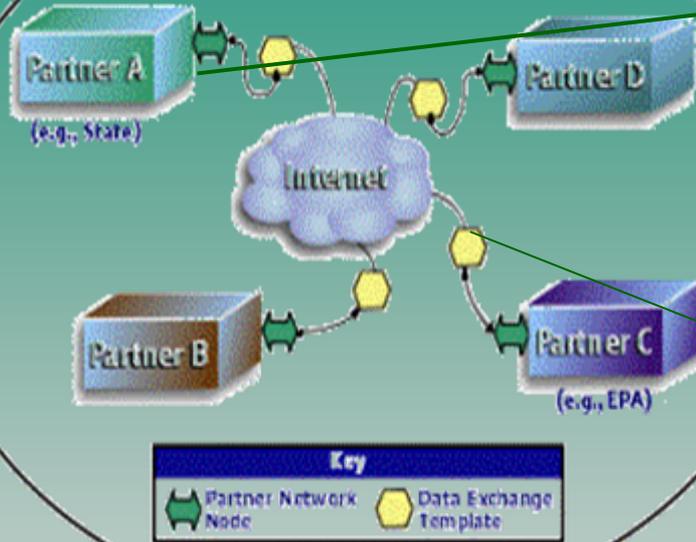
November 2008

Region 9

What is the Exchange Network?

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

Breaking it down!

Network Overview

Partner A (e.g., State)

Internet

Partner B

Partner C (e.g., EPA)

Partner D

Key
- Partner Network Node
- Data Exchange Template

➢ Nodes
- Hardware and software used to exchange information on the Network
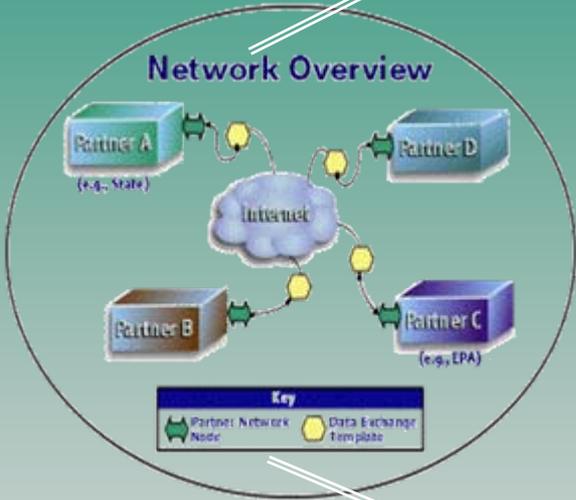- Transfer point on the Network

➢ Data Exchange Templates
- Describe format of data being exchanged
- Consist of XML schema
- Incorporate data Standards
- XML Schema for flows found in the Registry

How the pieces fit together

Environmental Department

EPA

SDWIS Federal System

RCRAInfo

EPA NODE (CDX)

Network Overview

Partner A (e.g., State)

Partner D

Internet

Partner B

Partner C (e.g., EPA)

Key

Partner Network Node

Data Exchange Template

Internet

Web Server Node

Single Integrated System

DET

Drinking Water Reporting Schema Package

<SDWIS: DrinkingWaterReport>
 <Site Information>
  <Facility #><location>
 <Chemical Info>
  <limit><.88ppm>

State systems may or may not be integrated.

Both partners map data to be exchanged to same XML Schema

Hazardous Waste Reporting XML Schema Package

<RCRA Facility Status Report>
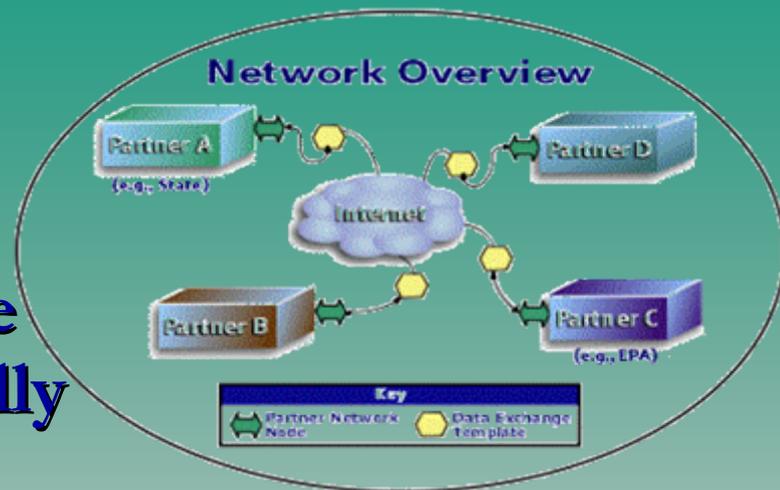 <Site Information>
  <Facility #><location>
 <Status Code>

Exchange Network Grant Program

Purpose:

- Assist states, tribal governments, and territories to develop the capabilities to participate fully

Goal:

- Enhance electronic reporting capabilities
- Reduce information collection and reporting burdens
- Integrate data from different sources
- Provide timely access to environmental data
- Improve data quality

Evaluation Criteria

- **Expected Environmental Outputs, Outcomes**
- **and Environmental Results** (20 points)
- **Feasibility/Approach** (20 points)
  - design of project and relationship between project goals, outputs, outcomes, and environmental results.
  - clearly articulates the roles and responsibilities of each partner, the milestones, and a schedule that ensures the work will be accomplished during the project period.
  - clearly stating coordination between the IM/IT department and Environmental/Health programs on this project (e.g. regularly scheduled meetings, a coordination plan, or as described in Appendix D).
  - identified potential problem areas and project dependencies.
  - potential for other Exchange Network partners to build on its results.

Evaluation Criteria

- **Relevance/Significance** (30 points):
    - deploying regulatory and national system flows,
    - establishing new 2.0 Nodes,
    - upgrading Nodes,
    - Network publishing,
    - establishing non-regulatory data flows, and
    - developing innovative projects
- **Budget, Resources and Key Personnel** (10 points)
- **Environmental Results Past Performance** (20 points)

FY 2009 Grant Program Focus

- **Enhance basic IM/IT capabilities**

- **Develop or Upgrade Exchange Network nodes or node clients**

- **Develop/Update Exchange Network data flows:**
    - Air Facility System (AFS) and/or Air Quality System (AQS);
    - Beach Notification;
    - Facility Registry System (FRS);
    - Integrated Compliance Information System – National Pollutant Discharge Elimination System (ICIS-NPDES);
    - Emission Inventory System (EIS);
    - Resource Conservation and Recovery Act Information System (RCRAInfo);
    - Safe Drinking Water Identification System (SDWIS);
    - Toxics Release Inventory System (TRIS); and
    - Water Quality Exchange.

- **Implement collaborative, innovative projects that demonstrate the value of the Exchange Network**

Eligible Water Data

- Water Quality Exchange (WQX)

- Beach Data

- Safe Drinking Water Identification System (SDWIS)

- Integrated Compliance Information System – National Pollution :Discharge Elimination System (ICIS)-NPDES

Water Quality Exchange (WQX)

- The Water Quality Exchange (WQX) allows Network partners to share ambient water quality data with the U.S. EPA.

- WQX represents the next evolution for EPA's STORET model for sharing water quality data.

- EPA will transition away from a distributed database model towards the Exchange Network model for the sharing of data. This transition is expected to be fully completed in 2009. The release of WQX constitutes a major component of that transition.

Water Quality Exchange (WQX)

- Version 1
  - The physical conditions in the environment at the time of a site visit;
  - The chemical and bacteriological make-up of the water sampled;
  - Chemical analyses of fish tissue collected.
- Version 2
  - Biological Taxon Abundance data, including population census, frequency class, group summaries, and individual results;
  - Toxicity data;
  - Habitat Assesment scores and their related metric scores;
  - Biological Index scores and their related metric scores.

Exchange Network Grant Program

FY 2009 Grant Program

- **NEIEN Grant Program Solicitation Notice**
  - Issued September 2009
  - Available on line:
    http://www.epa.gov/exchangenetwork/
    http://exchangenetwork.net/
  - Available by calling Pat Eklund   415-972-3738
- **Schedule**
  - November 21, 2008 – Applications due to EPA
  - April 2009 – Notification on funding recommendations

Exchange Network Grant Program

Hints for FY 2009

- ❖ **Read Grant Guidance carefully**

- ❖ **Focus on priority data flows**

- ❖ **Look for opportunities to link environmental and health data**

- ❖ **Emphasize accomplishments with funds received to date and gaps**

- ❖ **Look at grant drawdown**

- ❖ **Make sure your semi-annual and final technical reports have been sent to the NEIEN Program Manager (Pat Eklund)**

Exchange Network Grant Program

For more information

Contact:

Pat Eklund, NEIEN

415-972-3738

eklund.patricia@epa.gov