

## **Health, Safety, and Environmental Protection**

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Health, safety and environmental protection encompass a broad and important area of environmental engineering. The primary concern is protection of humans from workplace hazards including control of airborne toxic chemicals in the form of dusts, gases, mists and vapors; extremes of temperature and pressure; noise; and ionizing and nonionizing radiation. The professional discipline known as industrial hygiene deals with all of the above, although the specialized area known as health physics or radiological engineering relates specifically to radiation protection, and more specifically to ionizing radiations. Also included is risk assessment, the determination of the extent and nature of a response to a given dose. While principally applied in the context of human exposures, the technique can also be applied to other components of the ecosystem.

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