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Acronyms and Abbreviations

Area 3	San Gabriel Valley Area 3 Superfund Site
bgs	below ground surface
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDWR	California Department of Water Resources
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIP	community involvement plan
cis-1,2-DCE	cis-1,2-dichloroethene
COPC	contaminant of potential concern
COPEC	contaminant of potential ecological concern
DPH	California Department of Public Health
DQO	data quality objective
DTSC	California Department of Toxic Substances Control
ELCR	excess lifetime cancer risk
EPA	United States Environmental Protection Agency
FSP	field sampling plan
HHRA	human health risk assessment
HI	hazard index
HQ	hazard quotient
LADPW	Los Angeles Department of Public Works
LARWQCB	California Regional Water Quality Control Board, Los Angeles Region
MCL	maximum contaminant level
µg/L	micrograms per liter
mg/L	milligrams per liter

msl	mean sea level
NDMA	n-nitrosodimethylamine
N	nitrogen
NE	northeastern
NFA	no further action
NFR	no further requirements
NL	notification level
NO_3^-	nitrate
NPL	National Priorities List
NW	northwestern
OU	operable unit
PCE	tetrachloroethene
PRP	potentially responsible party
QA/QC	quality assurance/quality control
QAPP	quality assurance project plan
RI	remedial investigation
RI/FS	remedial investigation/feasibility study
RSL	regional screening level
San Gabriel Basin	San Gabriel Valley Groundwater Basin
SE	southeastern
SVOC	semivolatile organic compound
SW	southwestern
TCE	trichloroethene
1,2,3-TCP	1,2,3-trichloropropane
TRV	toxicity reference value
UST	underground storage tank
VOC	volatile organic compound
Watermaster	Main San Gabriel Basin Watermaster

Glossary

alluvial: Relating to alluvium.

alluvium: Sediment deposited by flowing water, as in a riverbed, flood plain, or delta.

aquifer: A saturated geologic unit, often of sand or gravel, which contains and transmits significant quantities of water under normal conditions.

basin: A large geologic depression in the bedrock filled with unconsolidated sediments.

bedrock: Solid rock that underlies loose material, such as soil, sand, clay, or gravel.

biological degradation: The process by which organic substances are broken down by the enzymes produced by living organisms.

bladder pump: A pump used for low-flow groundwater sampling consisting of a flexible, squeezable bladder encased in a rigid outer casing.

Comprehensive Environmental Response, Compensation, and Liability Act: Commonly known as Superfund, this act (Public Law 96-510; December 10, 1980) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment.

conceptual site model: A planning tool that provides the framework from which the study design is structured. It is frequently created as a site map that organizes information that already is known about a site.

contaminant: A substance not naturally present in the environment or present in unnatural concentrations that can, in sufficient concentration, adversely alter an environment.

contaminants of concern: The contaminants which have been shown through a risk assessment to be those that are likely to be causing risk to receptors at a site.

contaminants of potential concern: Contaminants that potentially pose a risk to human health or the environment.

contamination: The presence of hazardous substances in the environment.

conventional groundwater monitoring well: A groundwater monitoring well completed with one screened interval for monitoring one depth interval of an aquifer.

data quality objectives: Performance and acceptance criteria that clarify study objectives, define the appropriate type of data, and specify tolerable levels of potential decision errors that will be used as the basis for establishing the quality and quantity of data needed to support decisions.

degradation products: Chemical compounds that are formed by natural degradation or decay of some other chemical compound.

ecological risk assessment: A process for systematically evaluating the likelihood that adverse ecological effects may occur as a result of exposure to one or more contaminants.

environmental data: Any measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology.

evaluation criterion: A standard or reference point on which a decision will be assessed.

feasibility study: The mechanism for the development, screening, and detailed evaluation of remedial action alternatives.

groundwater: Water occurring underground, in the zone of saturation in an aquifer.

groundwater gradients: The rate at which the groundwater elevation or the potentiometric surface changes with distance. Groundwater gradients can be calculated in both horizontal and vertical directions.

groundwater monitoring well: A type of well specially designed and installed to sample groundwater at specific locations and depths to evaluate groundwater flow and contamination.

groundwater recharge: Infiltration of water from the earth's surface into the groundwater system.

hazard index: A summation of the hazard quotients for all chemicals to which an individual is exposed. A hazard index value of 1 or less indicates that no adverse human health effects (noncancer) are expected to occur.

hydrogeology: The study of the occurrence and movement of water beneath the surface of the earth.

human health risk assessment: Qualitative and quantitative evaluation of the risk posed to human health by the actual or potential presence of specific contaminants.

ion-exchange: A water treatment process involving the switching of ions between water being treated and solid resin. Undesirable ions in water are switched with acceptable ions on the resin.

Key contaminants of potential concern: The contaminants detected multiple times in groundwater at production wells within Area 3 at concentrations that exceed evaluation criteria. Key COPCs identify regional contamination within Area 3.

liquid-phase granular activated carbon: A water treatment process involving the pumping of contaminated groundwater through carbon-containing vessels, where the carbon attracts the contaminants, which sorb onto the surface of the carbon.

maximum contaminant levels: The maximum permissible level of a contaminant in water that is delivered to any user of a public water system.

mitigation: An action taken to avoid, reduce, or compensate for the effects of environmental damage.

National Priorities List: A list published in the Federal Register of hazardous waste sites in the United States that are eligible for extensive, long-term cleanup under the Superfund program.

non-point sources: Sources of contamination that originate from multiple areas or locations rather than from a discrete site.

notification level: Health-based advisory levels (formerly referred to as Action Levels) established by the California Department of Public Health for certain chemicals for which no established drinking water standards exist.

operable unit: A subunit of a Superfund site, defined based on a geographical area or on another parameter, where a number of separate activities are undertaken as part of site cleanup.

receptor: A plant or animal species used to estimate the potential exposure to contamination and likelihood of adverse effects to similar organisms in the environment.

remedial action: The actual construction or implementation phase of a Superfund site cleanup that follows remedial design.

remedial investigation: Actions undertaken to characterize the full nature and extent of contamination, including characterization of hazardous substances, identification of contaminant sources, and assessment of human health and ecological risk.

sedimentary: A type of rock consisting of layers resulting from consolidation of sediment; one of three main categories or classes into which all rocks are divided, the others being igneous and metamorphic.

soil vapor: Elements and compounds in a gaseous state in the small spaces between particles of soil. Such gases can be moved or driven out under pressure.

structural bedrock discontinuity: In structural geology, a subsurface bedrock zone or surface separating two unrelated groups of rocks across which an abrupt geologic change occurs, e.g., a fault.

Superfund: The program operated under the legislative authority of CERCLA and the Superfund Amendments and Reauthorization Act that funds and carries out EPA solid waste emergency and long-term response actions, including conducting or supervising cleanup actions.

tetrachloroethene: A volatile organic compound primarily used for dry cleaning clothing and in manufacturing processes as a solvent and metal degreaser.

trichloroethene: A volatile organic compound primarily used in manufacturing processes as a solvent, metal degreaser, and textile degreaser.

volatile organic compound: An organic (carbon-containing) compound that evaporates readily at room temperature.