

Appendix D.—Glossary of Terms

Corrosion and Wear Losses—Metal that is lost in the actual process of corrosion and wear (e.g., the gradual wearing down of saw blades or drills due to cutting friction) in the utilization of products; does not include metal lost because of a shortened product life due to corrosion and wear.

Dissipative Losses—Metal that is lost or consumed in use (e.g., used as catalysts and in paints and fertilizers) or dispersed beyond practical recovery (paper clips, nails, etc.).

Excess **Metal in the Material Cycle**—Material in use at each step in the material cycle that could be eliminated through applications of one or more conservation options.

Materials Cycle—The total flow of a material from mining to its ultimate return to the Earth (e.g., in landfills). Includes several steps or stages: mining, ore processing, metal production, transportation and handling, product manufacturing, distribution, use, storage, and disposal.

Metal Conservation Options—A technique by which metals can be conserved (their usage reduced). Example include: substitution of one material for another, prevention of losses in manufacture, making products smaller or with less metal, and recycling.

Metal Losses From the Materials Cycle—Residual metal from each step in the material cycle; examples include: the metal remaining in the ore that is not recovered, the slags of byproducts of metal processing, industrial scrap from product manufacture, material dispersed in use (e.g., pencil lead), and post-consumer waste.

Metal Processing Losses—Metal that is lost in the conversion of ore to metal, usually in the form of slags and dresses.

Metal Recycling-Recovering of metal from all sources including used products.

Milling and Concentrating Losses—Metal that is not recovered from the mined ore and remains in the mine “tailings.”

Nonmetallic Losses—Metal that is lost when the ore is not actually converted to metal but is used in nonmetallic applications, such as abrasives, refractories, insulation, and ceramics.

Product Manufacturing Losses—Metal that is lost in the form of industrial scrap remaining from the manufacture of products: examples are chips, grinding dusts, unused metal, and product rejects.

Postconsumer Waste—Metal that is lost in household wastes discarded into the municipal solid waste stream.

Product After Market—The business of product recycling, resale, and reuse.

Product Recycling—All forms of recycling including metal recycling, product or component rework or remanufacture, or product or component reuse.

Product Rework or Remanufacture—The process by which an old product is restored to a condition approaching or equaling its original condition by replacing worn parts, cleaning, and refinishing.

Substitution—The use of one material or metal in place of another in a product or application.

Transportation and Handling Losses—Ore that is lost in transit between the mine and the mill.

Unrecovered (and Unknown) **Material—Metal** that is lost due to lack of recycling; calculated by subtracting the amount of scrap available from obsolete products in a given year from the amount actually recycled. The amount of scrap available is based on the products manufactured in previous years and estimates of their lifetimes.

Wastes—Metal losses or excess usage.