
IS45. ENVIRONMENTAL RISK ASSESSMENT FOR AIR TOXICS

Esra KARAMAN

Centre for Labour and Social Security Training and Research, Pursaklar, Ankara, Turkey

Toxic air pollutants also known as hazardous air pollutants that cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. Some can even cause death or serious injury if accidentally released in large amounts. Examples of air toxics include; benzene, perchloroethylene dioxin, methylene chloride, asbestos, toluene, and metals such as cadmium, mercury, chromium, and lead compounds which is emitted from number of industries.

Many air pollutants remain in the environment for long periods of time and are carried by the winds hundreds of miles from their origin. Millions of people live in areas where urban smog, very small particles, and toxic pollutants pose serious health concerns. People exposed to high enough levels of certain air pollutants may experience burning in their eyes, an irritated throat, or breathing difficulties. Long-term exposure to air pollution can cause cancer and long-term damage to the immune, neurological, reproductive, and respiratory systems. In extreme cases, it can even cause death.

Environmental risk assessment described as the characterization of the potential adverse health effects of human exposures to environmental hazards. Characterizing risk involves integrating information on hazard, dose-response, and exposure.

There are main two steps of the risk assessment process: Hazard identification and Dose-Response Assessment. There are many programs that make identify human exposure pathways and estimate the amount of human exposure under different exposure scenarios and many toxic tools to asses environmental air toxic substances. Several databases, models and act are used to find health and safety information.

*esra.karaman@csgb.gov.tr