United States
Toxics Release Inventory

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Toxics Release Inventory (TRI) Program Update

This presentation will cover:
• TRI Background
• Overview of 2001 Data
• Current Activities

TRI Background

• In 1986, Congress enacted the Emergency Planning and Community Right-to-Know Act (EPCRA). Section 313 of EPCRA established the Toxics Release Inventory (TRI) Program. Beginning in 1987, manufacturers were required to report to EPA releases of toxic chemicals to the environment and quantities sent off-site for treatment.

• In 1990, Congress enacted the Pollution Prevention Act (PPA) that expanded TRI to include additional information on toxic chemicals in waste and on source reduction methods.

• Releases -- EPCRA section 313 requires that facilities report on releases to air, water, land, including disposal both at the facility and at off-site facilities.

• Other Waste Management -- The Pollution Prevention Act of 1990 (PPA) requires facilities to report to TRI on the various ways they manage wastes, including recycling.

Overview of the 2001 TRI Data

• In June 2003, TRI released to the public information on release and other waste management activities toxic chemicals for 2001 reporting year.

• 2001 is the first year for reporting lead and lead compounds as persistent bioaccumulative toxic (PBT) chemicals, and the second reporting year in which lower reporting thresholds (generally 10 and 100 pounds) apply for the other PBT chemicals (e.g., mercury).

• On- and off-site releases for all TRI facilities totaled 6.16 billion pounds for 2001.

• Continuing past trends, total releases into the environment nationwide decreased; by 1.05 billion pounds or 15.5% from 2000 to 2001. PBT chemicals decreased by 2%.

• Total releases decreased 22% from 1998 to 2001.

• For the core set of chemicals from industries that have reported since 1988, total on- and off-site releases decreased by 54.5% between 1988 and 2001.
Overview of the 2001 TRI Data - cont.

- The majority of all toxic chemical releases are to land (56% to land (on-site), 27% to water, 4% underground injection (on-site) and 9% transfers off-site to disposal to land or underground injection).
- Metal mining makes up 45% of toxic chemical releases, electric utilities 17%, and the chemicals sector 9.5%.
- Top four states for total releases for all industries: Nevada, Utah, Arizona and Alaska, together accounting for three-quarters of all on-site land releases. (This ranking is driven by the mining sector releases.)

2001 Releases by Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal Mining</td>
<td>45.2%</td>
</tr>
<tr>
<td>Electric Utilities</td>
<td>17.2%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>9.5%</td>
</tr>
<tr>
<td>Primary Metals</td>
<td>9.1%</td>
</tr>
<tr>
<td>All Others</td>
<td>12.3%</td>
</tr>
<tr>
<td>Paper</td>
<td>3.2%</td>
</tr>
<tr>
<td>Hazardous Waste/Solvent Recovery</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

Note: On-site Releases are from Section 5 of Form R. Off-site Releases are from Section 6 (transfers off-site to disposal) of Form R. Off-site Releases include metals and metal compounds transferred off-site for solidification/stabilization and for wastewater treatment, including to POTWs. Off-site Releases do not include transfers to disposal sent to other TRI Facilities that reported the amount as an on-site release.

PBT Overview – 2001 Data

- Releases of PBT chemicals in 2001 were 454.4 million pounds.
- Lead and lead compounds accounted for 97% of total releases of PBT chemicals.
- 85% of total PBT chemical releases were on-site land releases (with lead and lead compounds accounting for 98%).
- Industries with largest total releases were:
  - Metal mining, 75% (339.7 million pounds)
  - Primary metals, 10% (45.6 million pounds)
  - Hazardous waste/solvent recovery, 6% (26.1 million pounds)
  - Chemical manufacturing, 5% (21.5 million pounds)
  - Electrical utilities, 2% (9.3 million pounds)

Current Activities

Burden Reduction Options - Stakeholder Dialogue

- EPA is initiating an online, national stakeholder dialogue to develop opportunities to reduce the burden on reporting facilities.
- A primary goal of this effort is to reduce burden associated with TRI reporting while continuing to provide valuable information to the public as required by the statute.
- Through the dialogue, EPA is soliciting comment on several specific options as well as requesting suggestions for any other burden reduction options.

Current Activities - cont.

TEQ rule

- EPA is pursuing a rulemaking to broaden the information collected on dioxin and dioxin-like compounds.
- In addition to grams, EPA would also collect information on “toxicity equivalence” or TEQ for each release data element (e.g., fugitive emissions).
- EPA is aiming to have this rule in place for the 2004 reporting year.

Renewal of ICRs for Form R and Form A Certification Statement

- TRI Program will shortly submit to the Office of Management and Budget (OMB) the revised Information Collection Request (ICR) for the TRI Reporting Form R and the Form A Certification Statement.
- For the Form R ICR renewal, the TRI Program sought public comment on extensive changes to the Form R in an effort to collect information in a more logical and easier manner.
- In light of significant comments from States, the regulated community and other TRI data users concerning the implementation burden of so many changes at once, EPA considering deferring many of the proposed changes.
Current Activities - cont.

TRI-ME and Electronic Reporting
• For reporting year 2002 (forms due 1 July, 2003), as a result of the development and implementation of electronic signature (e-signature), facilities were able to submit forms electronically over the Internet using EPA's Central Data Exchange (CDX) without mailing any paper to EPA.
• Many facilities took advantage of the paperless, electronic signature certification feature of TRI-ME allowing them to certify and submit forms via the Internet through CDX.
• To date, the number of TRI chemical reports filed electronically rose from 5,450 in FY 2002 to 22,303 in FY 2003, an increase of 309%.

Current Activities - cont.

Earlier public release of TRI data
• TRI Program will be releasing its data to the public in two phases:
  • First phase will release the just the 2002 facility-reported data through Envirofacts (currently planned for February/March 2004).
  • Second phase will be a release of the analyzed data similar to what is currently done for the annual public data release. The products, however, will be more e-based by using TRI Explorer as the primary communication tool (currently planned for June 2004).
• Future data releases may even be earlier.

Current Activities - cont.

Reporting using North American Industry Classification System (NAICS) Codes
• Standard Industrial Classification (SIC) codes are used in TRI reporting by facilities to determine whether they are required to report. The facilities required to report are identified by SIC codes in the statute and by subsequent regulation.
• In March 2003, EPA’s TRI Program proposed replacing SIC codes with NAICS codes as an applicability criteria for TRI without producing any changes in the universe of facilities now subject to TRI reporting.
• EPA is working on finalizing the rule in 2004 for implementation in reporting year 2005.

Current Activities - cont.

Manufacturing Rule
• The TRI Program is working on a rulemaking with regard to mining in light of several court decisions on lawsuits.
• This rule will clarify how the activities of extraction and beneficiation should be characterized for the purposes of the TRI threshold determination.
• EPA is planning to propose this rule in 2004.

Current Activities - cont.

TRI Explorer
• loaded with the 2001 data and includes new enhancements such as a dynamic mapping tool
• located at http://www.epa.gov/triexplorer/