

Toxic Release Inventory (TRI) Flow Implementation Guide

The Toxics Release Inventory (TRI) flow allows partners to exchange information about facilities' self reported releases of hazardous substance to air, water, and land. It is unusual among National System Flows because data flows from reporting facilities to EPA and then out to States and Tribes

BENEFITS

States receiving data from EPA automatically via their nodes do not need to process submissions directly from facilities

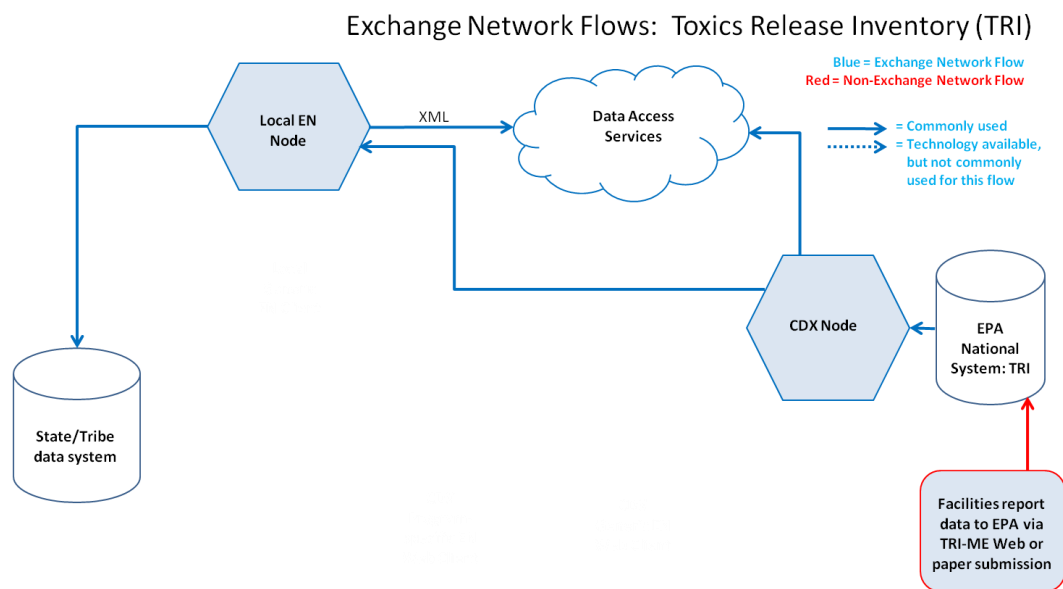
Facilities in States that receive data automatically from EPA do not have to double report to EPA and then to States—saving time and money

Practical Implementation Advice

- Anyone who has a node should consider implementing the TRI flow because it eliminates a dual reporting requirement for industry (thus saving industry reporters money) and it can save states and tribes significant resources by eliminating data entry.
- Agencies that are Exchange Network partners but are not designated Right-to-Know (RTK) coordinators should consider assisting the RTK coordinators by receiving data on their behalf.

TRI Data Flow Options

The graphic below shows the current options for flowing data. Exchange Network (EN) flow options are shown in blue and non-EN options are shown in red. (Terms are explained in Attachment I).



EXCHANGE NETWORK (EN) OPTIONS:

- For participating states, CDX transmits TRI data to States via node-to-node flows.

NON-EXCHANGE NETWORK OPTIONS:

- There are no non-EN flow options, except for pathways that facilities use to submit data to EPA via TRI-ME Web or by sending paper reports directly to EPA that are then processed in an EPA data entry center.

Summary of Current Practice

Federal law requires that facilities submit TRI data to both EPA and their State. Facilities required to report TRI data use EPA’s online TRI –ME Web. After EPA receives TRI data, CDX uses the EN to send it to partners’ nodes. This satisfies the legal requirement for many reporting facilities to submit the same data to both States and EPA without having to report twice.

Facilities in States that don’t have a node-to-node arrangement with EPA must submit data to EPA and print out a form to mail to their State agency. As a result, States that implement the TRI flow can eliminate a dual reporting requirement for industry, thus saving industry reporters money and saving States and Tribes significant resources consumed by manual data entry.

Sometimes agencies that are designated Right-to-Know (RTK) coordinators—and are therefore responsible for TRI—are not environmental agencies and may not have EN nodes. In this case, agencies with nodes should consider assisting the RTK coordinators by receiving data on their behalf.

TRI Flow Status and Milestones

TRI currently meets all of the “Network ready” criteria.

The table below shows institutional responsibilities and target completion dates for EPA activities.

Criteria:	Status	Actions	Primary Responsibility	Completion Period
Automation Ready	Done			
Solutions for all partners	Done			
Access to transaction status	Done			
Accessible and stable flow documentation	Done			
Specifications for Data Access Services	N/A	<i>Note: Because this is a “reverse flow,” traditional data access is not relevant</i>		
Clear path to eliminate alternatives	N/A			

Attachment 1: Terms

Node: A partner's point of presence on the EN consisting of a server (hardware and software) enabled with web services that allow partners to automatically provide and receive information via the Network and to publish data for use by other EN partners.

EN Client: A stand-alone application (i.e., software code) that lets partners submit data, request data, and receive results from an EN request. Clients differ from nodes in that they cannot respond to queries from other nodes and so cannot publish data. Clients also need more manual (vs. automated) steps, for example, to extract data and generate and review reports before submission.

CDX: EPA's Central Data Exchange. It serves as EPA's centralized electronic report receiving system. It receives data from partners and directs the data to EPA's program-specific National Systems (e.g., AQS, WQX, etc.).

CDX Node: CDX Node is EPA's node on the EN, allowing EPA to receive, send, and provide information via the Network. CDX Node can also publish EPA data for use by other EN partners.

CDX EN Web Clients:

- **Generic:** A client at CDX which receives XML-based data via standard web browsers for many different flows using Exchange Network protocols.
- **Program-Specific:** A client customized for a single National System with an intuitive user interface specific to the business process. Implemented at CDX, the client receives program-specific data in XML format via standard web browsers using Exchange Network protocols (e.g., for authorization and authentication, etc.)

CDX Web (non-EN) Application: A legacy CDX application that receives data (flat file or XML format) via standard web browsers. CDX Web applications are not consistent with EN protocols (e.g., they have a separate authentication and authorization service from the EN) and typically involve more manual steps than a node-to-node exchange of data.

Data Access Services: Using web services to make data available to Network users by querying nodes and returning environmental data in the form of XML documents. Published data can be accessed using a node or clients. Published data can be used in a number of ways, such as populating Web pages, synchronizing data between sites, viewing data in a Web service client, or building new sources of data into an integrated application.

Direct User: A partner entering data directly into a National Data System through a system-specific interface (manual entry).

EPA National Data System: Program-specific data systems at EPA that can receive and publish data via CDX.

Local Data System: A partner's database or series of databases in which environmental data is stored, managed, and manipulated.

XML: eXtensible Markup Language is a flexible language for creating common information formats and sharing both the format and content of data over the Internet and elsewhere. The electronic language that expresses and transports data standards and transaction sets. XML uses an extensible set of tags to describe the meaning of data.

Attachment 2: National System Flow “Ready to Use” Criteria

A focus of Exchange Network (EN) governance has been developing the National System Flows to help partners take advantage of the Network’s business value. Governance has identified six criteria for each flow to meet to make these flows “ready to use” by partners:

- Automation-ready flows. Support fully automated node-to-node flows.
- Access to transaction status. Support a fully automated process for reporting transaction status, processing results, and QA results from receipt by CDX through final processing in the National System.
- Accessible and stable flow documentation. Develop and make accessible stable documentation that describes all flow requirements. This includes a complete Flow Configuration Document (FCD) that is in compliance with EN procedures for version management.
- Solutions for all partners. Provide appropriately scaled EN solutions for partners of all sizes, needs, and capabilities. Some partners such as tribes and local clean air authorities may not need a fully functional node. A customized EN client or EN web client should be available to these users.
- Publishing interface. Provide a national standard set of query/solicit services defined in the FCD whether or not data are currently published. Implement a publishing interface where published data are critical to partner business processes (such as NPDES permit information for NetDMR).
- Clear path to eliminate alternatives. Have a clear path to eliminate legacy system alternatives to EN exchanges, including transition support for partners.