

ERB Acronym and Glossary – C

Acronym	Glossary	Definition
C	Carbon	An element, the presence of which can be used to separate organic from inorganic compounds.
C	data qualifiers - method (analytical) qualifier - C	Manual Spectrophotometric.
C	data qualifiers - organic analysis - C	Applies to pesticide results where the identification has been confirmed by Gas Chromatography/ Mass Spectrometry (GC/MS). Single component pesticides ³ 10 ng/đml in the final extract shall be confirmed by GC/MS.
Ca	Calcium	An alkaline earth metal that is very abundant in the environment. Readily forms salts with various metals and halogens. When present in water, it can indicate salinity and alkalinity. Contributes to hard water when present in high concentrations. It is an essential nutrient for animals and humans. Not generally considered toxic.
CA	Cooperative Agreement	1) Part of the DSMOA program. The CA assists in implementing the DSMOA. The CA provides reimbursement to states for cleanup activities at installations within the state. 2) An assistance agreement whereby EPA transfers money, property, services or anything of value to a state for the accomplishment of CERCLA-authorized activities or tasks.
CA	Corrective Action	The sequence of actions that include site assessment, interim remedial action, remedial action, operation and maintenance of equipment, monitoring of progress, and termination of the remedial action.
CA	Corrective Action or Cleanup Action	The sequence of actions that include site assessment, interim remedial action, remedial action, operation and maintenance of equipment, monitoring of progress, and termination of the remedial action.
CAA	Clean Air Act	The CAA was passed in 1970 as amendments to 42 USC 7401, and was amended in 1990. Its purpose is to "protect and enhance the quality of the Nation's air resources." Its primary application is through Prevention of Significant Deterioration permits to regulate new potentially polluting facilities. Of increasing importance are the National Emissions Standards for Hazardous Air Pollutants (NESHAPs).
CAAA	Clean Air Act Amendments	Amendments to the Clean Air Amendments establishing the National Ambient Air Quality Standards for "criteria contaminants" to address other air pollution problems.
CADD	Computer Aided Design and Drafting	Computer Aided Drafting or CAD drafting is a technical field for providing precision drawings for various occupations.
CAP	Corrective Action Plan	Associated with the Underground Storage Tank (UST) Program, it describes the appropriate corrective measures to be implemented at a site. Equivalent to a CERCLA Feasibility Study (FS).
CAS	Chemical Abstract Service Registration Number	A number assigned by the Chemical Abstracts Service to identify a chemical.
CATEX	Categorical Exclusion	A class of actions which either individually or cumulatively would not have a significant effect on the

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		human environment and therefore would not require preparation of an Environmental Assessment or Environmental Impact Statement under the National Environmental Policy Act (NEPA).
CAX	Cheatham Annex	also the Regional Supply Office (RSO) for the Peninsula at Naval Weapons Station Yorktown, Cheatham Annex. The mission is to provide complete retail supply support services for approximately 40 tenant activities between Cheatham Annex, Williamsburg and Naval Weapons Station, Yorktown. Included as part of this support service is custody asset storage for large, bulky and unique Navy material and programs.
CBC	Construction Battalion Center	functions as a support for operating units of the Naval Construction Force.
Cd	Cadmium	A soft metal used in electroplating, pigments, plastic stabilizers, batteries, fusible alloys, soft solder, and solder for aluminum. Pollution sources include smelter fumes and dust, some incineration products, fertilizer, municipal wastewater and sludge discharges. It is also an industrial byproduct of the manufacturing of zinc, copper and lead. Its mobility depends on the pH and redox state of the local environment. It can be adsorbed to sediments and soils or relatively soluble in surface water or groundwater depending on the conditions. Bioaccumulation in the environment is a concern. Ingestion can cause gastrointestinal problems, and inhalation can cause lung problems.
CDC	Centers for Disease Control	lead federal agency for protecting the health and safety of people - at home and abroad, providing credible information to enhance health decisions, and promoting health through strong partnerships. CDC serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States.
CDF	Confined Disposal Facility	An engineered structure for containment of dredged material. The confinement dikes or structures in a CDF enclose the disposal area above any adjacent water surface, isolating the dredged material from adjacent waters during placement.
CDI	Chronic Daily Intake	Exposure expressed as mass of a substance contacted per unit body weight per unit time averaged over a long period of time (as a Superfund program guideline, seven years to a lifetime) mg/kg/day.
CEAM	Center for Exposure Assessment Modeling	was founded to meet the scientific and technical exposure assessment needs of the United States Environmental Protection Agency (U.S. EPA) as well as state environmental and resource management agencies. CEAM provides proven predictive exposure assessment techniques for aquatic, terrestrial, and multimedia pathways for organic chemicals and metals.
CEC	Civil Engineer Corps	The Civil Engineer Corps (CEC) is a relatively small Navy community consisting of approximately 1300 officers, Billet locations for the CEC range from Bahrain, Saudi Arabia to Keflavik, Iceland, CEC officers have a

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		broad range of professional skills including contract management, public works management, Seabee operations, and other various fields,
CEQ	Council on Environmental Quality	coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives.
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980	The Federal statute enacted in 1980 and amended in 1986 by the Superfund Amendment and Reauthorization Act (SARA) that establishes a comprehensive, statutory framework for identifying, investigating, and cleaning up releases of hazardous substances to the environment. CERCLA authorizes the President to take response actions when a release or the threat of a release is discovered. Through Executive Order 12580, signed in January 1987, the President directs the Secretary of Defense to implement investigation and cleanup measures in consultation with EPA for releases of hazardous substances from facilities under the jurisdiction of the Secretary.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Act Information System	EPA's comprehensive database and management system that inventories and tracks releases addressed or needing to be addressed by the Superfund program. CERCLIS contains the official inventory of CERCLA sites and supports EPA's site planning and tracking functions. Sites that EPA decides do not warrant moving further in the site evaluation process are given a "No Further Response Action Planned" (NFRAP) designation. This means that no additional federal steps under CERCLA will be taken at the site unless further information warrants action. Sites are not removed from the data base after completion of evaluations in order to document that these evaluations took place and to preclude the possibility that they be needlessly repeated. Inclusion of a specific site or area in the CERCLIS database does not represent a determination of any party's liability, nor does it represent a finding that any response action is necessary. Sites that are deleted from the NPL are not designated NFRAP sites. Deleted sites are listed in a separate category in the CERCLIS database.
CERFA	Community Environmental Response Facilitation Act of 1992	This law amends CERCLA and requires that the federal government identify real property which is not contaminated, and that offers the greatest opportunity for expedited reuse and redevelopment by the community on each facility. The identified parcels of real property must be either free from hazardous substances and petroleum products, including aviation fuel and motor oil, and their derivatives, or the remediation of contamination by those substances should be expedited to facilitate transfer to the public.
CEU	Continuing Education Units	A nationally recognized method of quantifying the time spent in the classroom during professional development and training activities.

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CF	Conversion Factor	A factor used to equate the price of T-bond and T-note futures contracts with the various cash T-bonds and T-notes eligible for delivery. This factor is based on the relationship of the cash-instrument coupon to the required eight percent deliverable grade of a futures contract as well as taking into account the cash instrument's maturity or call.
CFC	Chlorofluorocarbon	A family of inert, nontoxic, and easily liquified chemicals used in refrigeration, air conditioning, packaging, insulation, or as solvents and aerosol propellants. Because CFCs are not destroyed in the lower atmosphere they drift into the upper atmosphere where their chlorine components destroy ozone.
CFM	Cubic Feet per Minute	A measure of the volume of a substance flowing through air within a fixed period of time. With regard to indoor air, refers to the amount of air, in cubic feet, that is exchanged with indoor air in a minute's time, i.e., the air exchange rate.
CFR	Code of Federal Regulations	The basic reference source for federal rules. Published annually, it is a compilation of the regulations of various federal agencies. The CFR is divided into 50 titles according to subject. For example, Title 7 deals with agriculture, Title 40 with the environment and Title 49 with transportation. Titles are divided into chapters, then to parts, sections, etc. The section is the basic unit of the CFR. Ideally, it consists of a short, concise presentation of a single point. It is important to note that the CFRs are changed daily by publication of the Federal Register (FR). The CFRs are the combination of regulations published in the FR for the previous year.
CFS	Cubic Feet per Second	A unit expressing rates of discharge. One cubic foot per second is equal to the discharge through a rectangular cross section, 1 foot wide by 1 foot deep, flowing at an average velocity of 1 foot per second. It is also approximately 7.48 gallons per second.
CH20	Formaldehyde	A colorless, pungent, and irritating gas, used chiefly as a disinfectant, preservative, and in synthesizing other compounds like resins.
CH4	Methane	A colorless, nonpoisonous, flammable gas created by anaerobic decomposition of organic compounds.
CHF	Contaminant Hazard Factor	A combined measure of contaminant concentrations in a given environmental medium.
CI	Confidence Interval	gives an estimated range of values which is likely to include an unknown population parameter, the estimated range being calculated from a given set of sample data.
CIMAGE	CIMAGE	Commercial Off the Shelf (COTS) software for document and records management.
cis 1,2-DCE	cis 1,2-Dichloroethene	A biological breakdown product of the more halogenated forms of ethene, Tetrachloroethene and Trichloroethene. Also used as an industrial solvent and is volatile.
CITT	conservative interwell tracer test	A tracer test using nonpartitioning (i.e., conservative) tracers. A CITT is commonly conducted prior to a PITT

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		or surfactant flood in order to fine tune the design parameters for the PITT of surfactant flood (e.g., injection and extraction flow rates, tracer residence time, tracer dilution, and tracer recovery).
Cl	Chlorine	A halogen that can substitute for hydrogen in many organic compounds. The resulting compounds are generally less flammable but highly toxic and persistent in the environment.
Cl-	Chlorides	Indicative of the concentration of salt water. Concentrations above 250mg/L are detectable by taste.
CLEAN	Comprehensive Long Term Environmental Action, Navy	A broad multi-year environmental contract.
CMC	Commandant of the Marine Corps	The highest ranking officer of the United States Marine Corps, who is a member of the Joint Chiefs of Staff and reports to the Secretary of the Navy.
CMI	Corrective Measures Implementation	The RCRA Corrective Action phase during which the selected cleanup technology is constructed, installed, implemented and/or operated until confirmatory sampling and analysis indicate that cleanup levels have been reached. Equivalent to a CERCLA Remedial Action (RA).
CMS	Corrective Measures Study	Evaluates the alternatives for cleanup technology in terms of the specific site characteristics such as contaminants, soil conditions and hydrogeologic conditions in a RCRA Corrective Action cleanup. Equivalent to a CERCLA Feasibility Study (FS).
CMS	Cost Effective Sampling	A method developed at Lawrence Livermore National Laboratory used to estimate the lowest frequency and, as a result, the lowest cost sampling schedule for a given monitoring well that still provides needed information for remedial and compliance-related decision making.
CMT	Continuous Multichannel Tubing	A multilevel groundwater monitoring system that uses custom-extruded flexible multichannel HDPE tubing to monitor as many as seven discrete zones within a single borehole.
CNG	Compressed Natural Gas	An alternative fuel for motor vehicles; considered one of the cleanest because of low hydrocarbon emissions and its vapors are relatively non-ozone producing. However, it does emit a significant quantity of nitrogen oxides.
CNO	Chief of Naval Operations	The senior military officer of the Department of the Navy. The CNO is a four-star admiral and is responsible to the Secretary of the Navy for the command, utilization of resources and operating efficiency of the operating forces of the Navy and of the Navy shore activities assigned by the Secretary. A member of the Joint Chiefs of Staff, the CNO is the principal naval adviser to the President and to the Secretary of the Navy on the conduct of war, and is the principal adviser and naval executive to the Secretary on the conduct of activities of the Department of the Navy.
CNS	Central Nervous System	The portion of the vertebrate nervous system consisting of the brain and spinal cord.
CO	Carbon Monoxide	A colorless, odorless, poisonous gas produced by

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		incomplete fossil fuel combustion.
Co	Cobalt	A hard, ductile, ferromagnetic metal. It is rare but produced primarily as a byproduct of other metals. It is used in chemical agents, electroplating, ceramics, lamp filaments, catalysts, dryers in printing inks, paints and varnishes, and in high temperature alloys. Cobalt can be soluble in water, but depends mainly on the presence and characteristics of adsorbing clay minerals and hydrous oxides of iron, manganese and aluminum in the local environment. Chelation is also possible.
CO	Commanding Officer or Contracting Officer	A US military officer or civilian employee who has a valid appointment as a contracting officer under the provisions of the Federal Acquisition Regulation. The individual has the authority to enter into and administer contracts and determinations as well as findings about such contracts.
CO2	Carbon Dioxide	A colorless, odorless, non-poisonous gas, which results from fossil fuel combustion and is normally a part of the ambient air.
COC	Chain of Custody	A process used to maintain and document the chronological history of the evidence. (Documents should include name or initials of the individual collecting the evidence, each person or entity subsequently having custody of it, dates the items were collected or transferred, agency and case number, victim's or suspect's name, and a brief description of the item.)
COC	Chemicals of Concern	Specific constituents that are identified for evaluation in the risk assessment process.
COC	Contaminant/Chemical of Concern	any contaminant that is shown to pose possible ecological risk to a site; also known as Contaminants of Concern, Contaminants of Potential Concern, or Contaminants of Interest.
COD	Chemical Oxygen Demand	A measure of the oxygen required to oxidize all compounds, both organic and inorganic, in water.
COE	Corps of Engineers (Army)	Plans, designs, builds and operates water resources and other civil works projects (Navigation, Flood Control, Environmental Protection, Disaster Response, etc.); Designs and manages the construction of military facilities for the Army and Air Force. (Military Construction); Provides design and construction management support for other Defense and federal agencies. (Interagency and International Services).
COMNAVBASE	Commander, Naval Base	The Naval Base Commander serves as Navy regional coordinator, setting policy and providing the leadership and continuity necessary to sustain the combat-ready force, leading the combined efforts of commands and activities which support operational fleet units.
COMPTRAK	Marine Corps Environmental Compliance Tracking System	CompTRAK, a database program, provides a necessary link between project-specific information and the budget. Each Marine Corps installation and Marine Forces command is responsible for reviewing its environmental program requirements on a continuing basis and entering them into the database. Based on this data, each installation and Forces command provides an

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		Operations Plan Submission (OPS) to HQMC annually covering the ensuing 2 years. The OPS serves as the programming, budgeting, and funding tool for local and centrally managed environmental funds.
CONUS	Continental United States	refers to the largest part of the U.S. that is delimited by a continuous border, also referred to as the conterminous states, the coterminous states, or the contiguous states.
COPC	Chemicals of Potential Concern	Chemicals identified in the initial stages of a site investigation that may pose a risk, and so are further investigated to gather data for a risk assessment.
COPC	Contaminant of Potential Concern	any contaminant that is shown to pose possible ecological risk to a site; also known as Contaminants of Concern, Contaminants of Potential Concern, or Contaminants of Interest.
COPC	Contaminant/Chemical of Potential Concern	any contaminant that is shown to pose possible ecological risk to a site; also known as Contaminants of Concern, Contaminants of Potential Concern, or Contaminants of Interest.
COTR	Contracting Officer's Technical Representative	An individual responsible for monitoring the Contractor's technical progress and recommending to the Contracting Officer changes in requirements; interpreting the Scope of Work; performing technical evaluation as required; performing technical inspections and acceptances required by the contract and assisting the Contracting Officer in the resolution of technical problems encountered during performance.
CPF	Carcinogenic Potency Factor	The upper 95th percentile confidence limit of the slope of the dose-response curve; expressed in units of (mg/kg/day) ⁻¹ . When derived from human epidemiological data, the carcinogenic potency factor may be a maximum likelihood estimate.
CPR	Cardiopulmonary Resuscitation	an emergency life-saving technique. Artificial respirations and chest compressions are used to restart the heart and lungs.
CPT	Cone Penetrometer Test	method to assess subsurface stratigraphy associated with soft materials, discontinuous lenses, organic material, potentially liquefiable material and landslides.
CQC	Construction Quality Control	consists largely of insuring conformance to the original design and planning requirements.
Cr	Chromium	A heavy metal that exists naturally as the trivalent (III) form and is man-made in the hexavalent (VI) form. It is used in making chrome-steel and chrome-nickel-steel alloys, chrome plating of metals, brick lining for high-temperature industrial furnaces, dyes, pigments, leather, wood preservatives, and cooling tower water treatment. The ultimate fate of chromium is to settle into sediments, however, it is slightly soluble and can persist in the water column for years before settling. In soil, chromium (III) tends to adhere to soil particles whereas chromium (VI) does not. This process depends on the pH and redox state of the soil. Chromium (III) is not very toxic because it does not bioaccumulate and generally does not penetrate biological membranes. However, chromium (VI) is considered more toxic because of its high oxidizing potential and it can penetrate biological

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		membranes. Dermal contact with chromic acid or chromium salts can cause lesions and ulcers. Chromium is a Group B, human carcinogen by inhalation. See Heavy Metals.
CRDL	Contract Required Detection Limit	Minimum level of detection acceptable under the contract Statement of Work.
CRP	Community Relations Plan	A written plan of action that provides for interaction with the public, elected officials and environmental groups, including obtaining their input at appropriate points during the Installation Restoration (IR) process. A CRP must be developed and implemented for removal actions and remedial actions at all IR sites. It will be based on research conducted by community interviews with state and local officials, citizen and community groups, interested residents, and local media representatives.
CRQL	Contract Required Quantitation Limit	Minimum level of detection acceptable under the contract Statement of Work. A range within which specified measurement results must fall to be compliant. Control limits may be mandatory, requiring corrective action if exceeded, or advisory, requiring that noncompliant data be flagged. It replaces the existing Contract Required Detection Limits (CRDL).
CRZ	Contamination Reduction Zone	In hazardous waste health and safety operations, the forward control for operations outside the Hot Zone. Personnel protection may be required. Restricted to operations and support personnel essential to hands-on work performed in the Hot Zone.
CSM	Conceptual Site Model	Describes a series of ideas about how a chemical might affect ecological components (primarily the plants and animals, but also the interactions among plants and animals). Also, describes ecosystems or ecosystem components potentially at risk, and the relationships between measurement and assessment endpoints and how plants and animals might get exposed to harmful chemicals.
CTC	Cost to Complete	costs to be incurred to satisfy the complete scope of a project at a specific data date. The difference between the cost to date and the forecast final cost
CTET	carbon tetrachloride (CCl ₄)	Compound consisting of one carbon atom and four chlorine atoms, once widely used as an industrial raw material, as a solvent, and in the production of chlorofluorocarbons (CFCs). Its use as a solvent ended when it was discovered to be carcinogenic.
Cu	Copper	A ductile, malleable metal that occurs naturally in rock, soil, water, sediment, plants and animals and can occur as copper (II) or (I). It is used in brass, copper alloys, electrical conductors, copper salts, art, in agriculture to treat plant diseases, for water treatment, and as preservatives for wood, leather and fabrics. Most copper in water is in the (II) state and is bound to organic matter and not in a readily exchangeable form. In soil, copper will be strongly adsorbed. Copper salts are strong skin and mucous membrane irritants. When bioavailable, copper is highly toxic to aquatic invertebrates.

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CURTT	Clean Up Review Tiger Team	was established to review existing cleanup technology selections at all eight engineering field divisions and activities' Installation Restoration (IR) sites and Base Realignment and Closure (BRAC) sites. CURTT is composed of in-house experts and nationally known technical consultants, academics and cost estimators.
CV	Coefficient of Variation	The standard deviation as a percent of the arithmetic mean.
CV	data qualifiers - method (analytical) qualifier - CV	Manual Cold Vapor AA.
CVOC	Chlorinated Volatile Organic Compound	An organic compound that is best identified and quantified by using EPA Method 8270C.
CWA	Clean Water Act of 1977	The CWA amended the Federal Water Pollution Control Act first passed in 1956. Its objective is to "restore and maintain the chemical, physical and biological integrity of the Nation's waters." The Act's major enforcement tool is the National Pollutant Discharge Elimination System (NPDES) permit.
CZMA	Coastal Zone Management Act	The Coastal Zone Management Program (CZMP) is authorized by the Coastal Zone Management Act of 1972 and administered at the federal level by the Coastal Programs Division (CPD) within the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management (OCRM). The CPD is responsible for advancing national coastal management objectives and maintaining and strengthening state and territorial coastal management capabilities. It supports states through financial assistance, mediation, technical services and information, and participation in priority state, regional, and local forums.

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	calibration	The establishment of an analytical curve based on the absorbance, emission intensity, or other measured characteristic of known standards. The calibration standards must be prepared using the same type of acid or concentration of acids as used in the sample preparation, i.e., the same matrix.
	calibration blank	Usually an organic or aqueous solution that is as free of analyte as possible and prepared with the same volume of chemical reagents used in the preparation of calibration standards and diluted to the appropriate volume with the same solvent (water or organic). The calibration blank is used to give the null reading for the instrument response versus concentration calibration curve. One calibration blank should be analyzed with each analytical batch or every method-specified number of samples, whichever is more frequent.
	calibration check	Verification of the ratio of instrument response to analyte amount, a calibration check is done by

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		analyzing for analyte standards in an appropriate solvent. Calibration check solutions are made from a stock solution which is different from the stock used to prepare standards.
	calibration standards	A series of known standard solutions used by the analyst for calibration of the instrument (i.e. preparation of the analytical curve).
	Camp Lejeune	Marine Corps Base, Camp Lejeune is located in eastern North Carolina on the Atlantic coast.
	cancer	The development of a malignant tumor or abnormal formation of tissue.
	cancer risk	Incremental probability of an individual developing cancer over a lifetime as a result of exposure to a chemical.
	cap	A layer of clay, or other impermeable material installed over the top of a closed landfill to prevent infiltration of rainwater and minimize leachate.
	capillarity	The action by which a liquid is held to a solid by surface tension; also known as capillary force
	capillary action	Upward movement of water through very small spaces due to molecular forces and surface tension, called capillary forces.
	capillary barrier	Sloping layers of fine over coarse soils for the hydraulic isolation of buried wastes. Generally used to prevent water infiltration into landfills.
	capillary fringe	A zone of porous material lying between the unsaturated and saturated zone, just above the water table, which may hold water by capillary action in the smaller void spaces.
	capillary pressure	The difference between the non-wetting-phase and wetting-phase pressures
	capillary trapping	The prevention of NAPL movement due to capillary forces; NAPL will be immobilized when the vector sum of viscous and gravitational forces are less than the capillary force.
	capping	The controlled placement of materials (e.g., sand, fill, gravel, or synthetic materials) to physically isolate contaminated sediments from the overlying aquatic environment.
	capture zone	The volume of aquifer from which groundwater is retrieved and/or contained by pumping a well or network of wells.
	carbon absorber	An add-on control device that uses activated carbon to absorb volatile organic compounds from a gas stream. The VOCs are later recovered from the carbon.
	carbon adsorption	A treatment system that removes contaminants from groundwater or surface water by forcing it through tanks containing activated carbon treated to attract the contaminants.
	carcinogen	1) Any substance that can cause, aggravate, or contribute to the production of cancer. 2) A chemical classification for the purpose of risk assessment based on the weight of evidence for human carcinogenicity

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		according to USEPA 1986 Guidelines for Risk Assessment, in which carcinogens are summarized as follows: Group A: Human carcinogen: Sufficient evidence from human epidemiological studies. Group B: Probable Human Carcinogen: B1: Limited evidence from human epidemiological studies. B2: Sufficient evidence from animal studies and inadequate or no data from human epidemiological studies. Group C: Possible Human Carcinogen: Limited evidence of carcinogenicity from animal studies in the absence of human data.
	carcinogenic	Causing or producing cancer.
	carrying capacity	1) In recreation management, the amount of use a recreation area can sustain without loss of quality. 2) In wildlife management, the maximum number of animals an area can support during a given period.
	case study	A detailed account of the cost and effort involved in using a technology or process.
	casing	Pipe used in water well construction generally extending from the land surface to the top of the well screen. The type and size of casing used will vary depending on well yield and other design requirements.
	catabolism	The process whereby energy is extracted from organic compounds by breaking them down into their component parts.
	catalysis/reaction	A remedial technology in which a surfactant or co-solvent solution is exposed to materials which cause the reactive destruction of volatile, semi-volatile, non-volatile contaminants, yielding innocuous reaction products.
	catalyst	An inorganic substance that changes the speed, yield, or required temperature of a chemical reaction without being consumed or chemically changed by the chemical reaction.
	catalytic oxidation	A process that uses an inorganic substance to lower the temperature required to destroy gas phase compounds.
	catalyzed decomposition	The process of breaking a reactant into its constituent parts using a compound that causes an increase in the rate of decomposition.
	catadromous	Fish that swim downstream to spawn.
	cathodic protection	A technique to prevent corrosion of a metal surface by making it the cathode of an electrochemical cell.
	cation	A positively charged atom or group of atoms
	cation exchange capacity	A quantitative measure of surface charge of a cation, reported in equivalents of exchangeable ions per unit weight of the solid.
	cells	1) In solid waste disposal, holes where waste is dumped, compacted, and covered with layers of dirt on a daily basis. 2) The smallest structural part of living matter capable of functioning as an independent unit.
	characteristic	Any one of the four categories used in defining hazardous waste: ignitability, corrosivity, reactivity, and toxicity.

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	characterization	Facility or site sampling, monitoring and analysis activities to determine the extent and nature of a release. Characterization provides the basis for acquiring the necessary technical information to develop, screen, analyze, and select appropriate cleanup techniques.
	chelate	A coordination complex in which more than one atom or molecule (often an organic compound) binds to a metal. In the environment, chelation effectively removes the metal: it is no longer available for chemical interactions or to biota. See Complexation.
	chelation	Formation of compound by inactivating a metallic ion and making it part of the ring.
	chemical analysis	The process of determining the amount of individual compounds in a mixture.
	chemical binder	A compound that produces or promotes cohesion in loosely assembled substances.
	Chemical Fingerprinting	The chemical analysis of contaminants and associated chemicals intended to provide source-specific information on the contaminants; a component of most environmental forensic studies.
	chemical leaching	The process of using a compound to enhance the dissolution of soluble components from solid materials.
	chemical oxidation	A process that involves adding a compound (oxidant) to increase the oxidation state of reactants.
	chemical partitioning	The preferential separation of a chemical into different media or states. For example, many metals are more likely to partition to sediments than to remain in groundwater.
	chemical reaction	The transformation of reactants into products that involves the breaking of intermolecular bonds.
	chemical reducing agents	Compounds that cause a decrease in the oxidation state of reactants.
	chemical remediation	The use of compounds to recover or transform unwanted chemicals in the environment.
	chemical resistance	The ability of chemical protective clothing to maintain its integrity and protection qualities when it comes into contact with a hazardous material.
	chemical stress	The result of a chemical reaction of two or more materials. Examples include corrosive materials attacking a metal, the pressure or heat generated by the decomposition or polymerization of a substance, or any variety of corrosive actions.
	chemical testing	The use of instruments and procedures to determine the identity of compounds in mixtures.
	chemical treatment	Any one of a variety of technologies that use chemicals or a variety of chemical processes to treat waste.
	chlorinated	Any compound that contains at least one chlorine atom.
	chlorinated compounds	The grouping or classification of compounds that contain at least one chlorine atom.
	chlorinated hydrocarbons	These include a class of persistent, broad-spectrum organic compounds that linger in the environment and

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		accumulate in the food chain. Among them are the insecticides DDT, aldrin, dieldrin, heptachlor, chlordane, lindane, endrin, mirex, hexachloride, and toxaphene. Other examples include tetrachloroethene, trichloroethene, carbon tetrachloride, and trichloromethane, used as industrial solvents.
	chlorinated organic compounds	Compounds that contain carbon and chlorine atoms.
	chlorinated solvent	An organic hydrocarbon in which chlorine atoms substitute for one or more hydrogen atoms in the compound's structure, e.g., methylene chloride and 1,1,1-trichloromethane. Commonly used in aerosol spray containers, in highway paint, for grease removal in manufacturing, dry cleaning, and other operations. The substituted chlorine makes the compound less flammable than the nonsubstituted equivalent, but more toxic.
	chlorination	The application of chlorine to drinking water, sewage, or industrial waste to disinfect or to oxidize undesirable compounds.
	chronic effect	An adverse effect on a human or animal in which symptoms recur frequently or develop slowly over a long period of time.
	chronic exposure	Multiple exposures occurring over an extended period of time, or a significant fraction of an animal's or human's lifetime.
	chronic toxicity	The capacity of a substance to cause long-term poisonous human health effects. See Acute Toxicity.
	circle of influence	The circular outer edge of the depression produced in the water table by pumping water from a well. See Cone of Influence, Cone of Depression.
	circulating well	A device installed into the water saturated subsurface that causes groundwater to flow in a circular pattern.
	cis	In a chiral (directional) organic compound, the prefix cis indicates that the substituted atoms are on the same side of the compound. For example, in cis 1,2-Dichloroethene, the chlorine atoms are on the same side of the carbon to carbon double bond. The presence or absence of cis or trans compounds can indicate whether biological activity or abiotic, chemical reactions have taken place in the environment. See trans.
	clarification	Clearing action that occurs during water treatment when solids settle out. This is often aided by centrifugal action and chemically induced coagulation.
	clarifier	A tank in which solids settle to the bottom and are subsequently removed as sludge.
	clastic rock	A consolidated sedimentary rock composed of broken fragments that are derived from pre-existing rocks, e.g. sandstone, conglomerate, shale, etc.
	clay	1) Natural material with plastic (flowing) properties; 2) A composition of particles of very fine size grades; and 3) A composition of crystalline fragments of hydrous-aluminum silicate or hydrous-magnesium silicate minerals.

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	clay soil	Soil material containing more than 40 percent clay, less than 45 percent sand, and less than 40 percent silt.
	cleanup	Actions taken to deal with a release or threat of release of a hazardous substance that could affect humans and/or the environment. The term "cleanup" is sometimes used interchangeably with the terms remedial action, removal action, response action, or corrective action.
	cleanup alternatives	The evaluation of management techniques or technologies to control or remove unwanted compounds from the environment.
	cleanup costs	The time and cost incurred to implement controls or complete the removal of unwanted compounds from the environment.
	cleanup level	The residual concentration of a hazardous substance in a medium that is determined to be protective of human health and the environment under specified exposure conditions.
	cleanup technology	A technology that is the whole or part of a treatment train to cleanup hazardous waste sites.
	climate	The average course or condition of the weather at a place as exhibited by temperature, wind velocity, and precipitation.
	climatology	The science that deals with the climate and climatic phenomena.
	closeout	Conducted when DON considers no further response actions under the IR Program to be appropriate for the site and when site cleanup confirms that no significant threat to public health or the environment exists. The Navy forwards closeout documentation to the regulators for concurrence.
	closure	The regulatory process of deactivating, stabilizing and or decontaminating waste management units or facilities under RCRA.
	Closure Plan	Documentation prepared to guide the deactivation, stabilization and surveillance of a waste management unit or facility under RCRA.
	coagulation	Clumping of particles in water to settle out impurities, often induced by chemicals such as lime, alum, and iron salts.
	coastal plains	Any plain which has its margin on the shore of a large body of water, particularly the sea, and generally represents a strip of recently emerged sea floor.
	coastal zone	As defined by the NCP, all US waters subject to the tide, US waters of the Great Lakes, specified ports and harbors on inland rivers, waters of the contiguous zone, other waters of the high seas subject to the NCP, and the land surface or land substrata, groundwaters, and ambient air proximal to those waters. The term coastal zone delineates an area of federal responsibility for response action. Precise boundaries are determined by EPA/USCG agreements and identified in federal regional contingency plans.

Acronym	Glossary	Definition
	cofferdam	A watertight enclosure from which water is pumped to expose the bottom of a body of water and permit construction (as of a pier).
	cold environments	Environmental conditions where water is in a solid state (snow or ice).
	coliform bacteria	A group of bacteria considered a reliable indicator of the adequacy of treatment for bacterial pathogens.
	coliform index	A rating of the purity of water based on a count of fecal bacteria.
	coliform organism	Microorganisms found in the intestinal tract of humans and animals. Their presence in water indicates fecal pollution and potentially adverse contamination by pathogens.
	colloids	Very small, less than 1 μ m, finely divided solids (that do not dissolve) that remain dispersed in a liquid for a long time due to their small size and electrical charge.
	combustible	A term the NFPA, DOT, and others use to classify certain materials with low flash points that ignite easily. Both NFPA and DOT generally define combustible liquids as having a flash point of 100° F (38° C) or higher. The NFPA classifies nonliquid materials such as wood and paper as ordinary combustibles. OSHA defines combustible liquids within the Hazard Communication Law as any liquid with a flash point at or above 100° F (38° C) but below 200° F (93.3° C).
	combustion	1) Burning, or rapid oxidation, accompanied by release of energy in the form of heat, light, and/or sound. A basic cause of air pollution. 2) Refers to controlled burning of waste, in which heat chemically alters organic compounds, converting into stable compounds such as carbon dioxide and water.
	combustion chamber	The actual compartment where waste is burned in an incinerator.
	co-metabolic bioventing	The advantageous transformation of unwanted compounds during microbiologic metabolic activity stimulated by the injection of air into the subsurface.
	cometabolism	A reaction in which microbes transform a contaminant even though the contaminant cannot serve as an energy source for the organisms. To degrade the contaminant, the microbes require the presence of other compounds (primary substrates) that can support their growth.
	cometabolite	An enzyme produced by microbiological metabolism that aids in degradation of a contaminant.
	comment period	Time provided for the public to review and comment on a proposed action or rule making after publication in the Federal Register or as a document.
	commercial waste	All solid waste emanating from business establishments such as stores, markets, office buildings, restaurants, shopping centers, and theaters.
	commercial waste management facility	A treatment, storage, disposal, or transfer facility which accepts waste from a variety of sources, as compared to a private facility which normally manages a limited waste stream generated by its own operations.

Acronym	Glossary	Definition
	commingled plume	A mixture of chlorinated and non-chlorinated hydrocarbon compounds dissolved in groundwater.
	community	In ecology, a group of interacting populations in time and space. Sometimes, a particular subgrouping may be specified, such as the fish community in a lake or the soil arthropod community in a forest.
	community relations	The effort to establish two-way communication with the public to create understanding of Installation Restoration Program and related actions, to assure public input into decision-making processes related to affected communities, and to make certain that the Navy is aware of and responsive to public concerns. Specific community relations activities are required in relation to Superfund remedial actions. The term "public" includes citizens directly affected by the site, other interested citizens or parties, organized groups, elected officials, and potentially responsible parties.
	community reuse plan	The basis for the proposed action and alternatives addressed in the DoD Component's EIS or other NEPA analyses.
	community water system	In Virginia, as defined by the Virginia Department of Health, a water system serving at least 25 individuals or more than 15 residential connections.
	comparability	A qualitative measure of the confidence with which one data set can be compared to another. Sample data should be comparable with other measurement data for similar samples and sample conditions.
	completeness	A measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under routine operating conditions.
	complexation	Electrostatic association of positively charged metal ions and negatively charged organic matter, usually with two or more points of attachment. See Chelate.
	composite sample	A representative sample created by the homogenization of multiple samples from multiple sampling locations within the same general area. A composite sample is generally taken to indicate the average concentration in a particle media. For example, composite samples are often taken of soil to characterize it for disposal. Typically, only one sample is necessary for every 100 cubic yards. Therefore, several grab samples from each roll-off containing the soil may be homogenized to form the composite sample. Taken in this way, the composite will represent an average concentration of the chemicals of concern for the soil.
	compost	The relatively stable humus material that is produced from a composting process in which bacteria in soil mixed with garbage and degradable trash break down the mixture into organic fertilizer.
	composting	The controlled biological decomposition of organic material in the presence of air and water to form a humus-like material. Controlled methods of composting include mechanical mixing and aerating, ventilating the materials by dropping them through a vertical series of

Acronym	Glossary	Definition
		aerated chambers, or placing the compost in piles out in the open air and mixing it or turning it periodically.
	condensation	The conversion of compounds in the gas phase to a liquid or solid phase usually initiated by a reduction in temperature.
	conductance	A rapid method of estimating the dissolved-solids content of a water supply by determining the capacity of a water sample to carry an electrical current.
	conduction	The transmission of energy in the form of heat or electrical current through a material object.
	conductivity	A measure of the ability of a solution or material to carry an electrical current.
	cone of depression	A conelike depression of the water table (or of a potentiometric surface of a confined aquifer) that is created in the vicinity of a well by pumping. The surface area included in the cone is known as the area of influence of the well.
	cone of influence	The depression, roughly conical in shape, produced in the water table by the pumping of water from a well.
	cone penetrometer	This device consisting of a hollow steel rod that is pushed into the ground. Instrumentation installed in the steel rod records several parameters related to difficulty of insertion, formation pore pressure, and electrical resistivity. These data can be interpreted to obtain information about subsurface geology.
	confined aquifer	An aquifer in which groundwater is confined between two aquitards and is under pressure which is significantly greater than atmospheric pressure.
	confinement	Confinement techniques are the actions necessary to confine a hazardous material release to a limited area. These actions occur remote from the spill or leak site and are therefore defensive.
	confining unit	A stratigraphic unit which, because of low permeability relative to the units above or below, prevents or impedes upward or downward movement of water and pressure.
	confounding factors	An uncontrolled or uncontrollable variable that influences an experimental outcome.
	congener	Any of two compounds composed of the same elements in the same proportions but which have different properties because of different structures.
	conservation	Preserving and renewing, when possible, human and natural resources. The use, protection, and improvement of natural resources according to principles that will assure their highest economic or social benefits.
	consolidated	A rock that is firm and rigid in nature due to the natural interlocking and/or cementation of its mineral grain components. The reverse is unconsolidated.
	constructed wetlands	A constructed wetland is a designed and constructed complex of saturated substrates, emergent and submergent vegetation, animal life, and water that simulates natural wetlands for human use and benefits.

Acronym	Glossary	Definition
	construction and demolition waste	Waste building materials, dredging materials, tree stumps, and rubble resulting from construction, remodeling, repair, and demolition of homes, commercial buildings and other structures and pavements. May contain lead, asbestos, or other hazardous substances.
	consumptive use	Water removed from available supplies without return to a water resource system (uses such as manufacturing, agriculture, and food preparation.)
	containment	An act, process, or means of preventing the spread of unwanted compounds in the environment.
	containment technologies	Those technologies designed to prevent the further migration of contaminants. Can include reducing the mobility of contamination, construction of physical barriers to reduce the flow of water through contaminated media, or pumping to control the flow of contaminated groundwater.
	contaminant	1) Any physical, chemical, biological, or radiological substance or matter that has an adverse affect on air, water, or soil. 2) As defined by section 101(33) of CERCLA, shall include but not be limited to, any element, substance, compound or mixture, including disease-causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring. Shall not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance and shall not include natural gas, liquified natural gas or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas). 3) For purposes of the NCP, the term pollutant or contaminant means any pollutant or contaminant that may present an imminent and substantial danger to public health or welfare.
	contaminant chemistry	The physical properties of unwanted compounds found in the environment.
	contaminant level monitoring	The process of determining the amount of unwanted compounds present over a period of time.
	contaminant mobility reduction	An act, process, or means of preventing the spread of unwanted compounds in the environment.
	contaminant removal	The act, process, or means of extracting unwanted chemicals from the environment.
	contaminant sampling	The act of collecting small quantities of gas, liquid, or solids from the environment to determine the amount of unwanted compound present.
	contaminated dredge spoils	Material containing unwanted compounds such as polychlorinated biphenyls that was removed from the bed of a body of water in order to increase its water carrying capacity or to allow for the passage of boats.

Acronym	Glossary	Definition
	contaminated plume	A visible or measurable discharge of an unwanted compound from a given point of origin, for example, a plume of smoke.
	contaminated sediment	Material located at the bottom of the body of water that contains unwanted compounds.
	contaminated site	Any property, including but not limited to structures, sediment, soil and water, that contains a contaminant resulting from a discharge or release.
	contaminated soil	Unconsolidated material in the top layer of the surface of the earth that contains unwanted compounds.
	contamination	Introduction into water, air and/or soil of microorganisms, chemicals, toxic substances, wastes, or wastewater in a concentration that makes the medium unfit for its next intended use. Also applies to surfaces of objects and buildings, and various household and agricultural use products.
	contiguous zone	A zone of the high seas, established by the U. S. under the Convention on the Territorial Sea and Contiguous Zone, that is in contact with or touching the territorial sea and that extends 9 nautical miles seaward from the outer limit of the territorial sea.
	continuing calibration	Analytical standard run every ten analytical samples or every two hours, whichever is more frequent, to verify the calibration of the analytical systems.
	contract	A legally enforceable binding agreement between two or more persons or parties regarding the supply of goods or services.
	control limits	A range within which specified measurement results must fall to be compliant. Control limits may be mandatory, requiring corrective action if exceeded, or advisory, requiring that noncompliant data be flagged.
	conventional pollutants	Statutorily listed pollutants understood well by scientists. These may be in the form of organic waste, sediment, acid, bacteria, viruses, nutrients, oil and grease, or heat.
	cooperation	Association of persons for common benefit.
	correspondence	Any official letters, memorandums, notes, telecommunications, and any other forms of addressed, written communications sent and received by the EFD/EFA or other sources. Internal Department of Navy drafts and related internal memorandum should not be included in the Administrative Record (AR) unless they contain information found nowhere else that is considered or relied upon in the CERCLA response action decision. Drafts that are circulated outside of DON for review (e.g., to regulators or the public) shall be included in the AR as well as the comments received by DON from those entities (and DON response to those comments).
	corrosion	The dissolution and wearing away of metal caused by a chemical reaction such as between water and pipes, chemicals touching a metal surface, or contact between two metals.
	corrosive	A chemical agent that reacts with the surface of a

Acronym	Glossary	Definition
		material causing it to deteriorate or wear away.
	corrosivity hazard	A material that causes visible destruction of or irreversible alterations to living tissue by chemical action at the point of contact.
	cosolvent effects	When more than one solvent is dissolved in aqueous solution, the solubility of each solvent can be increased due to the presence of other solvents.
	cost	The total spent for goods or services including money, time, and labor.
	cost and performance	A detailed account of the cost and ability of an environmental technology to meet stated performance goals.
	cost sharing	A publicly financed program through which society, as a beneficiary of environmental protection, shares part of the cost of pollution control with those who must actually install the controls. In Superfund, the government may pay part of the cost of a cleanup action with those responsible for the pollution paying the major share.
	cost estimate	The total spent for goods or services including money, time, and labor.
	cost estimating tools	A judgment or estimate regarding the total spent for goods or services including money, time, and labor.
	cost recovery	A legal process by which potentially responsible parties who contributed to contamination at a Superfund site can be required to reimburse the Superfund for money spent during any cleanup actions by the federal government.
	cost/benefit analysis	A quantitative evaluation of the costs which would be incurred versus the overall benefits to society of a proposed action such as the establishment of an acceptable dose of a toxic chemical.
	cost-effective alternative	An alternative control or corrective method identified after analysis as being the best available in terms of reliability, performance, and cost. Although costs are one important consideration, regulatory and compliance analysis does not require EPA to choose the least expensive alternative. For example, when selecting or approving a method for cleaning up a Superfund site the Agency balances costs with the long-term effectiveness of the methods proposed and the potential danger posed by the site.
	cover	To overspread the surface of (one thing) with another; as, to cover wood with paint or lacquer; to cover a table with a cloth.
	cover material	Soil used to cover compacted solid waste in a sanitary landfill.
	cracking	The process whereby heavy molecules of naphtha or petroleum are broken down into hydrocarbons of lower molecular weight (especially in the oil-refining process).
	cradle-to-grave or manifest system	A procedure in which hazardous materials are identified and tracked as they are produced, treated, transported, and disposed of by a series of permanent, linkable, descriptive documents (e.g., manifests).

Acronym	Glossary	Definition
	creosote	A distilled or blended product produced from the by-product(s) of manufactured gas plant operations and most commonly used in wood preservation.
	criteria	Descriptive factors taken into account by EPA in setting standards for various pollutants. These factors are used to determine limits on allowable concentration levels, and to limit the number of violations per year. When issued by EPA, the criteria provide guidance to the states on how to establish their standards.
	cross section	A diagram or drawing that shows features transected by a given plane, usually a vertical plane so that the view shows features through the depth of the earth.
	cultural resources	The physical remains of a people's way of life that archaeologists and historians study to try to interpret how people lived.
	cumulative exposure	The summation of exposures of an organism to a chemical over a period of time.
	cycloalkene	Unsaturated, monocyclic hydrocarbon with the formula C_nH_{2n-2} .