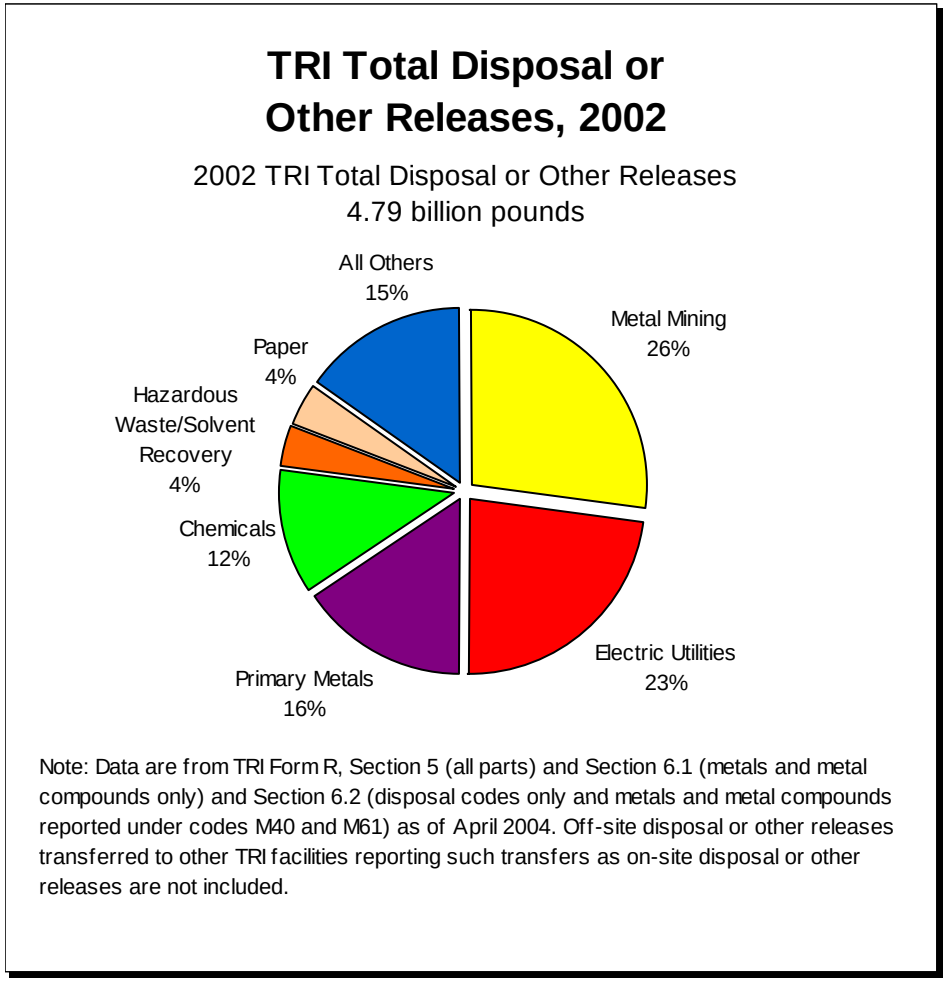
TRI Public Data Release 2002

June 2004

2002 Disposal or Other Releases by Industry



Who Reported in 2002

- 24,379 facilities reported to TRI in 2002, compared to 25,388 facilities in 2001.
- 315 Federal facilities reported for 2002, an increase of 10%
- 2002 is the third reporting year in which lower reporting thresholds (10 and 100 pounds) apply for persistent bioaccumulative toxic (PBT) chemicals such as dioxins, mercury and PCBs. It is the second year for lead and lead compounds.
  - ➢ 8,505 facilities reported lead and lead compounds for 2002 compared to 8,702 facilities in 2001.
  - ➢ About 19% of facilities reported zero disposal or other releases.
    - There were 1,617 zero release reporters in 2002 compared to 1,728 zero release reporters in 2001.

What's New

- EPA is presenting more context for understanding results by providing additional detail on types of on-site "releases"
  - Subcategories will show Class I injection wells, RCRA Subtitle C landfills, and other landfills, distinguishing them from other types of releases such as air or water
- We have made major strides in obtaining and providing data electronically
  - 81% of TRI reports were submitted electronically
  - 23% of reports submitted electronically were received via CDX this year, up from 7% last year
  - Electronic management of data allowing us to reduce paper reports
  - Web tool, TRI Explorer, is the dissemination mechanism of choice, allowing users to create reports defined by their needs
- Our modernization efforts focus on improving data quality and timeliness of releasing data to the public

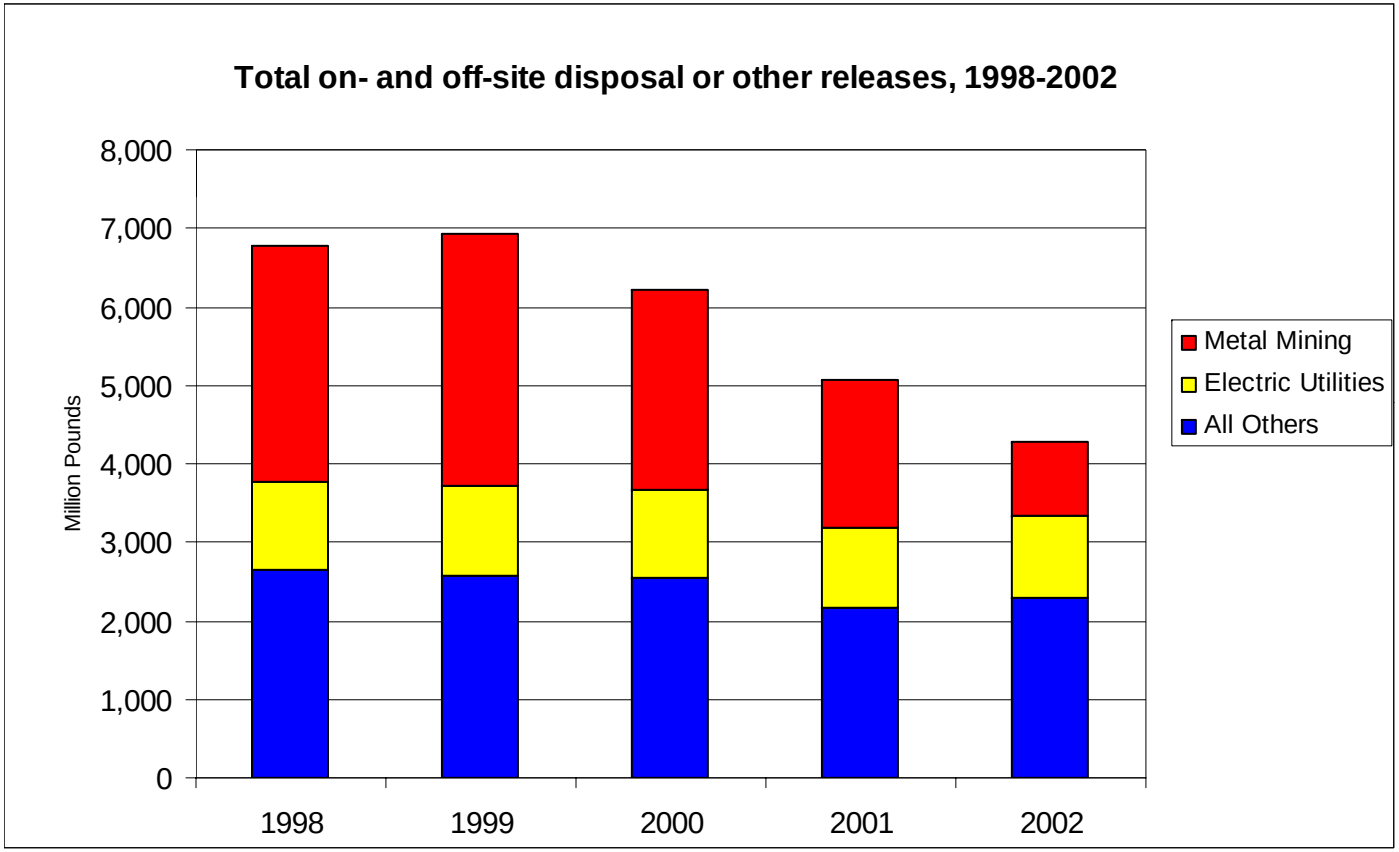
Major Findings 2002

- There was a 15% decrease in total disposal or other releases into the environment nationwide from 2001 to 2002. This was largely attributable to the metal mining sector (43%) and is related to a court decision.
- Without metal mining, total disposal or other releases increased by 5%, largely attributed to one copper smelter that reported large increases.
  - Without metal mining and this one copper smelter that reported large increases, there was a decrease of 3 percent.
  - EPA strongly encourages facilities to identify ways to continue progress toward reducing releases

Major Findings 2002

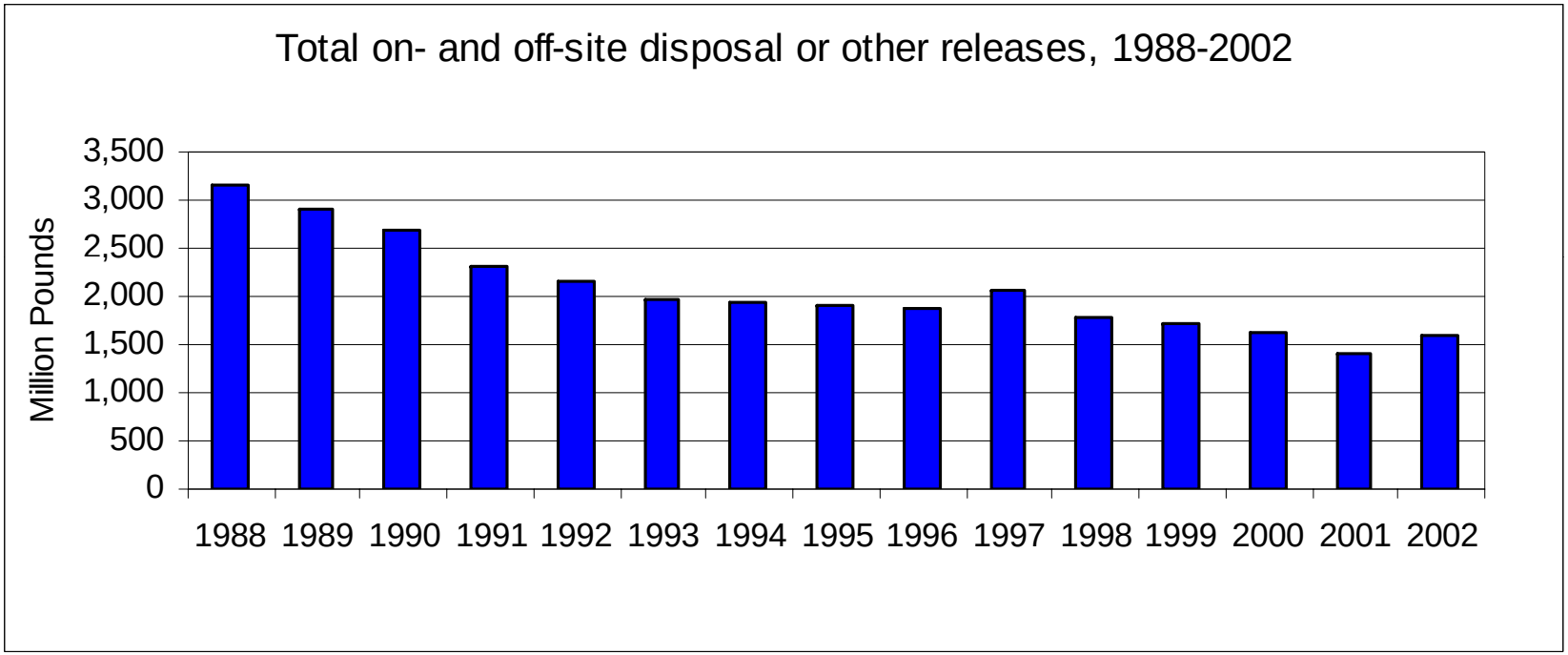
- Total disposal or other releases of certain PBT chemicals (lead and mercury) increased from 2001-2002 while Dioxin decreased.
  - However, the TRI data available to the public using the frozen dataset in TRI Explorer will show an increase in dioxin and a decrease in lead due to large known facility reporting errors. When correcting for these errors, lead increased by 3.2% and dioxin decreased by 5%.
  - Mercury releases increased by 10%
  - One or two facilities often drive results (e.g., two facilities accounted for 50% of lead releases in 2002)
- Releases from electric utilities increased 3.5% and now represent 23% of total disposal or other releases compared to 19% in 2001
  - A combination of large decreases in total disposal or other releases in metal mining (43%) and the increase in utility releases could shift more focus to the electric utility sector.
- Total on- and off-site disposal or other releases from federal facilities increased by 9%, attributed primarily to higher coal usage by one facility.

1998-2002 Data Trends



Note: Data are from TRI Form, Sections 5 (all parts) and 6.1 (metals and metal compounds only) and 6.2 (Disposal codes only and metals and metal compounds reported under codes M40 and M61). Does not include PBT chemicals, vanadium and vanadium compounds. Does not include transfers to disposal or other releases sent to other TRI facilities that reported the amounts as on-site disposal or other releases. Data as of April 2004.

1988-2002 Data Trends



Note: Data are from TRI Form, Sections 5 (all parts) and 6.1 (metals and metal compounds only) and 6.2 (Disposal codes only and metals and metal compounds reported under codes M40 and M61). Does not include delisted chemicals, chemicals added in 1990, 1994 and 1995, aluminum oxide, ammonia, hydrochloric acid, PBT chemicals, sulfuric acid, vanadium and vanadium compounds. For the years 1998 and after, does not include industries, other than manufacturing industries, that are required to report for 1998 and later years only. Data as of April 2004.

Production-related Waste Managed, 2002 and 2001-2002

- Total production-related waste managed in 2002 was 26.2 billion pounds.
  - Includes disposal or other releases, recycling, energy recovery, treatment on- and off-site not associated with one-time remedial actions or catastrophic events.
- This represents a 4% decrease (1.05 billion pounds) from 2001-2002. Almost 981 million pounds of the decrease was reported by metal mining sector. Without reporting by the metal mining sector, the decrease is 0.3%.

Metal Mining Sector

- The metal mining industry had the largest decrease in reporting of disposal or other releases of 43% from 2001-2002
  - This decrease can be largely attributed to the Barrick v. EPA decision for non-PBT chemicals.
  - This decision allows facilities to apply the *de minimis* exemption to non-PBT chemicals in waste rock.

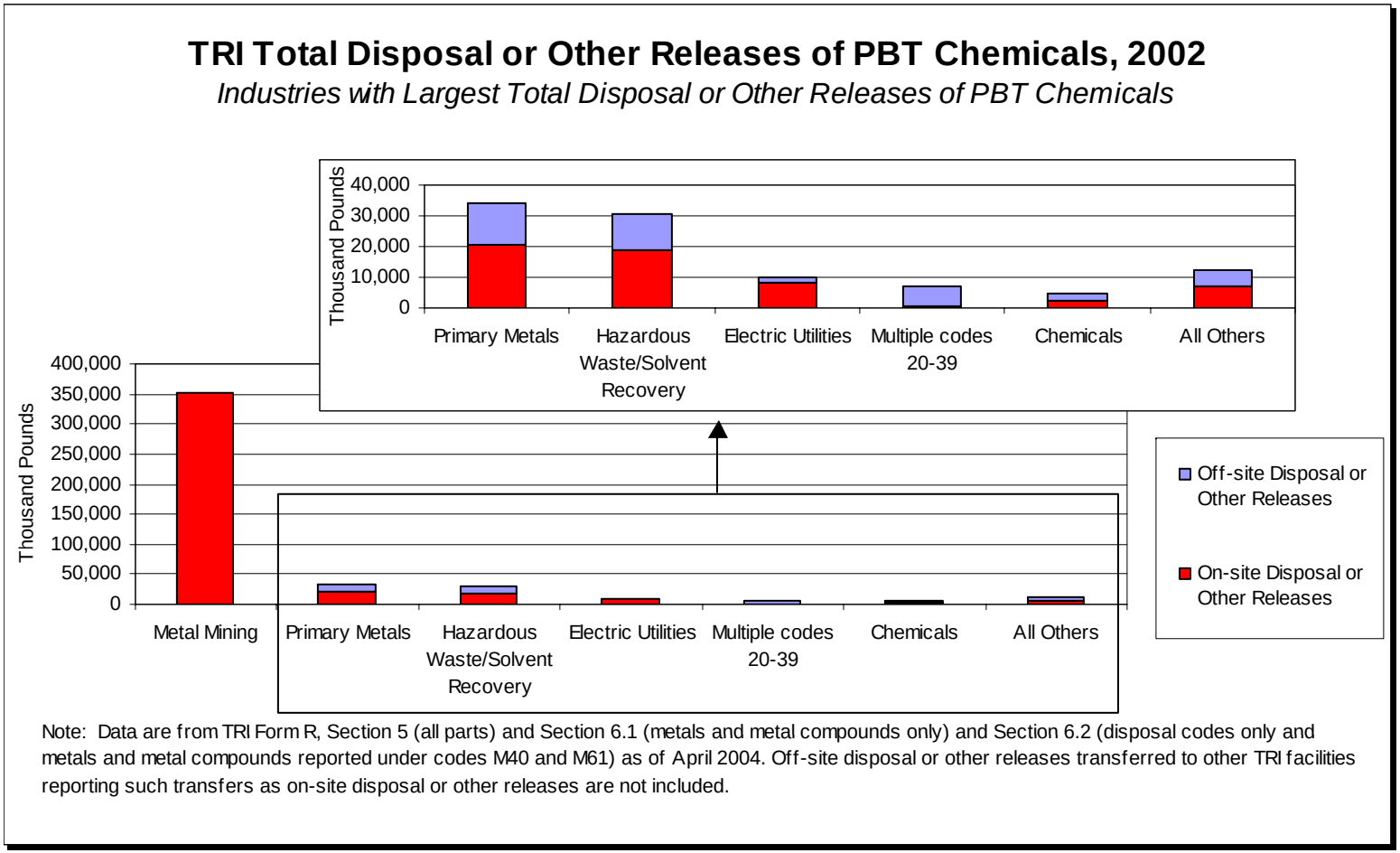
Federal Facilities

- Total on- and off-site disposal or other releases increased by 9%
  - This increase can largely be attributed to one facility which has increased coal use
- 315 Federal facilities reported for 2002, an increase of 10% from 286 facilities in 2001
  - The increase in disposal or other releases is not attributed to this increase in the number of federal facilities reporting
- Total production-related waste managed decreased by 6%
  - This decrease can largely be attributed to one facility which has decreased coin production

PBT Chemicals Data

- Total disposal or other releases of certain PBT chemicals (lead and mercury) increased from 2001-2002 while Dioxin decreased.
  - However, the TRI data available to the public using the frozen dataset in TRI Explorer will show an increase in dioxin and a decrease in lead due to large known facility reporting errors. When correcting for these errors, lead increased by 3.2% and dioxin decreased by 5%.
  - Mercury releases increased by 10%
  - One or two facilities often drive results (e.g., two facilities accounted for 50% of lead releases in 2002)
- Lead and lead compounds accounted for 98% of total disposal or other releases of PBT Chemicals in 2002
- 78% of total disposal or other releases was attributed to the metal mining sector in 2002

2002 PBT Disposal or Other Releases

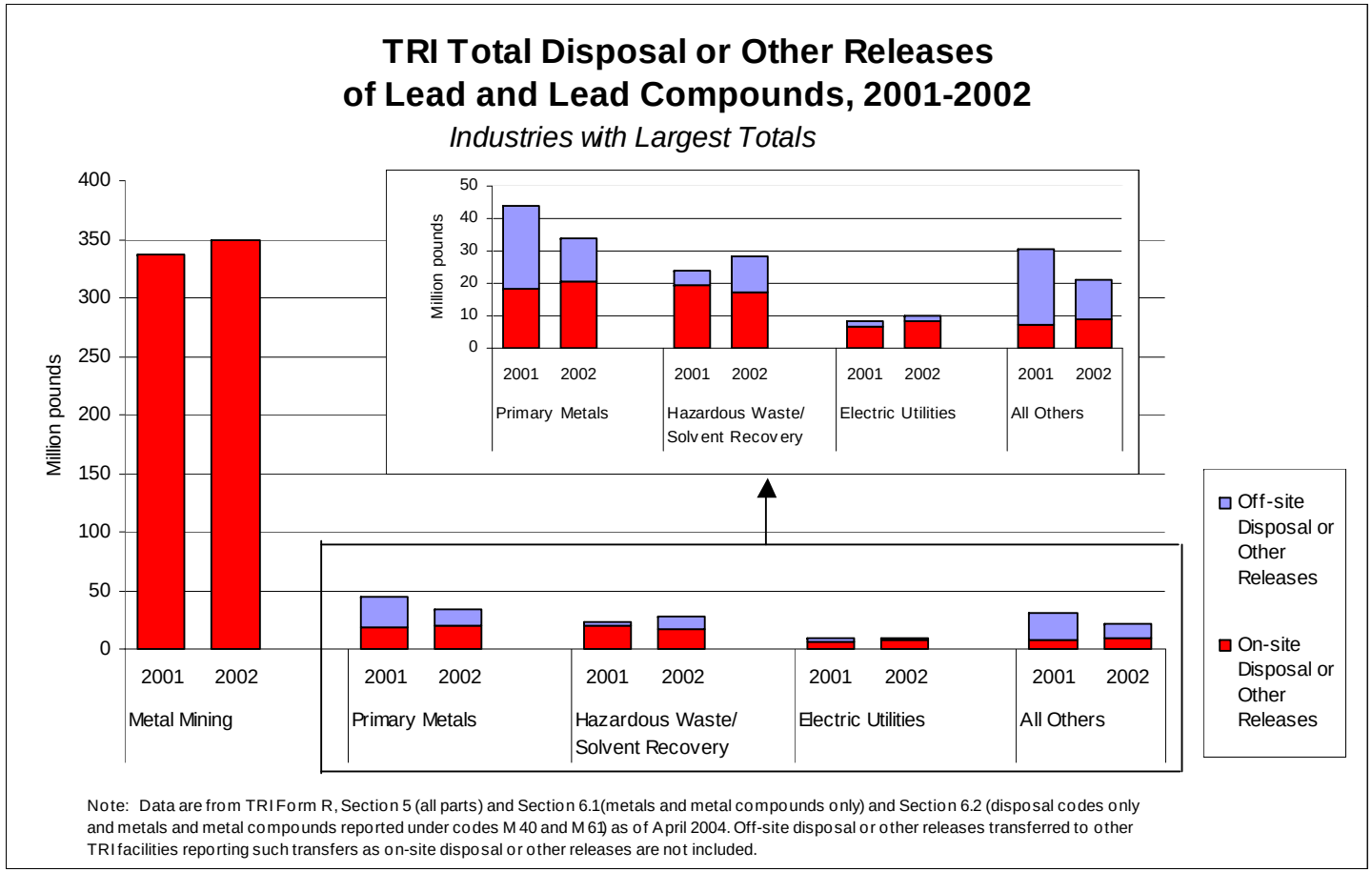


Note: Data are from TRI Form R, Section 5 (all parts) and Section 6.1 (metals and metal compounds only) and Section 6.2 (disposal codes only and metals and metal compounds reported under codes M40 and M61) as of April 2004. Off-site disposal or other releases transferred to other TRI facilities reporting such transfers as on-site disposal or other releases are not included.

Lead and Lead Compounds

- Total on- and off-site disposal or other releases were 441.8 million pounds in 2002. This is a slight decrease (0.5% or 2.0 million pounds) from 2001 to 2002.
  - With one facility correction not contained in the frozen dataset, lead and lead compounds would have increased by 3.2%
  - 79% of total disposal or other releases was attributed to the metal mining sector
    - Two metal mining facilities accounted for 50% of total disposal or other releases of lead and lead compounds in 2002 (mostly on-site)
- Lead and lead compounds accounted for 98% of total disposal or other releases on- and off-site of PBT chemicals in 2002.
- Without the metal mining sector, total on-site disposal or other releases increased by 6% and total off-site disposal or other releases decreased by 30%.
- Facilities reporting zero disposal or other releases represented about 19% of all facilities reporting lead and lead compounds (1,728 facilities in 2001 and 1,617 facilities in 2002).

Lead and Lead Compounds Disposal or Other Releases, 2001-2002



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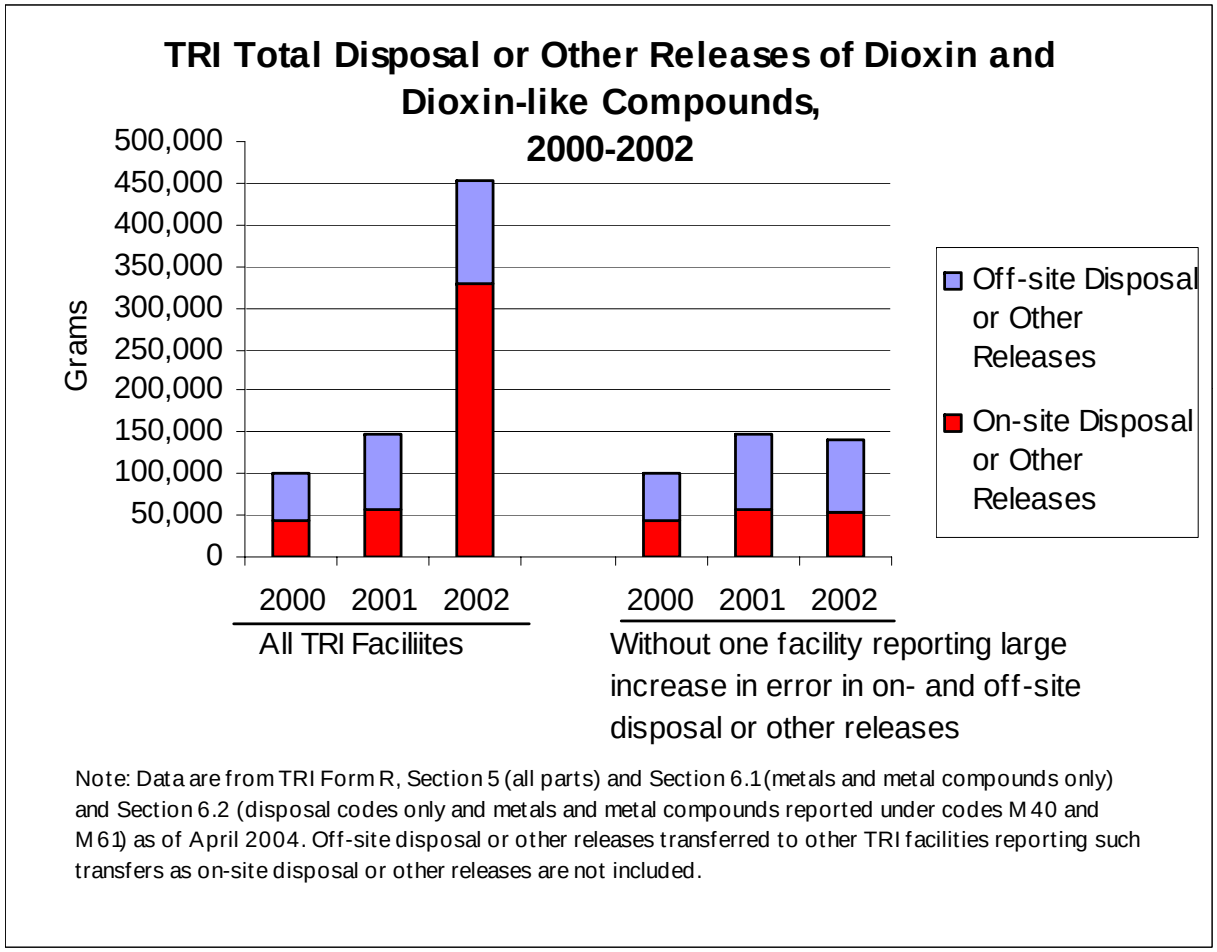
Dioxin and Dioxin-like Compounds

- Disposal or other releases of dioxin and dioxin-like compounds in 2002 were 452,209 grams.
  - One facility reported 311,022 grams in error, accounting for 69% of all disposal or other releases in 2002.
- Without the facility reporting in error, total disposal or other releases in 2002 were 141,187 grams (5% decrease from 2001).
  - However, as shown in the following graph, 2002 disposal or other release levels have not returned to 2000 levels.

2000-2002 Dioxin and Dioxin-like Compounds



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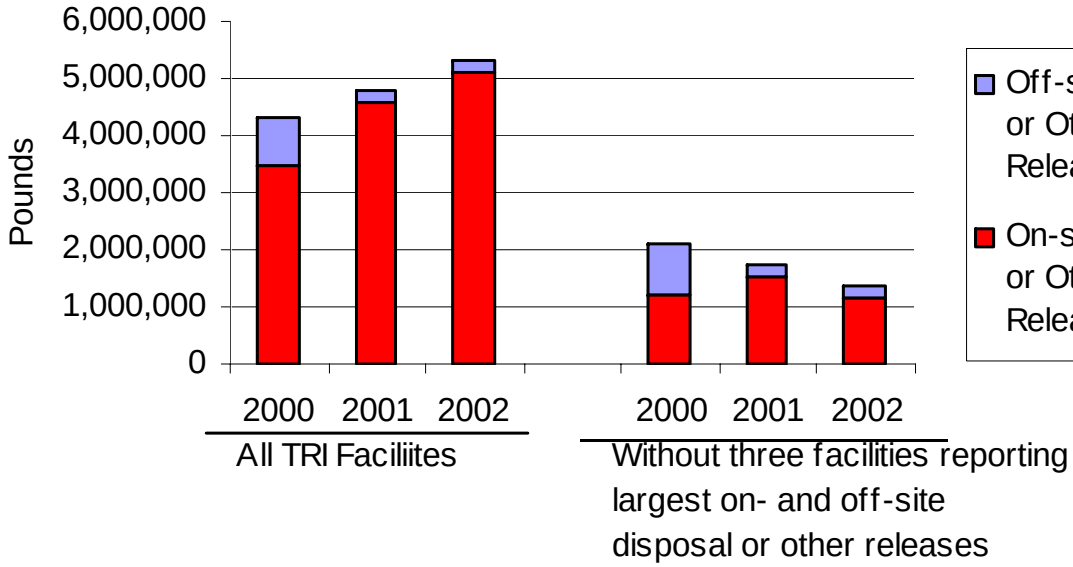
Mercury and Mercury Compounds

- Disposal or other releases of mercury and mercury compounds in 2002 were 5.3 million pounds, an increase of 10% from 2001.
  - Three facilities accounted for 75% of total disposal or other releases of mercury and mercury compounds in 2002 (mainly as on-site surface impoundments and on-site landfills other than RCRA).
- Without the reporting by the three facilities with the largest amounts, total disposal or other releases of mercury and mercury compounds decreased by 35% between 2000 and 2002.
  - Off-site disposal or other releases decreased by 81%.
  - However, on-site disposal or other releases decreased by 4%.
  - On-site air emissions were about the same, with a decrease of 64 pounds.

2000-2002 Mercury and Mercury Compounds



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