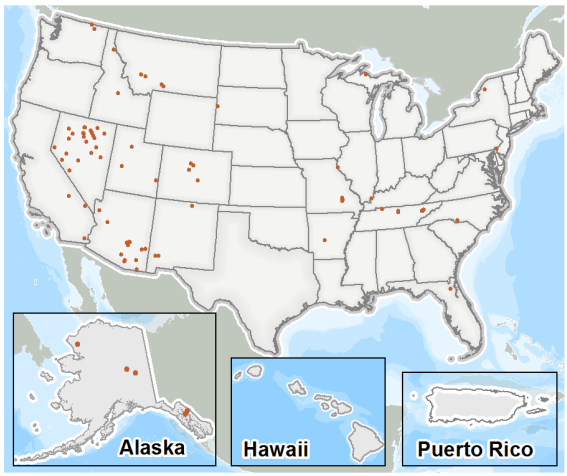
# Metal Mining



TRI Facilities, 2012: Metal Mining

The portion of the metal mining sector covered by TRI includes facilities mining for copper, lead, zinc, silver, gold, and several other metals. These facilities tend to be in Western states where most of the copper, silver and gold mining occurs; however, zinc and lead mining tend to occur in Missouri, Tennessee, and Alaska. Metals generated from U.S. mining operations are used in a wide range of products, including automobiles and electrical and industrial equipment. The extraction and beneficiation of these minerals generate large amounts of waste.

## Quick Facts for 2012

**Number of TRI Facilities:** **88**
Facilities Reporting Newly Implemented Source Reduction Activities: 6

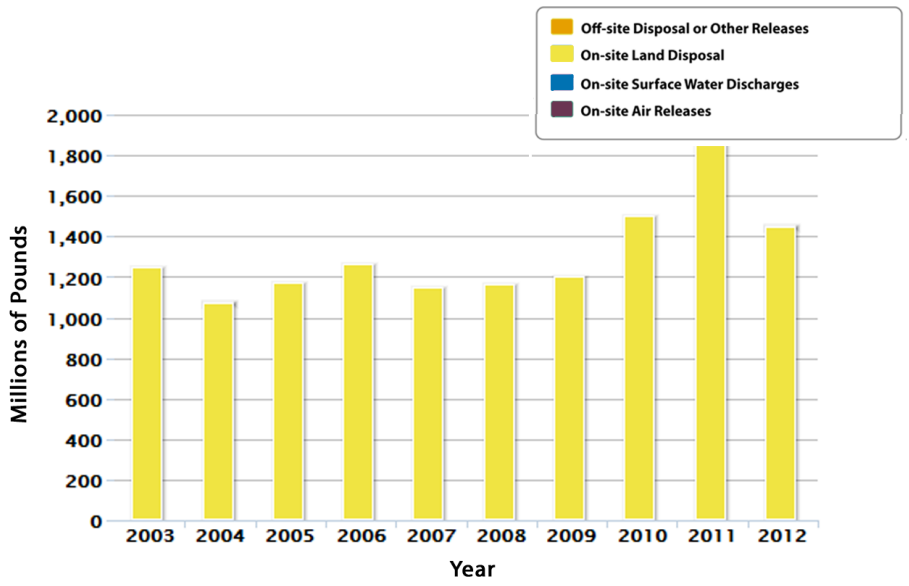
**Total Disposal or Other Releases:** **1,448.8 million lb**

- **On-site:** **1,445.7 million lb**
  - Air: 2.6 million lb
  - Water: 2.0 million lb
  - Land: 1,441.1 million lb
- **Off-site:** **3.1 million lb**

**Production-Related Waste Managed:** **1,532.2 million lb**

- Recycled: 61.1 million lb
- Energy Recovery: 20 lb
- Treated: 22.8 million lb
- Disposed of or Otherwise Released: 1,448.2 million lb

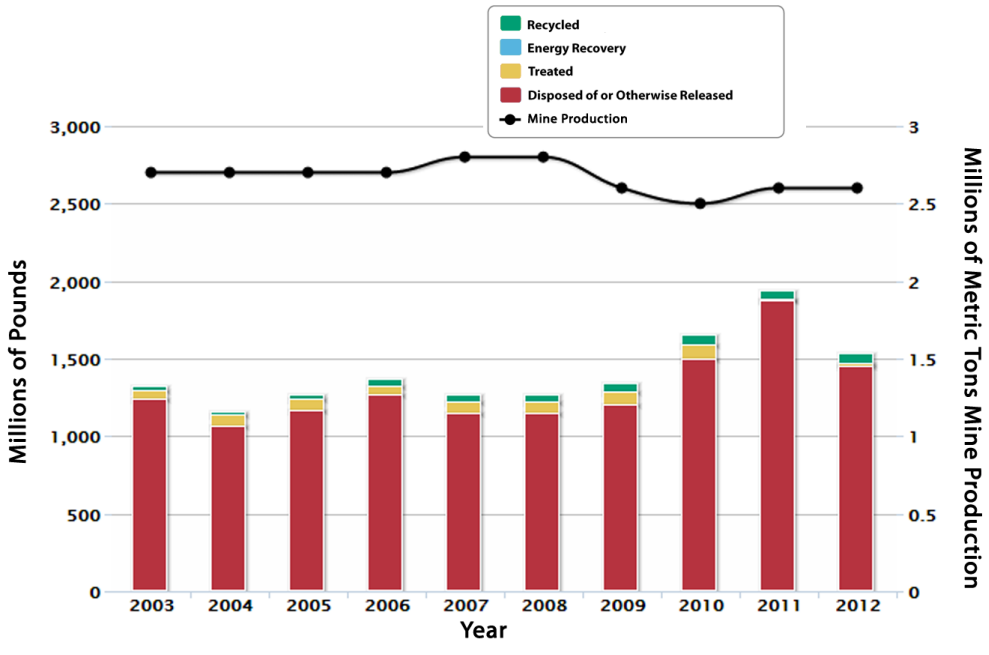
Figure 31. Total Disposal or Other Releases, 2003-2012
Metal Mining



The metal mining industry's total disposal or other releases reflect the high volume of materials managed on-site at metal mines. As shown in Figure 31, more than 99% of its releases are on-site land disposals resulting from very small concentrations of metals naturally present in the ore body. In 2012, the metal mining sector reported the largest disposal or other releases representing 40% of the releases for all industries. It also reported nearly two-thirds (65%) of the on-site land disposal reported for 2012 for all industries.

As shown in Figure 32, the metal mining sector's production-related waste managed is primarily disposed of or otherwise released. The quantity of waste managed changed little from 2003 to 2009, and then it increased in 2010 and 2011 prior to a decline in 2012. Metal mine production, represented by the black solid line in Figure 32, remained relatively steady from 2003 to 2012. This indicates that factors other than production have contributed to the recent changes in quantities of waste managed. One factor frequently cited by facilities is the composition of the extracted ore and waste rock, which can vary substantially from year to year. In some cases, large quantities of toxic chemicals in waste rock may qualify for a concentration-based exemption and not need to be reported in one year but not qualify for the exemption the next year or vice versa due to very small changes in the chemical's concentration.

**Figure 32. Production-Related Waste Managed, 2003-2012**
**Metal Mining**




In the metal mining sector, 6 of the 88 facilities initiated practices in 2012 to reduce their toxic chemical use and waste generation through source reduction. Toxic chemical quantities reported by this sector are not especially amenable to source reduction, since they primarily reflect the natural composition of the waste rock.

To learn more about this sector, visit EPA's Minerals/Mining/Processing Compliance Assistance website at www.epa.gov/compliance/assistance/sectors/mineralsmining.html.