

APPENDIX

H

DEFINITIONS

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Action levels - numeric values or other performance criteria that are protective of human health, safety and the environment

Aquifer - a geologic formation, group of geologic formations, or part of a geologic formation that contains sufficient saturated permeable material to yield economical quantities of water to wells and springs

Chemicals of concern - specific constituents that are identified for evaluation in the risk assessment process

Corrective action - the sequence of actions at a release site that include site assessment, interim remedial action, remedial action, operation and maintenance of equipment, monitoring of progress, and termination of the remedial action

Direct exposure pathway - an exposure pathway where the point of exposure is at the source, without a release to any other medium

Excavation area - the area containing the tank system and backfill material bounded by the ground surface, the walls and floor of the pit, and the trenches into which the underground storage tank system was placed at the time of installation; or two feet around the underground storage tank system if the limits of the original excavation cannot be determined

Exposure - contact of an organism with a chemical of concern

Exposure assessment - the estimation (qualitative or quantitative) of the magnitude, frequency, and duration of exposure to a chemical of concern, and the route of exposure

Exposure pathway - the course a chemical or physical agent takes from a source to an exposed organism. An exposure pathway describes a unique mechanism by which an individual or population is exposed to chemicals or physical agents at or originating from a site. Each exposure pathway includes a source or release from a source, an exposure point, and an exposure route. If the exposure point differs from a source, a transport/exposure medium (e.g., air) or media (in cases of inter-media transfer) also is included

Fate and transport analysis - a study conducted to determine the mechanisms and routes by which chemicals of concern may enter a specific environment, the specific environments potentially affected by the chemicals of concern, and the final disposition and chemical form of the chemicals of concern in those environments

Free phase product - petroleum product floating on the groundwater or surface water, or on the ground surface

Hazard index (HI) - the sum of more than one hazard quotient for multiple chemicals of concern or multiple exposure pathways

Hazard quotient - the ratio of a single chemical exposure level over a specified time period to a reference dose for that chemical derived from a similar exposure period

Indirect exposure pathway - an exposure pathway with at least one intermediate release to any media between the source and the point(s) of exposure (i.e. chemicals of concern from soil through groundwater to the point(s) of exposure)

Middle distillate total petroleum hydrocarbons - petroleum products with boiling point ranges from 190⁰ to 360⁰ C, such as diesel fuels, heating fuels, kerosene, motor oil, waste oil, transformer oil, crude oil, aviation fuel, and similar substances

Reasonable maximum exposure - the highest exposure to a chemical of concern expected to occur at a site

Receptor - persons, structures, utilities, surface water, groundwater, or water supply wells that are or may be adversely affected by a petroleum release

Reference dose (RfD) - an estimate of a daily exposure level to a chemical of concern for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious effects during a lifetime

Sensitive receptor - subpopulations that may be at increased risk from chemical exposures due to increased sensitivity (i.e., infants and children, elderly people, pregnant and nursing women, and people with chronic illness), behavior patterns that may result in high exposure, and/or current or past exposures from other sources.

Slope factor - An upper-bound estimate of the probability of a response per unit intake of a chemical of concern over a lifetime, used to estimate an upper-bound probability of an individual developing cancer as a result of a lifetime of exposure to a particular level of a potential carcinogen

Tier 1 assessment - a risk-based analysis to develop non-site specific values for direct and indirect exposure pathways utilizing conservative exposure factors and fate and transport for potential pathways and various property use categories

Tier 2 assessment - a risk-based analysis applying the direct exposure values established under a Tier 1 assessment at the point(s) of exposure developed for a specific site and development of values for potential indirect exposure pathways at the point(s) of exposure based on site specific conditions

Tier 3 assessment - a risk-based analysis to develop values for potential direct and indirect exposure pathways at the point(s) of exposure based on site specific conditions

Volatile - petroleum products with boiling point ranges from 20⁰ to 190⁰ C, such as gasoline, gasohol, aviation gas, jet fuel, and similar substances