

ERB Acronym and Glossary – A

	Glossary	Definition
A	data qualifiers - method (analytical) qualifier - A	Flame Atomic Absorption (AA). See Method Qualifier.
A	data qualifiers - organic analysis - A	Indicates that a Tentatively Identified Compound (TIC) is a suspected aldol-condensation product. See Data Qualifiers.
A-106	Office of Management and Budget Circular #A-106	The OMB Circular A-106 module was a software program that helped environmental coordinators plan, program, budget and forecast costs to manage their environmental projects, now superseded by Environmental Program Requirements Module (EPRM).
AA	Atomic Absorption	AA is an acronym for Atomic Absorption, a methodology for the detection of metals. It describes a single element analysis using a single wavelength
AAQS	Ambient Air Quality Standard	sets legal limits on the level of an air pollutant in the outdoor (ambient) air necessary to protect public health. Both the Air Resources Board (ARB) and the U.S. Environmental Protection Agency (USEPA) are authorized to set ambient air quality standards.
ABM	Abrasive Blasting Media	Material used to remove paint, coatings, and/or corrosion from industrial structures.
ACGIH	American Conference of Governmental Industrial Hygienists	A community of professionals that advances worker health and safety through education and the development and dissemination of scientific and technical knowledge.
ACH	Air Changes per Hour	The movement of a volume of air in a given period of time; if a house has one air change per hour, it means that all of the air in the house will be replaced in a one-hour period.
ACHP	Advisory Council on Historic Preservation	An independent Federal agency that promotes the preservation, enhancement, and productive use of our Nation's historic resources.
A-E	Architect-Engineer	Architects provide professional services in the development, design, construction, alteration or repair of building projects. Engineers design, plan and supervise the construction of structures
AF	Soil Adherence Factor to skin, mg/cm ²	Experimentally-derived data for adherence of soil to skin have resulted in measured values ranging from 0.2 to 1.5 mg/cm ² per event.
AFCEE	Air Force Center for Engineering and the Environment	A field operating agency of The Air Force Civil Engineer . Services and products in environmental, architectural and landscape design, planning and construction management services and products.
Ag	Silver	A naturally occurring metal that is acquired as a by-product during retrieval of other metals like copper, lead, zinc and gold. It is used in surgical prostheses, splints, fungicides, coins, photographic materials, electrical products, paints, and batteries. Silver in water can form various salts or adsorb to various inorganic compounds, or humus and other organic debris. The majority of silver is sorbed by manganese dioxide, which is dependent on the pH and redox state of the local environment. Silver

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		in soil can be mobile depending on the pH, redox state, presence or absence of inorganic and organic compounds that affect sorption.
AIRFA	American Indian Religious Freedom Act	established on August 11, 1978, protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.
AL	Action Level	1) In the Superfund program, the existence of a contaminant concentration in the environment high enough to warrant action or trigger a response under SARA and the NCP. 2) Regulatory levels recommended by EPA for enforcement by FDA and USDA when pesticide residues occur in food or feed commodities for reasons other than the direct application of the pesticide. As opposed to "tolerances" which are established for residues occurring as a direct result of proper usage, action levels are set for inadvertent residues resulting from previous legal use or accidental contamination. 3) Unless otherwise specified in a NAVOSH standard, one-half the relevant Permissible Exposure Limit (PEL) or Threshold Limit Value (TLV). See Tolerances.
Al	Aluminum	A light ductile metal that is easy to weld. It is a good conductor of heat and electricity. When it is exposed to air, it creates a protective film resistant to corrosion. It is used in alloys with copper, zinc, manganese and magnesium. It is a very versatile metal and so has a wide variety of uses: packaging materials, utensils, auto-bodies, airplanes, building materials, electrical conductors, explosives, fireworks, abrasives, cosmetics, paints, and even food additives. It is a natural component in soil, water, and air. Inhalation of the fine powder can lead to pulmonary fibrosis.
AM	Action Memorandum	For Removal Action to be accomplished at NPL and non-NPL sites. 1) For an Interim Removal Action - specifies what threat is being addressed and how long the action will remain effective; should also state what type of final action may be conducted and how the removal action contributes to the implementation of the final action. 2) For a Final Removal Action -specifies the performance standards or cleanup levels to be reached by the actions.
ANOVA	Analysis of Variance	An analysis of the variation in the outcomes of an experiment to assess the contribution of each variable to the variation.
ANPR	Advanced Notice of Proposed Rulemaking	It describes various approaches that the agencies could pursue to allow or require financial institutions to provide alternative types of privacy notices that would be more readable and useful to consumers. It also seeks comment on whether differences between federal and state laws pose any special issues for developing a short privacy notice.

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ANSI	American National Standards Institute	The American National Standards Institute (ANSI) is a private, non-profit organization (501(c)3) that administers and coordinates the U.S. voluntary standardization and conformity assessment system.
AOC	Area of Concern	A discrete area of contamination or suspected contamination that is in the PA/SI (or RFA) phase and that has not been entered into the DoD RMIS database.
AOU	Accelerated Operable Unit	An action which prevents, controls or responds to a release or threatened release of hazardous substances, pollutants, and contaminants where prompt action is necessary but a response under removal authorities is not appropriate or desirable. The purpose of an AOU is to allow the remedial action for that Operable Unit to proceed prior to completion of the final Record of Decision (ROD) for the total remedial action. AOUs are particularly appropriate where the size and complexity of the total remedial action would seriously delay implementation of independent parts of the action. AOUs will only proceed after complying with applicable procedures in the NCP. It is not intended that AOUs diminish the requirements for, delay the conduct of, or conflict with the total remedial action.
APCD	Air Pollution Control District	County and regional agencies established pursuant to the County Air Pollution Law of 1947 and the Mulford-Carrell Act of 1967 to administer and enforce minimum standards for air quality.
API	American Petroleum Institute	represents America's oil and natural gas industry and insures a strong, viable U.S. oil and natural gas industry capable of meeting the energy needs of our Nation in an efficient and environmentally responsible manner
APR	Air Purifying Respirator	A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.
AQAPS	Automated Quality Assessment Program System	AQAPS is a database where QA findings and observations are documented and stored. AQAPS was developed by Navy Explosive Ordnance Disposal Technology Division, Indian Head, Maryland and is used by QA personnel.
AQD	Air Quality District	The air pollution control agency that is responsible for controlling emissions from stationary sources of air pollution.
AR	Administrative Record	A compilation of information established for all CERCLA sites made available to the public at the start of the Remedial Investigation (RI) for remedial actions, or at the time of Engineering Evaluation/Cost Analysis (EE/CA) for removal actions. Information in the Administrative Record supports the selected remedy for remedial actions and removal actions.
ARAR	Applicable or Relevant and Appropriate Requirement	Requirements, including cleanup standards, standards of control and other substantive environmental protection requirements and criteria, for hazardous substances as specified under Federal and state laws and regulations, that must be met when complying with CERCLA and SARA.

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ARF	Administrative Record File	1) Refers to documents, as they are being established and maintained. Until a response action decision has been selected, there is no complete administrative record for that decision. Thus, to avoid creating the impression that the record is complete at any time prior to the final selection decision, the set of documents is referred to as the ARF rather than the AR. 2) A file that contains all information used in order to make decisions on the selection of a response action under CERCLA. Available for public review and comment.
ARMS	Administrative Records Management System	The Comprehensive Environmental Response Compensation and Liability Act requires the establishment of an Administrative Record for sites being cleaned up in compliance with this law. It is the combination of records and other material that forms the basis for remedy selection and legal review of the CERCLA response action implemented at an installation restoration site.
ARPA	Archaeological Resources Protection Act	An act to protect archaeological resources on public lands and Indian lands, and for other purposes.
ARTT	Alternative Restoration Technology Team	A Naval Facility Engineering Command-chartered workgroup established to promote and implement the use of cost effective, innovative technologies, and methods in the Navy Environmental Restoration program.
AS	Air Sparging	General term for the technology of introducing gases, usually air, beneath the water table to promote site remediation. Air sparging can be divided into two distinct processes: in-well aeration and air injection.
As	Arsenic	A metalloid occurring naturally in the earth's crust and fossil fuels. It can be released into the environment during combustion of fossil fuels containing arsenic. It is used in the production of glass, enamels, ceramics, oil, cloth, linoleum, electrical semiconductors, pigments, fireworks, pesticides, fungicides, veterinary pharmaceuticals, and wood preservatives. Soluble forms of arsenic can be quite mobile, while less soluble forms tend to adsorb to sediments and soils. It is a known human carcinogen, and bioaccumulates to toxic levels.
AS	data qualifiers - method (analytical) qualifier - AS	Semiautomated Spectrophotometric.
AS/SVE	Air Sparging/Soil Vapor Extraction	Vacuum is applied through extraction wells to create a pressure/concentration gradient that induces gas-phase volatiles to be removed from soil through extraction wells.
ASCII	American Standard Code for Information Interchange (Computer Language)	The basis of character sets used in almost all present-day computers. US-ASCII uses only the lower seven bits (character points 0 to 127) to convey some control codes, space, numbers, most basic punctuation, and unaccented letters a-z and A-Z. More modern coded character sets (e.g., Latin-1, Unicode) define extensions to ASCII for values above 127 for conveying special Latin characters (like accented characters, or German

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		ess-tsett), characters from non-Latin writing systems (e.g., Cyrillic, or Han characters), and such desirable glyphs as distinct open- and close-quotation marks. ASCII replaced earlier systems such as EBCDIC and Baudot, which used fewer bytes, but were each broken in their own way.
ASN(I&E)	Assistant Secretary of the Navy (Installation and Environment)	Responsible to the Secretary of the Navy for the formulation of Department-wide policies and procedures, and for overseeing all DoN functions and programs relating to: environmental protection, planning and restoration ashore and afloat, and natural and cultural resources conservation; acquisition, use, and disposal of real property, housing, and other facilities, including all planning; construction, operation, management, maintenance and repair of installations, housing and other facilities; timely completion of closures and realignments of installations under applicable base closure laws; DoN operational and long range basing and infrastructure requirements analysis; safety and occupational health of military and civilian personnel; allocation of related resources and requirements.
AST	Aboveground Storage Tank	Any tank or other container that is above ground, partially buried, bunkered, or in a subterranean vault. This includes floating fuel systems.
ASTM	American Society for Testing and Materials	ASTM International is one of the largest voluntary standards development organizations in the world-a trusted source for technical standards for materials, products, systems, and services. Known for their high technical quality and market relevancy, ASTM International standards have an important role in the information infrastructure that guides design, manufacturing and trade in the global economy.
ATEG	Potassium/Sodium Hydroxide Tetraethylene Glycol	ATEG is a treatment process to decompose the PCB molecule and other chlorinated organics.
ATSDR	Agency for Toxic Substances and Disease Registry	ATSDR is the principal federal public health agency involved with hazardous waste issues. The agency helps prevent or reduce the harmful effects of exposure to hazardous substances on human health. ATSDR, an agency of the U.S. Department of Health and Human Services, was created by the Superfund Law in 1980.
ATTIC	Alternative Treatment Technology Information Center	A comprehensive information retrieval system containing data on alternative treatment technologies for hazardous waste.
AV	data qualifiers - method (analytical) qualifier - AV	Automated Cold Vapor AA.
AWQS	Ambient Water Quality Standards	Specified concentrations and durations of air pollutants reflecting relationship between the intensity and composition of water pollution to undesirable effects established by a state board and/or federal government.

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	abandoned well	A well whose use has been permanently discontinued or which is in a state of such disrepair that it cannot be used for its intended purpose.
	abatement	Reducing the degree or intensity of, or eliminating, pollution.
	abiotic	Not relating to living things, not alive.
	absorbance	A measure of the decrease in incident light passing through a sample into a detector. It is defined mathematically as: $A = \log \frac{I(\text{solvent})}{I(\text{solution})}$ where I = radiation intensity
	absorbed dose	The amount of a chemical that enters the body of an exposed organism. Equal to intake multiplied by an absorption factor.
	absorption	1) The process by which one substance is taken into the body of another substance. 2) The penetration of molecules or ions of one or more substances (gas, liquid or solid) into the interior of another substance. For example, in hydrated bentonite (a type of clay), the water that is held between the mica-like layers (held within the clay) is the result of absorption.
	accident site	The location of an unexpected occurrence, failure or loss, either at a plant or along a transportation route, resulting in a release of hazardous materials.
	accuracy	The degree of agreement between a measured value and a true, expected value.
	acetone	A colorless, volatile liquid with a sweet odor. It is considered the least toxic solvent in industry. It can occur naturally. It is used in the production of lubricating oils, chloroform, pharmaceuticals, pesticides, paints, varnishes and lacquers. If present in water, it is more likely to volatilize or biodegrade before bioaccumulating or adsorbing to sediments. Acetone will also readily volatilize and biodegrade in soil. It is also a common laboratory contaminant, so its presence in a sample does not always indicate its presence in the environment. Synonyms - Dimethylketone and 2-propanone.
	acid	An inorganic or organic compound that 1) reacts with metals to yield hydrogen; 2) reacts with a base to form a salt; 3) dissociates in water to yield hydrogen ions; 4) has a pH of less than 7.0; 5) neutralizes bases or alkalis; and 6) turns litmus paper red. All acids contain hydrogen. They are corrosive to tissue and should be handled with care.
	acid neutralizing capacity	A measure of the ability of water or soil to resist changes in pH.
	acidic	The condition of water or soil that contains a sufficient amount of acid substances to lower the pH below 7.0
	activated carbon	A highly adsorbent form of carbon used to remove odors and toxic substances from liquid or gaseous emissions. In waste treatment it is used to remove

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		dissolved organic matter from waste water. It is also used in motor vehicle evaporative control systems.
	acute exposure	A single exposure to a toxic substance which results in severe biological harm or death. Acute exposures are usually characterized as lasting no longer than a day, as compared to longer, continuing exposure over a period of time.
	acute toxicity	The ability of a substance to cause poisonous effects resulting in severe biological harm or death soon after a single exposure or dose, usually within 24 hours. Also, any severe poisonous effect resulting from a single short-term exposure to a toxic substance. See Chronic Toxicity, Toxicity.
	adaptation	Changes in an organism's structure or habits that help it adjust to its surroundings.
	adjacent property	Either those properties contiguous to the boundaries of the property being surveyed or other nearby properties.
	Administrative Order	A legal document signed by EPA directing an individual, business, or other entity to take corrective action or refrain from an activity. It describes the violations and actions to be taken, and can be enforced in court. Such orders may be issued, for example, as a result of an administrative complaint whereby the respondent is ordered to pay a penalty for violations of a statute.
	Administrative Order On Consent	A legal agreement signed by EPA and an individual, business, or other entity through which the violator agrees to pay for correction of violations, take the required corrective or cleanup actions, or refrain from an activity. It describes the actions to be taken, may be subject to a comment period, applies to civil actions, and can be enforced in court.
	adsorption	The process by which a gas, vapor, dissolved material or very small particle adheres to the surface of a solid due to chemical or physical forces; the attraction and adhesion of ions from an aqueous solution to the solid soil or rock surfaces with which they are in contact.
	adsorption coefficient	Ratio of a substance's total concentration in the sorbed phase and in the solution.
	adsorption/absorption	A remedial technology in which a surfactant or co-solvent solution is exposed to materials onto (adsorption) or into (absorption) which volatile, semi-volatile, non-volatile contaminants will partition. One type of common adsorbent is activated carbon, while polymeric resins act as absorbents.
	advection	The transport of dissolved contaminants by the bulk movement of groundwater flow; the main process driving the movement of dissolved contaminants.
	advisory	A non-regulatory document that communicates risk information to those who may have to make risk management decisions.
	aeration	A process of supplying or introducing air/oxygen into a medium which promotes biological degradation of organic matter in water. The process may be passive (as when waste is exposed to air), or active (as when a

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		mixing or bubbling device introduces the air).
	aeration tank	A chamber used to inject air into water.
	aerobe	Bacteria that use oxygen as an electron acceptor.
	aerobic	Life or processes that require, or are not destroyed by, the presence of oxygen. See Anaerobic.
	aerobic treatment	Process by which microbes decompose complex organic compounds in the presence of oxygen and use the liberated energy for reproduction and growth. Such processes include extended aeration, trickling filtration, and rotating biological contactors.
	affected public	The people who live and/or work near a hazardous waste site.
	affinity	A chemical attraction or force that causes the atoms of certain elements or compounds to combine with atoms of another element or compound and remain in the combined state.
	air purification devices	Respirators or filtration devices which remove particulate matter, gases, or vapors from the atmosphere. These devices range from full face piece, dual cartridge masks with eye protection, to half-mask face piece, mounted cartridges with no eye protection.
	air rotary drilling	Drilling technique that uses air to lift cuttings from the borehole.
	air stripping	A treatment system that removes volatile organic compounds (VOCs) from contaminated groundwater or surface water by forcing an airstream through the water and causing the compounds to volatilize to the airstream, enabling separation of the compounds from the water and possible further treatment of the airstream.
	Alameda	The former home of Alameda Naval Air Station located on the east side of San Francisco Bay, south of the San Francisco Bay Bridge.
	Albany	Capital of the state of New York, name of a Los Angeles Class submarine and location of Marine Corps Logistics Base in Georgia.
	algae	Simple rootless plants that grow in sunlit waters, on rocks and in soil, in proportion to the amount of available nutrients. They can affect water quality adversely by lowering the dissolved oxygen in the water. They are food for fish and small aquatic animals.
	aliphatic hydrocarbon	A compound built from carbon and hydrogen atoms joined in a linear chain. Petroleum products are composed primarily of aliphatic hydrocarbons.
	aliquot	A measured portion of a sample taken for analysis.
	alkali	Any compound having highly basic properties; i.e., one that readily ionizes in aqueous solution to yield OH ⁻ anions, with a pH above 7.0, and turns litmus paper blue. Examples are oxides and hydroxides of certain metals belonging to group IA of the periodic table (Li, Na, K, Rb, Cs, Fr). Ammonia and amines may also be alkaline. Alkalis are caustic and dissolve tissue. Treat alkali burns by quickly washing with large amounts of

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		water for at least 15 minutes. Common commercial alkalis are sodium carbonate (soda ash), caustic soda and caustic potash, lime, lye, waterglass, regular mortar, portland cement, and bicarbonate of soda.
	alkaline	The condition of water or soil which contains a sufficient amount of alkali substances to raise the pH above 7.0.
	alkalinity	The capacity of water to neutralize acids.
	Alkyl(ated) PAH	Polycyclic aromatic hydrocarbons containing one or more carbon- (alkyl) side chains. Also called "substituted PAH".
	alluvial	Relating to mud and/or sand deposited by flowing water.
	Alpha factor	Ratio of indoor air concentration to the soil gas concentration or to groundwater concentration multiplied by the compound's Henry's constant.
	alternative fuels	Substitutes for traditional liquid, oil-derived motor vehicle fuels like gasoline and diesel. Includes methanol, ethanol, compressed natural gas, and others.
	alternative technology	An approach that aims to use resources efficiently or to substitute resources in order to do minimum damage to the environment. This approach permits a large degree of personal user control over the technology.
	ambient	Usual or natural surrounding conditions, e.g., ambient temperature - the natural, uninfluenced temperature of the surroundings.
	anabolism	The process whereby energy is used to build organic compounds, such as enzymes and nucleic acids, that are necessary for life functions.
	anadromous	Fish that spend their adult life in the sea but swim upriver to freshwater spawning grounds to reproduce.
	anaerobic	A life or process that occurs in, or is not destroyed by, the absence of oxygen.
	anaerobic decomposition	Reduction of the net energy level and change in chemical composition of organic matter caused by microorganisms in an oxygen free environment.
	analytes	The chemicals for which a sample is analyzed.
	analytical method	Defines the sample preparation and instrumentation procedures or steps that must be performed to estimate the quantity of analyte in a sample.
	animal studies	Investigations using animals as surrogates for humans with the expectation that the results are pertinent to humans.
	anion	An anion is an ion with a negative charge.
	anion exchange capacity	A quantitative measure of surface charge of an anion reported in equivalents of exchangeable ions per unit weight of the solid.
	anisotropic / anisotropy	Having different properties in different directions. See isotropic.
	anoxic	Condition characterized by low levels (or the absence) of free oxygen.
	antagonism	1) Interference or inhibition of the effect of one chemical by the action of another. 2) An interaction of two or

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		more chemicals which results in an effect that is less than the sum of their effects taken independently.
	anthropogenic	Of or relating to humans or the era of human life. Man-made.
	anthropomorphic	Ascribing human motivation, characteristics, or behavior to inanimate objects, animals, or natural phenomena.
	anti-degradation clause	Part of federal air and water quality requirements prohibiting deterioration where pollution levels are above the legal limit.
	aqueous	Something made up of, similar to, or containing water; watery.
	aquiclude	A saturated geologic unit that is incapable of transmitting significant quantities of water under ordinary hydraulic gradients.
	aquifer	A saturated, permeable geologic formation or structure that is capable of yielding water in usable quantities under ordinary hydraulic gradients.
	aquitard	The less permeable beds in a stratigraphic sequence; beds may be permeable enough to transmit water in quantities that are significant in the study of regional groundwater flow or environmental contamination, but their permeability is not sufficient to allow completion of production wells within them.
	aromatic	A class of hydrocarbons consisting of cyclic conjugate carbon atoms, such as benzene or toluene, commonly added to gasoline in order to increase octane. Some aromatics are toxic.
	artesian aquifer	A confined aquifer in which groundwater rises in a well above the point at which it is naturally found in the aquifer, due to artesian pressure.
	asbestos	A mineral fiber that can pollute air or water and cause cancer or asbestosis when inhaled. EPA has banned or severely restricted its use in manufacturing and construction.
	ash	The mineral content of a product remaining after complete combustion.
	assessment endpoint	Environmental characteristics, which, if they were found to be significantly affected, would indicate a need for remediation (e.g., decrease in sports fisheries).
	assimilative capacity	The capacity of a natural body of water to receive wastewaters or toxic materials without deleterious effects and without damage to aquatic life or humans who consume the water.
	astronomy	The study of the stars.
	asymptote	A straight line always approaching, but never meeting, a curve.
	asymptotic	see asymptote
	atmosphere-supplying devices	Respiratory protection devices coupled to an air source. The two types are Self-Contained Breathing Apparatus (SCBA) and supplied air respirators (airline).
	attenuation	The process by which a compound is reduced in concentration with distance and time through absorption, adsorption, degradation, dilution, diffusion,

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		dispersion, and/or chemical or biological transformation.
	autochthonous	A term applied to rocks of which the dominant constituents have been formed in the natural or original position as opposed to prior erosion and disposition.
	autotrophic	An organism that produces food from inorganic substances, e.g. photosynthetic plants.