APPENDIX E: GLOSSARY AND ACRONYMS

Italicized terms and their definitions are taken from the RMP rule and the RMP list rule.

Term	Definition
AA	Administering Agency (AA): the local agency responsible to implement the CalARP program. In most instances, the Certified Unified Program Agency (CUPA) has this responsibility. When there is no CUPA, the implementing agency is the agency designated by the Secretary for Environmental Protection pursuant to HSC Section 25404.3(f) or the agency designated by OES pursuant to 25533(f). CCCHSD is the CUPA and the AA for Contra Costa County
Accidental release	An unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source
Acute exposure	Refers to a single exposure that occurs over a relatively short period of time (e.g., during exposure to a vapor cloud resulting from an accidental release)
Administrative controls	Written procedural mechanisms used for hazard control
Aerosol entrainment	When small liquid droplets remain suspended in a vapor cloud instead of falling to the ground
Alternative release scenarios	The scenarios other than worst case provided in the hazard assessment. For alternative scenariossources may consider the effects of both passive and active mitigation systems. One example of an alternative release scenario is the Emergency Response Planning Scenario (ERPS)
Article	A manufactured item, as defined under 29 CFR 1910.1200(b) and Section 5189 of Title 8 of the California Code of Regulations, that is formed to a specific shape or design during manufacture, that has end use functions dependent in whole or in part upon the shape or design during end use, and that does not release or otherwise result in exposure to a regulated substance under normal conditions of processing and use
Atmospheric	The dilution of a vapor or gas as it mixes with the surrounding air and moves dispersion downwind
Atmospheric stability	A classification of the amount of turbulence (horizontal and vertical movement of the surrounding air) that exists in the atmosphere at any given time. Levels of atmospheric stability are identified with a letter (A - F). Unstable conditions (A - C) generally occur during mid-day with clear skies and light winds; these conditions cause considerable horizontal and vertical turbulence and result in rapid dispersion of a vapor cloud as it moves downwind. Neutral conditions (D) can occur during the day or night with cloudy skies and moderate-to strong winds; these conditions cause less turbulence in the horizontal and vertical directions than unstable conditions and result in less rapid dispersion of the vapor cloud as it moves downwind. Stable conditions (E - F) generally occur at night or early morning with clear skies and light winds; there is very little horizontal or vertical turbulence, which results in very slow dispersion of the vapor cloud as it moves downwind
Average concentration	The time-weighted concentration at a given downwind location over a specified period of time or duration of exposure (i.e., the averaging time)

Averaging time	The time interval over which the instantaneous concentration of the hazardous material within the vapor cloud is averaged to assess the effects of the exposure
Boiling liquid expanding vapor explosion (BLEVE)	The explosive vaporization of a superheated liquid when it is rapidly (instantaneously) released from a storage container or transportation vessel. The resulting release of energy generates a fireball that often occurs if the material is combustible and the container/vessel failure is caused by an external fire. The primary consequences of a BLEVE are (1) overpressure that may be generated, (2) large vessel fragments that may be propelled away from the explosion, and (3) when applicable, thermal radiation from the fireball
CCCHSD	Contra Costa County Health Services Department, which is the CUPA, the AA, and the designated agency
CCR	California code of regulations
CFR	Code of federal regulations
Catastrophic release	A major uncontrolled emission, fire, or explosion, involving one or more regulated substances that presents imminent and substantial endangerment to public health and the environment
Chronic exposure	Refers to multiple or continuous exposures occurring over a long period of time (i.e., months or years)
Classified information	Defined in the Classified Information Procedures Act, 18 U.S.C. App. 3, Section l(a) as "any information or material that has been determined by the United States Government pursuant to an executive order, statute, or regulation, to require protection against unauthorized disclosure for reasons of national security"
Concentration in air, parts per million (ppm), % by volume (Vol%)	The relative amount (volume) of a material that is contained within a vapor cloud in the air, often expressed in parts per million (ppm) or % by volume (vol%). A concentration of 1,000,000 ppm (or 100 vol%) means that the vapor cloud volume consists only of the material with no air. A concentration of 500,000 ppm (or 50 vol%) means that the vapor cloud volume is one-half material and one-half air
Condensate	Hydrocarbon liquid separated from natural gas that condenses due to changes in temperature, pressure, or both, and remains liquid at standard conditions
Consequence analysis	The prediction of the effects of accidental releases using mathematical models, historical experience of accident effects, and/or experimental results. Includes estimating a source term, predicting the transport of energy or the release of material through the environment, and/or estimating the effects of the release
Covered process	A process that has a regulated substance present in more than a threshold quantity as determined under §68.115 of 40 CFR 68 or Section 2770.5 of the CalARP regulation
Crude oil	Any naturally occurring, unrefined petroleum liquid
CUPA	Certified Unified Program Agencies
Delayed ignition	The ignition of a flammable vapor cloud several minutes following its release, usually associated with a point distant from the release

Dense gas, heavy gas	A vapor cloud that is more dense (or heavier) than the surrounding air. Such a cloud has a tendency to hug the ground following the release. The atmospheric dispersion of a heavy gas cloud is driven primarily by the difference in density between the vapor cloud and the surrounding air rather than by the surrounding atmospheric turbulence
Designated agency	Any state, local, or federal agency designated by the state as the agency responsible for the review of an RMP for completeness and for appropriate enforcement actions. In Contra Costa County, CCCHSD is the designated agency
Dispersion model	Any method used to predict (based on release information and meteorological data) the characteristics (e.g., concentration and dimensions) of a vapor cloud as it moves downwind. The method may be based on experimental data, theoretical data, or a combination of the two. In many cases, the method is often put into a computer program for easy use
Dose	A measure of total exposure to a specific hazard (toxic concentration, thermal radiation, etc.) that occurs during the duration of a release event (passage time of a toxic cloud, duration of a burning fireball, etc.). For example, exposure to a constant, toxic vapor cloud concentration of 1,000 ppm for 10 minutes results in a toxic dose of 10,000 ppm-min. Exposure to a constant thermal radiation intensity of 5,000 W/m 2 for 10 seconds results in a thermal dose of 50,000 J/m 2
Endpoint	A toxic substance's Emergency Response Planning Guideline level 2 (ERPG 2) developed by the American Industrial Hygiene Association (AIHA). If a substance has no ERPG 2, then the endpoint is the level of concern (LOC) from the *Technical Guidance for Hazards Analysis,* updated where necessary to reflect new toxicity data. For vapor cloud explosions, 1-psi overpressure and for fires (i.e., jet fires, pool fires, fireballs), 5 kW/m 2 for 40 seconds, are to be used. For vapor cloud fires and jet fires, the lower flanunability limit provided by NFPA or other sources shall be used
Emergency response planning guidelines (ERPG) of effect	The concentration of a hazardous material in air above which some members of the public may begin to experience adverse effects. The AIHA approves and publishes three levels (ERPG 1, ERPG 2, and ERPG 3, defined below), each related to the severity
Emergency response planning scenario (ERPS)	A more descriptive title for the CalARP program's Alternative Release Scenario (ARS) required under the CalARP regulation. It is representative of the most serious (or significant) potential release(s) from a stationary source that may be unlikely to occur, but is physically possible and reasonably feasible. ERPSs are also modeled using more pessimistic meteorological parameters
Environmental receptor	Natural areas such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and federal wilderness areas, that could be exposed at any time to toxic concentrations, radiant heat, or overpressure greater than or equal to the endpoints provided in §68.22(a) of 40 CFR 68 or Section 2750.2(a) of the CalARP regulations, as a result of an accidental release and that can be identified on local U. S. Geological Survey maps
ERPG 1	The maximum airborne concentration below which it is believed nearly all individuals could be exposed for up to 1 hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor
ERPG 2	The maximum airborne concentration below which it is believed nearly all individuals could be exposed for up to 1 hour without experiencing or developing irreversible or other serious health effects or symptoms that could impair their abilities to take protective action

ERPG 3	The maximum airborne concentration below which it is believed nearly all individuals could be exposed for up to 1 hour without experiencing or developing life-threatening health effects
ERPS	Emergency response planning scenario:
Explosion	A release of energy that causes a transient change in the density, pressure, and velocity of the air surrounding the source of energy. This release of energy may generate a damaging pressure wave. If the source of energy originates from rapid depressurization of a vessel (high pressure vessel rupture or BLEVE), this is referred to as a ***physical explosion;*** if the source of energy originates from combustion of flammable material (vapor cloud explosion), it is called a ***chemical explosion***
Exposure time	The total time interval over which an individual is actually exposed to a hazardous condition (material in a vapor cloud, fire, etc.)
Field gas	Gas extracted from a production well before the gas enters a natural gas processing plant
Fireball	A fireball results following the immediate ignition of a rapid (instantaneous) release of a flammable vapor or superheated liquid or liquid/vapor mixture. The burning cloud tends to rise, expand, and assume a spherical shape. A fireball usually exists for only 10 to 20 seconds; however, it may present thermal radiation effects and severely burn individuals hundreds of feet from its source. A fireball often accompanies a BLEVE if the released liquid is flammable and the release results from vessel failure caused by an external fire
Flammability limits, and lower	The flammability limits represent the range of concentration in air of a flammable upper vapor or mist that will undergo self sustaining combustion (i.e., will burn). For example, the flammability limits for propane are 21,000 - 95,000 ppm (often represented as percentage: 2.1 - 9.5% by volume). Outside these limits, a propane vapor cloud will not undergo self sustaining combustion. The ***upper flammability limit* (UFL)** is the maximum concentration of a hazardous material in air that can burn or be ignited (e.g., for propane the UFL is 95,000 ppm or 9.5% by volume). The ***LFL*** is the minimum concentration of a hazardous material in air that can burn or be ignited (e.g., for propane, the LFL is 2 1,000 ppm or 2. 1 % by volume)
Flash fire	Results when a flammable vapor-air or vapor/mist-air mixture is ignited. A flash fire usually exists for only a few seconds; however, individuals located within or near the vapor cloud when it ignites may suffer severe burns
Footprint	The area potentially affected by an accidental release of hazardous material in which the level of concern is exceeded. For example, the footprint for a toxic release could represent the area covered by the toxic cloud in which the average concentration of the material in the cloud exceeded the ERPG 3 value. For an explosion, the footprint would be the area in which the level of concern for overpressure would be exceeded (see "vulnerability zone")
H&SC	California Health and Safety Code
Hazard and operability study (HAZOP)	A PHA methodology
Hazard assessment	As used in connection with EPA's RMP rule, an analysis to estimate the potential consequences of accidental releases of hazardous materials on the public and on the environment when such impacts provide a direct pathway to acute human health effects

Immediately dangerous to life and (IDLH) concentration	The maximum concentration in air to which a healthy worker may be exposed for 30 minutes without experiencing any escape-impairing symptoms or permanent health health effects. IDLH values are published by the National Institute for Occupational Safety and Health (NIOSH). The IDLH concentration is intended to be used for respirator selection for workers and is not applicable for assessing health effects to the general public
Implementing agency	The state or local agency that obtains delegation for an accidental release prevention program under subpart E of 40 CFR 63 under Section 112(l) of the Clean Air Act (CAA). The implementing agency may, but is not required to be, the state or local air permitting agency. If a state or local agency does not take delegation, EPA will be the implementing agency for the state. In California OES has applied to be the implementing agency
Inherently safer	An approach to the design of safer chemical plants, chemical processes, and storage facilities with clear potential benefits to safety, health, and the environment
Injury	Any effect on a human that results either from direct exposure to toxic concentrations; radiant heat; or overpressures from accidental releases or from the direct consequences of a vapor cloud explosion (such as flying glass, debris, and other projectiles) from an accidental release and that requires medical treatment or hospitalization
Interested persons	Those residents, workers, students, and others who would be potentially affected by an accidental or catastrophic release
Jet fire	Results from the ignition of a flammable vapor or liquid/vapor mixture that is being continuously discharged from an orifice, leak, or rupture. The resulting flame has a torch-like appearance and may pose thermal radiation hazards to nearby individuals
Level of concern (LOC)	Refers to the criteria that are used to determine the extent of a footprint predicted in a hazard assessment (see "footprint"). LOCs can be specified for toxic exposure (e.g., ERPGs), exposure to fires/flames (thermal exposure criteria), and explosions (overpressure). LOCs are selected based on the objectives of the hazard assessment. For example, ERPG 2 is often used in consequence analyses directed at improving emergency planning activities. The footprint for ERPG 2 indicates the areas where people may need to take protection or perform other emergency actions to avoid serious health effects
Local emergency planning committee (LEPC)	A local interdisciplinary group appointed by the State Emergency Response Commission (SERC) to develop a comprehensive emergency plan for responding to accidental releases of hazardous materials that could affect the public. Individual plants/facilities have the primary responsibility of responding to onsite (i.e., within the fenceline) emergencies, while the LEPC is responsible for developing plans for safeguarding the public if hazardous materials migrate off site (i.e., over the fenceline). The membership of the LEPC must include local citizens, emergency responders, members of law enforcement, local media, as well as industry representatives
Major change	Introduction of a new process, process equipment, or regulated substance, an alteration of process chemistry that results in any change to safe operating limits, or other alteration that introduces a new hazard
Mechanical Integrity	The process of ensuring that process equipment is fabricated from the proper materials of construction and is properly installed, maintained, and replaced to prevent failures and accidental releases

Medical treatment	Treatment, other than first aid, administered by a physician or registered professional personnel under standing orders from a physician
Mitigation system, active, passive	Specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment ***Passive mitigation*** Equipment, devices, or technologies that function without human, mechanical, or other energy input. An example of a passive mitigation system is a dike surrounding a storage tank that limits the spread and vaporization of a spilled liquid hazardous material ***Active mitigation*** Equipment, devices, or technologies that need human, mechanical, or other energy input to function. An example of an active mitigation system is an automatic shutoff valve that limits the duration of a hazardous material release
Mixing layer, mixing height	The mixing layer is the layer of air closest to the earth's surface into which materials will disperse when released. The top or depth of the layer, referred to as the ***mixing height,*** varies from location to location, time of day, and time of year. The top of the mixing layer acts as a "ceiling" to restrict vertical spreading of a vapor cloud. Therefore, a thin (shallow) mixing layer results in less rapid dispersion of a vapor cloud as it moves downwind, possibly resulting in a larger footprint compared to the same situation having a thicker (deeper) mixing layer
Model accuracy	The ability of a model to produce results that match the experimental (or known) data
Model uncertainty	The statistical confidence limits (upper and/or lower bounds) associated with a model prediction compared to the actual, unknown outcome. For example, a model may predict that the concentration in a vapor cloud is 500 ppm with an uncertainty of 50% (i.e., 500 ppm, plus or minus 50%). This means the actual value of the concentration (which is not known) is expected to fall somewhere between 250 ppm and 750 ppm
Modified stationary source	A stationary source which has undergone an addition or change which qualifies as a “major change” as defined in Section 2735.3
Natural gas processing plant (gas plant)	Any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. A separator, dehydration unit, heater treater, sweetening unit, compressor, or similar equipment shall not be considered a "processing site" unless such equipment is physically located within a natural gas processing plant (gas plant) site
OCA	Offsite consequence analysis
OES	Governor’s Office of Emergency Services, which is the implementing agency for the CalARP program
OSHA	Occupational Safety and Health Administration
Off site	Areas beyond the property boundary of the stationary source or areas within the property boundary to which the public has routine and unrestricted access during or outside business hours
Overpressure	The sudden increase in the local atmospheric pressure that may result from an explosion. The standard pressure in the atmosphere is approximately 14.7 lb per square inch at sea

	level. An explosion that causes a 3 lb per square inch overpressure means that the local atmospheric pressure suddenly increased from 14.7 to 17.7 lb per square inch. Significant overpressure may cause severe injury to exposed individuals and damage to property
P&ID	Piping and instrumentation diagram
Passive gas	A vapor cloud that is buoyant (i.e., light) or neutrally buoyant compared to the surrounding air. The atmospheric dispersion of such a cloud is completely dominated by turbulence (horizontal and vertical movement of air) in the atmosphere. A passive gas *does not* have a tendency to hug the ground like a heavy or dense gas
Peak concentration	The maximum, instantaneous (i.e., zero averaging time) concentration that occurs at a given downwind location as a vapor cloud passes the location
Petroleum refining process unit	A process unit used in an establishment primarily engaged in petroleum refining as defined in the NAICS code for petroleum refining (32411) and used for the following: (1) producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants, (2) separating petroleum, or (3) separating, cracking, reacting, or reforming intermediate petroleum streams. Examples of such units include, but are not limited to, petroleum-based solvent units, alkylation units, catalytic hydrotreating, catalytic hydrorefining, catalytic hydrocracking, catalytic reforming, catalytic cracking, crude distillation, lube oil processing, hydrogen production, isomerization, polymerization, thermal processes, and blending, sweetening, and treating processes. Petroleum refining process units include sulfur plants
Plume	The appearance of a vapor cloud that is being released over a prolonged period of time from a stack, pipe, vessel, or evaporating pool. The resulting vapor cloud is elongated and spreads out as it moves downwind, having a cigar-shaped appearance
Pool depth	The thickness of a liquid pool that is spilled onto a given surface (concrete, gravel, soil, water, etc.). The minimum pool depth that a liquid spill may attain as it spreads out depends upon such factors as the roughness and contour of the surface, the liquid viscosity, and the liquid pour point temperature
Pool fire	Results from the ignition of flammable vapors that evaporate from a flammable liquid spill. The flames associated with the pool fire may produce thermal radiation effects to individuals located near the fire
Population	The public
Pressure wave	A moving disturbance that emanates from an explosion and causes a localized increase in atmospheric pressure (overpressure) as it traverses the atmosphere
Process	Any activity involving a regulated substance including any use, storage, manufacturing, handling, or the onsite movement of such chemicals, or combination of these activities. For purposes of this definition, any group of vessels which are interconnected and separate vessels which are located such that a highly hazardous chemical could be involved in a potential release shall be considered a single process
Process hazard	A method for systematically analyzing a process to identify the potential operability analysis (PHA) problems and hazards associated with the process. You can use any one of seven different methodologies included in the CalARP regulation for conducting a PHA, but your choice of methodology should be appropriate to the size and complexity of

	your process. Areas of concern during PHA can include equipment, instrumentation, utilities, human actions (routine and nonroutine), and external events
Produced water	Water extracted from the earth from an oil or natural gas production well, or that is separated from oil or natural gas after extraction
Public	Any person except employees or contractors at the stationary source
Public receptor	Offsite residences; institutions (e.g., schools, hospitals); industrial, commercial, and office buildings; parks; or recreational areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public could be exposed to toxic concentrations, radiant heat, or overpressure as a result of an accidental release
Qualified person	A person who is qualified to attest, at a minumum to: (1) the validity and appropriateness of the process hazard analysis (PHA) performed pursuant to Section 2760.2; (2) the completeness of a risk management plan; and (3) the relationship between the corrective steps taken by the owner or operator following the PHAs and those hazards which were identified in the analyses.
RMP	The risk management plan as described by the component elements identified in Article 3 of the CalARP regulations
Rainout	When liquid droplets fall to the ground instead of remaining in a vapor cloud
Regulated substance	Any substance listed pursuant to section II 2(r)(3) of the Clean Air Act as amended in §68.130 of 40 CFR 68 or in Section 2770.5 of the CalARP regulation
Release duration	The total time interval over which a hazardous material is being released to the surrounding air
Release rate	Refers to the quantity (in pounds, kilograms, gallons, etc.) of a hazardous material that is released per unit time (per second, per minute, per hour, etc.) from a tank, pipe, or other piece of equipment
Replacement in kind	A replacement that satisfies the design specifications
Root cause	Prime reasons, such as failures of some management systems, that allow faulty design, inadequate training, or improper changes, which lead to an unsafe act or condition, and result in an incident. Root causes are also known as underlying causes. If root causes were removed, the particular incident would not have occurred.
Shelter-in-place	A method of protecting oneself from exposure to a toxic vapor cloud by remaining inside an enclosure (building or house) until the concentration within the vapor cloud (outside of the enclosure) has decreased to a safe level
Solar radiation	The amount of thermal radiation from the sun that reaches the earth's surface. The solar radiation varies at different locations, hour of the day, time of the year, and cloudiness
Source term	Defines the quantity or release rate, the duration of the release, and the form (liquid, vapor, or liquid and vapor) for an accidental release of a hazardous material
Stationary source	Any buildings, structures, equipment, installations, or substance-emitting stationary activities that belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under

	common control), and from which an accidental release may occur. The term stationary source does not apply to transportation, including storage incident to transportation, of any regulated substance or any other extremely hazardous substance under the provisions of this chapter. A stationary source includes transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary soure for loading or unloading. Transportation includes, but is not limited to, transportation subject to oversight or regulation under 49 CFR part 192, 193, or 195, or a state natural gas or hazardous liquid program for which the state has in effect a certification to DOT under 49 U.S.C. Section 60105. Properties shall not be considered contiguous solely because of a railroad or gas pipeline right-of-way
Stoichiometric concentration	The concentration of a flammable material in air with the precise amount of oxygen needed to burn all of the flammable material, assuming complete combustion (i.e., if combustion were complete, no excess fuel or oxygen would be present following the combustion process)
Surface roughness	A measure of the weighted-average height of surface objects (grass, trees, buildings, etc.) in the vicinity (upwind and downwind) of the released hazardous material. The surface roughness influences the atmospheric dispersion of a released hazardous material by increasing turbulence (horizontal and/or vertical movement) of the surrounding air. Small values of surface roughness create less turbulence and result in less rapid dilution of the cloud as it moves downwind, while larger values of surface roughness create more turbulence and result in more rapid dilution of the cloud as it moves downwind
Thermal radiation	Energy produced by sources of heat (sun, electric heater, fireball, jet fire, pool fire, etc.) that is subsequently transmitted through the air. Thermal radiation may cause severe burns to individuals located near the source of heat; the severity of health effects from thermal radiation depends upon a variety of factors (e.g., thermal flux intensity, exposure duration, angle of exposure, protective clothing)
Threshold quantity(TQ)	The quantity specified for regulated substances pursuant to Section 2770.5 of the CalARP regulations and determined to be present at a stationary source as specified in Section 2770.2 of the CalARP regulations
Trade secret	Trade secrets as defined in Section 6254.7 of Subdivision (d) of the Government Code and Section 1060 of the Evidence Code and includes information submitted to an administering agency which has been designated by the stationary source as trade secret and which shall not be released by the administering agency except to authorized officers and employees of other governmental agencies, and only in connection with the official duties of that officer or employee pursuant to any law for the protection of health and safety. Trade secret information is to be handled pursuant to Section 25538 of the Health and Safety Code.
Typical meterological conditions	The temperature, wind speed, cloud cover, and atmospheric stability class, prevailing at the site based on data gathered at or near the site or from a local meteorological station
Vapor cloud explosion (VCE)	Results from the ignition of a cloud of flammable vapor or vapor/mist. The burning cloud generates expanding gases so quickly that a damaging pressure wave is produced. Partial confinement and/or significant congestion, resulting in increased turbulence in the burning cloud, are usually required for high velocity flame propagation (which generates damaging overpressures). The overpressure produced by the VCE can cause severe injuries and damage at significant distances from the point of release and/or the point of ignition

Vessel	Any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container
Vulnerability zone	The vulnerability zone is the overlay of all footprints associated with a hypothetical accidental release of hazardous material, accounting for the variation in the wind direction at the time of the release. For a toxic release, the vulnerability zone is obtained by rotating the footprint to include all possible wind directions, which results in a circular area. CCCHSD has defined the vulnerability zone to be the radius of one mile or distance to the ERPS toxic or flammable endpoint, whichever is greater.
Wind persistence	The tendency of the wind to blow in a given direction, within some angular range, for a given time span. A wind persistence value of 5 hours means that the wind blows in approximately the same direction for 5 consecutive hours
Wind speed	The velocity of the wind as it moves through the atmosphere, generally measured by the National Weather Service (NWS) at a height of 10 meters (33 ft) from the ground and reported based on the direction the wind is originating (e.g., winds from the southeast). The wind speed is most often reported as being within some range of values (i.e., 5 - 10 mph). The wind speed influences the atmospheric dispersion of hazardous vapor clouds. While the NWS reports wind speeds at a height of 10 meters from the ground, the wind speed does vary as a function of elevation. Wind speeds used in dispersion models should represent values that are consistent with the actual height of the release or the depth of the vapor cloud, as appropriate
Worst-case release	Release of the largest quantity of a regulated substance from a vessel or process line failure in ten minutes that results in the greatest distance to an endpoint defined in §68.22(a) of 40 CFR 68 and Section 2750.2(a) of the CalARP regulations
Worst-case scenario	An accidental release involving a hazardous material that would result in the worst (most severe) offsite consequences