

HUMAN WASTE - Annual Worldwide Accumulation

Table 2. Common Social and Industrial Wastes Produced throughout the World, Estimated Relative Quantities and their Social and Environmental Impacts.				
Waste Materials	Tonnes per year	Fate	Locations	Present Impact
Sewage, - assuming 1kg per person per day.	2 billion	Mostly Discharged directly into Water Supplies, and on to the Land Surface. Processed for fertilizer in some areas, or landfilled.	Population centers and Global.	Causes millions of deaths worldwide, and numerous diseases such as Cholera in poor societies. Counteracted by chlorination.
Animal farm wastes, solids and sludges.	Billions	Often a serious disposal problem, used as natural 'organic' fertilizer, burned, and used as cooking fuel in the third world.	Global and Local.	Food contamination and water pollution health risks, everywhere they are used. Counteracted by chlorination. Air pollution in homes from fuel use.
Refuse, - assuming 5 kg per person per day.	10 billion	Most is sent to uncontrolled landfill. Some to sanitary landfill.	Population centers and local.	Causes thousands of deaths and numerous diseases in poor societies through improper controls.
Combustion wastes - gases.	30 billion	Atmospheric releases. Scrubbed gases become solid waste.	Global.	Implicated in millions of deaths in all societies from air pollution.
Combustion wastes - solids.	500 million	Mostly controlled in surface land-fill.	Localized	Groundwater pollution and related effects.
Chemical wastes, and fertilizer run-off.	Millions	Mostly controlled in selected and protected sites.	Localized	Minor groundwater pollution.
Industrial wastes.	Millions	Mostly controlled in selected and protected sites.	Localized	Minor groundwater pollution.
Mining Wastes - acidic wastes, toxic metals.	Billions	Surface disposal mostly in confined areas with the application of some controls in some regions.	Mine sites.	Localized groundwater pollution. Acid mine drainage.
Nuclear and other high and low radioactivity wastes - solids. *	40 Thousand	Totally retained, 100% controlled and managed according to international standards. Some medical radioactive wastes in hospitals and universities may evade such control.	Only in specific, licensed disposal sites.	Minor, if any, health impact, yet gives rise to significant political angst, and social misinformation.

* The operation of the 443 commercial nuclear plants in the world (2003) displaces, each year, the emission to the atmosphere of about 3 billion tonnes of carbon dioxide, about 30 million tonnes of sulfur dioxide and millions of tonnes of solid wastes and vaporized toxic metals including mercury, selenium and arsenic.