

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 tends 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 2011

Number of TRI Facilities: 87
 Facilities Reporting Newly Implemented Source Reduction Activities: 6

On-site and Off-site Disposal or Other Releases: 1,894.8 million lbs

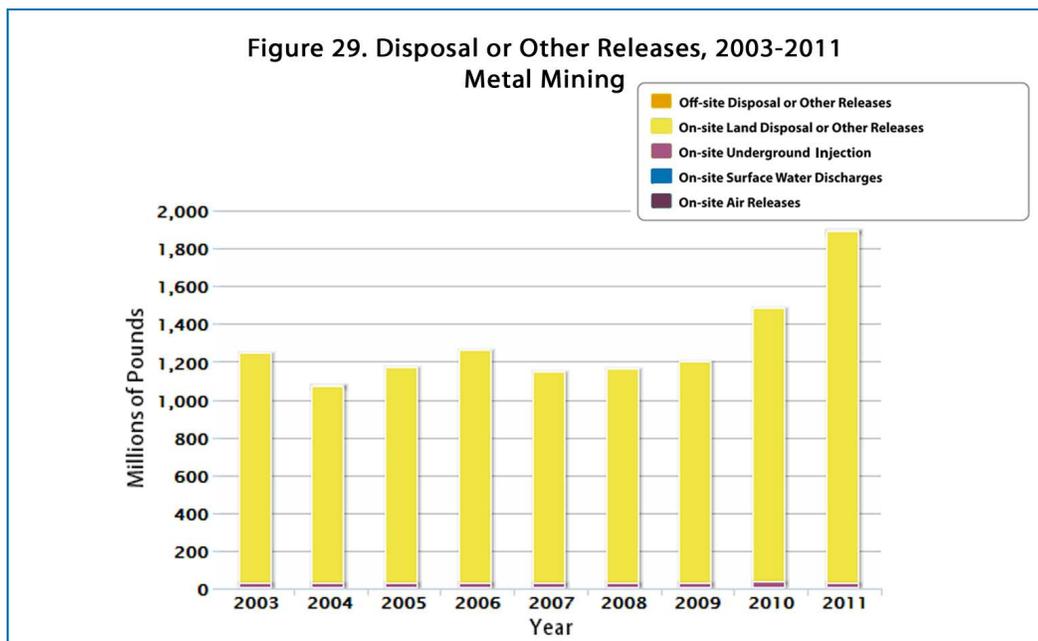
On-site: 1,892 million lbs

- Air: 3.1 million lbs
- Water: 1.9 million lbs
- Land: 1,862.4 million lbs
- Underground Injection: 24.6 million lbs

Off-site: 2.8 million lbs

Production-Related Waste Managed: 1,956.1 million lbs

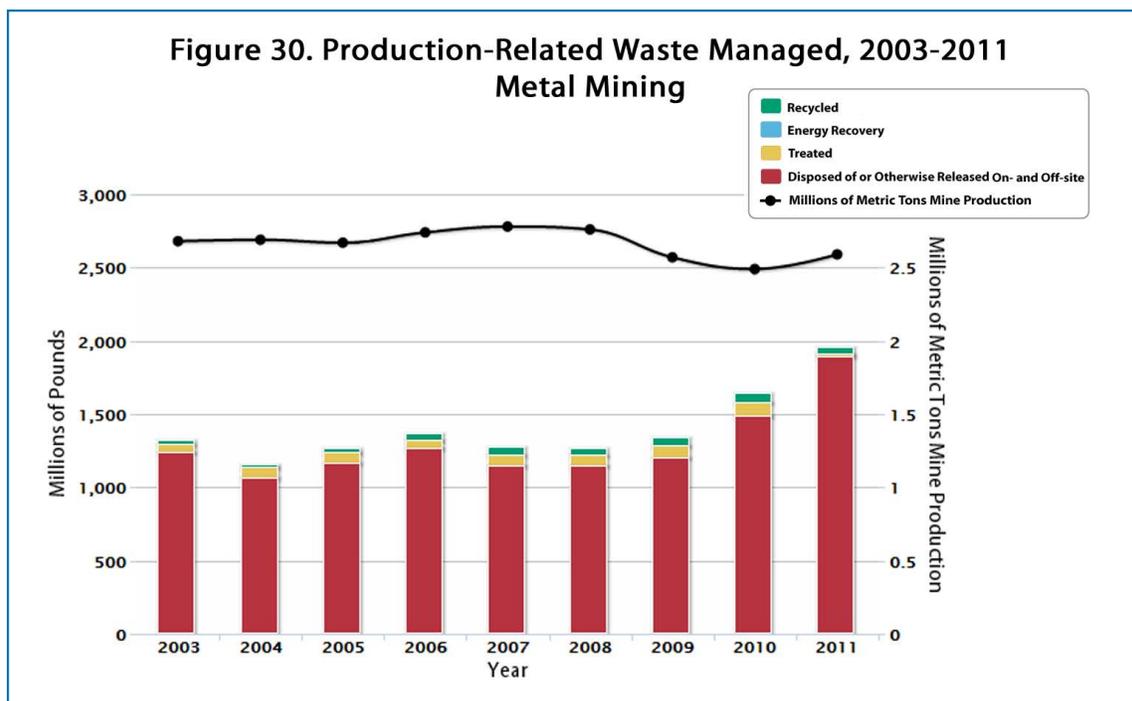
- Recycled: 49.0 million lbs
- Energy Recovery: 14 lbs
- Treated: 12.9 million lbs
- Disposed of or Otherwise Released: 1,894.2 million lbs



The metal mining industry's total disposal or other releases reflect the high volume of materials managed on site at metal mines. The vast majority of its total disposal or other releases are on-site land disposals and are a result of very small concentrations of metals naturally present in the ore body. In 2011, the metal mining sector reported the largest disposal or other releases representing 46% of the total disposal or other releases for all industries. It also reported more than three-quarters (76%) of the on-site land disposal reported for 2011 for all industries.



The metal mining sector had the third largest total production-related waste managed in 2011. As shown in Figure 30, total production-related waste changed little from 2003 to 2009, and then increased by 46% from 2009 to 2011. Mine production, represented by the black solid line in Figure 30, remained relatively steady from 2003 to 2011. This suggests that factors other than production, such as changes in the composition of the ore body and waste rock, have contributed to the recent upward trend. Such factors are particularly significant in cases where large quantities that qualify for a concentration-based exemption in one year may become reportable in their entirety the next year due to very small increases in the concentration of a toxic chemical in waste rock.



In the metal mining sector, 7% of facilities reported having initiated practices to reduce their toxic chemical use and waste generation through source reduction activities in 2011. The most commonly reported source reduction activity for the sector was good operating practices, such as improved maintenance scheduling.

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