Term
acid
Definition: A corrosive solution with a pH less than 7. Vinegar is a common weak acid; battery acid is much stronger.
activated sludge process
Definition: A sewage treatment process by which bacteria that feed on organic wastes are continuously circulated and put in contact
with organic waste in the presence of oxygen to increase the rate of decomposition.
acute effect
Definition: An adverse effect on any living organism in which severe symptoms develop rapidly and often subside after the exposure
stops.
acute toxicity
Definition: Adverse effects that result from a single dose or single exposure of a chemical; any poisonous effect produced within a
short period of time, usually less than 96 hours. This term normally is used to describe effects in experimental animals.
aeration
Definition: The act of mixing a liquid with air (oxygen).
aerobic
Definition: A biological process that occurs in the presence of oxygen.

Term
agricultural waste
Definition: Poultry and livestock manure, and residual materials in liquid or solid form generated from the production and marketing of poultry, livestock, furbearing animals, and their products. Also includes grain, vegetable, and fruit harvest residue.
air quality standards
Definition: The level of selected pollutants set by law that may not be exceeded in outside air. Used to determine the amount of pollutants that may be emitted by industry.
alkalinity
Definition: Having the properties of a base with a pH of more than 7. A common alkaline is baking soda.
ambient
Definition: Any unconfined portion of the atmosphere; open air; outside surrounding air.
anaerobic
Definition: A biological process which occurs in the absence of oxygen.
aquifer
Definition: A water-bearing layer of rock (including gravel and sand) that will yield water in usable quantity to a well or spring.
asbestos

Term
Definition: A mineral fiber that can pollute air or water and cause cancer or asbestosis when inhaled. EPA has banned or severely
restricted the use of asbestos in manufacturing and construction.
assimilative capacity
Definition: The ability of a natural body of water to receive wastewaters or toxic materials without harmful effects and without damage to aquatic life.
bactericide
Definition: A pesticide used to control or destroy bacteria, typically in the home, schools, or on hospital equipment. benthic organism
Definition: Any of a diverse group of aquatic plants and animals that lives on the bottom of marine and fresh bodies of water. The presence or absence of certain benthic organisms can be used as an indicator of water quality.
best available control technology
Definition: The application of the most advanced methods, systems, and techniques for eliminating or minimizing discharges and emissions on a case-by-case basis as determined by EPA. BACT represents an emission limit based on the maximum degree of reduction of each pollutant as described in regulations under the Clean Air Act (CAA). The determination of BACT takes into account energy, environmental, economic effects, and other costs. Acronym: bact
best available technology economically achievable

Term
Definition: Originally described under Section 304(b)(2)(B) of the Clean Water Act, this level of control is generally described as the best technology currently in use and includes controls on toxic pollutants. Acronym: batea
best management practices
Definition: Procedures or controls other than effluent limitations to prevent or reduce pollution of surface water (includes runoff control, spill prevention, and operating procedures).
Acronym: bmp
bioaccumulation/biomagnification
Definition: A process where chemicals are retained in fatty body tissue and increase in concentration over time. Biomagnification is
the increase of tissue accumulation in species higher in the natural food chain as contaminated food species are eaten.
bioassay
bioassay
Definition: A method of testing a material's effects on living organisms.
biochemical oxygen demand
Definition: A measure of the oxygen required to break down organic materials in water. Higher organic loads require larger amounts
of oxygen and may reduce the amount of oxygen available for fish and aquatic life below acceptable levels.
Acronym: bod
biochemicals

Term Definition: Chemicals that are either naturally occurring or identical to naturally occurring substances. Examples include hormones, pheromones, and enzymes. Biochemicals function as pesticides through non-toxic, non-lethal modes of action, such as disrupting the mating pattern of insects, regulating growth, or acting as repellants. Biochemicals tend to be environmentally compatible and are thus important to Integrated Pest Management programs. biodegradable Definition: The ability of a substance to be broken down physically and/or chemically by microorganisms. For example, many chemicals, food scraps, cotton, wool, and paper are bio-degradable; plastics and polyester generally are not. biodiversity Definition: The number and variety of different organisms in the ecological complexes in which they naturally occur. Organisms are organized at many levels, ranging from complete ecosystems to the biochemical structures that are the molecular basis of heredity. Thus, the term encompasses different ecosystems, species, and genes that must be present for a healthy environment. A large number of species must characterize the food chain, representing multiple predator-prey relationships. biological pesticides

Definition: Certain microorganisms, including bacteria, fungi, viruses, and protozoa that are effective in controlling target pests. These agents usually do not have toxic effects on animals and people and do not leave toxic or persistent chemical residues in the environment.

biota

Term
Term
Definition: All living organisms in a given area.
bubble
Definition: Evicting courses of air pollution with covered facilities may control more than is required at one emission point where
Definition: Existing sources of air pollution with several facilities may control more than is required at one emission point where
control costs are lower, in return for comparable relaxation at a second point where costs are higher or more difficult to achieve.
by-product
Definition: Materials, other than the intended product, generated as a result of an industrial process.
Definition: Materials, other than the intended product, generated as a result of an industrial process.
сар
Definition: A fairly impermeable seal, usually composed of clay-type soil or a combination of clay soil and synthetic liner, which is
placed over a landfill during closure. The cap serves to minimize leachate volume during biodegradation of the waste by keeping
precipitation from percolating through the landfill. The cap also keeps odors down and animal scavengers from gathering.
capacity assurance plan
Definition: A plan which assures that a state has the ability to treat and dispose of hazardous wastes generated within its borders
over the next 20 years. Section 104 of SARA required the first plan to be submitted to EPA in October 1989. But even though
capacity has been certified, the state is not required to treat or dispose of hazardous wastes at home; many are exporting to other
states that have commercial facilities, permitted landfills, and incinerators.
carcinogenic or carcinogen

Definition: Capable of causing cancer. A suspected carcinogen is a substance that may cause cancer in humans or animals but for

Term
which the evidence is not conclusive.
CERCLIS
Definition: The federal Comprehensive Environmental Response, Compensation, and Liability Information System. This database
includes all sites which have been nominated for investigation by the Superfund program and the actions that have been taken at
these sites. If the site investigation reveals contamination, the site is ranked and may be included on the National Priorities List for
Superfund cleanup. Inclusion in the CERCLIS database does not necessarily mean that a property is a hazardous waste site. An emergency action may have been conducted there or a simple investigation which concluded that no further action was required.
Chemical Abstract Service
Definition: Since the 1890s, CAS has been assigning identification numbers to chemicals that companies register with them. Every
year, CAS updates and writes new chemical abstracts on well over a million different chemicals, including their composition,
structure, characteristics, and all the different names of that chemical. CAS On-Line is a computer network available to individual and
business account holders to receive information about specific chemicals of concern. Each abstract is accompanied by the CAS
number.
Acronym: CAS
Chemical Oxygen Demand
Definition: A measure of the everyon concurring conceity of increasing and organic matter present in water or westewater; the amount
Definition: A measure of the oxygen-consuming capacity of inorganic and organic matter present in water or wastewater; the amount of oxygen consumed from a chemical oxidant in a specific test.
Acronym: COD
chlorination

Term
Definition: Adding chlorine to water or wastewater, generally for the purpose of disinfection, but frequently for accomplishing other piological or chemical results. Chlorine also is used almost universally in manufacturing processes, particularly for the plastics ndustry.
chlorofluorocarbons
Definition: A family of chemicals commonly used in air conditioners and refrigerators as coolants and also as solvents and aerosol propellants. CFCs drift into the upper atmosphere where their chlorine components destroy ozone. CFCs are thought to be a major cause of the ozone hole over Antarctica. Acronym: CFCs
chronic effect
Definition: An adverse effect on any living organism in which symptoms develop slowly over a long period of time or recur frequently. clear cut
Definition: Harvesting all the trees in one area at one time, a practice that destroys vital habitat and biodiversity and encourages rainfall or snowmelt runoff, erosion, sedimentation of streams and lakes, and flooding.
Definition: This term is commonly used interchangeably with "global warming" and "the greenhouse effect," but is a more descriptive erm. Climate change refers to the buildup of man-made gases in the atmosphere that trap the sun's heat, causing changes in weather patterns on a global scale. The effects include changes in rainfall patterns, sea level rise, potential droughts, habitat loss,

Term
and heat stress. The greenhouse gases of most concern are carbon dioxide, methane, and nitrous oxides. If these gases in our
atmosphere double, the earth could warm up by 1.5 to 4.5 degrees by the year 2050, with changes in global precipitation having the
greatest consequences.
cloning
Definition: In biotechnology, obtaining a group of genetically identical cells from a single cell; making identical copies of a gene.
closure
Definition: The procedure an operator must go through when a landfill reaches the legal capacity for solid waste. No more waste can
be accepted and a cap usually is placed over the site. The cap is then planted with grasses and other ground covers.
Code of Federal Regulations
Definition: A periodic publication of the regulations established by U.S. law.
Acronym: CFR
commercial waste management facility
Definition: A treatment, storage, disposal, or transfer facility that accepts wastes from a variety of sources for profit. A commercial
facility manages a broader spectrum of wastes than a private facility, which normally manages a limited volume or type of waste.
community relations
Definition: Two-way communications with the public to foster understanding of EPA programs and actions and to increase citizen
input into EPA decisions. Specific community relations activities such as holding public meetings and comment periods and opening
input into El A decisiono. Openno community relationo del vitico such as holding public meetings and comment periods and opening

Term
information repositories are required at Superfund sites.
compost
Definition: Decomposed organic material that is produced when bacteria in soil break down garbage and biodegradable trash, making
organic fertilizer. Making compost requires turning and mixing and exposing the materials to air. Gardeners and farmers use compost
for soil enrichment.
conditionally exempt generators
Definition: Small quantity facilities that produce fewer than 220 pounds of hazardous waste per month. Exempt from most regulations,
conditionally exempt generators are required to determine whether their waste is hazardous and to notify local waste management
agencies. These generators may treat or dispose of the waste on site or ensure that the waste is sent to a permitted disposal or
recycling facility.
consent decree
Definition: A legal document submitted by the Department of Justice on behalf of the EPA for approval by a federal judge to settle a
case. A consent decree can be used to formalize an agreement reached between EPA and potentially responsible parties (PRPs) for
cleanup at a Superfund site. Consent decrees also are signed by regulated facilities to cease or correct certains actions or processes
that are polluting the environment and include payment of penalties. The Clean Water Act, Clean Air Act, Toxic Substances Control
Act, and others all use consent decrees.
conservation

Definition: Preserving and renewing natural resources to assure their highest economic or social benefit over the longest period of

Term
time. Clean rivers and lakes, wilderness areas, a diverse wildlife population, healthy soil, and clean air are natural resources worth
conserving for future generations.
corrosive
Definition. A substance that acts or waars away materials gradually by shamiaal action
Definition: A substance that eats or wears away materials gradually by chemical action.
county emergency operations plan
Definition: A plan required by Federal Emergency Management Agency regulations that describes actions the county will take to
respond to emergency situations such as natural disasters, major fires, transportation incidents, or chemical releases.
covered facility
Definition. A facility beying one or more of the 2664 extremely becardeus substances in emounts higher than the quantity designated
Definition: A facility having one or more of the 366+ extremely hazardous substances in amounts higher than the quantity designated
by EPCRA. These facilities must file reports with the SERC and LEPC.
criteria
Definition: Descriptive factors taken into account by EPA in setting standards for pollutants. For example, water quality criteria
describe the concentration of pollutants that most fish can be exposed to for an hour without showing acute effects.
dechlorination
Definition: Removal of chlorine and chemical replacement with hydrogen or hydroxide ions to detoxify a substance.
deep well injection

Term
Definition: A process by which waste fluids are injected deep below the surface of the earth.
delist
Definition: Use of the petition process (1) to have a chemical's toxic designation rescinded; (2) to remove a site from the National
Priority List; or (3) to exclude a particular waste from regulation even though it is a listed hazardous waste.
discharge
Definition. The release of any waste into the any ironment from a point source. Heyelly refere to the release of a liquid waste into a
Definition: The release of any waste into the environment from a point source. Usually refers to the release of a liquid waste into a
body of water through an outlet such as a pipe, but also refers to air emissions.
discharge area
Definition: An area of land where there is a net annual transfer of water from the ground water to surface water, such as to streams,
springs, lakes, and wetlands.
dispersion model
Definition: A mathematical prediction of how pollutants from a discharge or emission source will be distributed in the surrounding
environment under given conditions of wind, temperature, humidity, and other environmental factors.
disposal
Definition: The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into the

Term
environment (land, surface water, ground water, and air).
disposal facility
Definition: A landfill, incinerator, or other facility which receives waste for disposal. The facility may have one or many disposal
methods available for use. Does not include wastewater treatment.
dissolved oxygen
Definition: Oxygen that is freely available in water to sustain the lives of fish and other aquatic organisms.
Acronym: DO
dose
Definition: In terms of monitoring exposure levels, the amount of a toxic substance taken into the body over a given period of time.
dose response
Definition: How an organism's response to a toxic substance changes as its overall exposure to the substance changes. For
example, a small dose of carbon monoxide may cause drowsiness; a large dose can be fatal.
dump
Definition: A land site where wastes are discarded in a disorderly or haphazard fashion without regard to protecting the environment.
Uncontrolled dumping is an indiscriminate and illegal form of waste disposal. Problems associated with dumps include multiplication
of disease-carrying organisms and pests, fires, air and water pollution, unsightliness, loss of habitat, and personal injury.

Term
ecology
Definition: The study of the relationships between all living organisms and the environment, especially the totality or pattern of
interactions; a view that includes all plant and animal species and their unique contributions to a particular habitat.
ecosystem
Definition: The interacting synergism of all living organisms in a particular environment; every plant, insect, aquatic animal, bird, or
land species that forms a complex web of interdependency. An action taken at any level in the food chain, use of a pesticide for
example, has a potential domino effect on every other occupant of that system.
effluent
Definition: Wastewater discharged from a point source, such as a pipe.
effluent limitations
Definition: Limits on the amounts of pollutants which may be discharged by a facility; these limits are calculated so that water quality
standards will not be violated even at low stream flows.
Emergency and Hazardous Chemical Inventory
Definition: An annual report by facilities having one or more extremely hazardous substances or hazardous chemicals above certain
weight limits, as specified in Section 311 and 312 of EPCRA.
Emergency Broadcasting System

n	
finition: Used to inform the public about an emergency and the protective actions to take. The EBS is a service of local radio ar evision stations, activated as needed and approved by a local emergency management agency. ronym: EBS	าd
ergency Preparedness Coordinator	
finition: The local government official designated to be notified immediately of chemical emergencies (e.g., spills, chemical eases, explosions, or fires) under EPCRA.	
ission	
finition: The release or discharge of a substance into the environment. Generally refers to the release of gases or particulates i air.	nto
ission standards	
finition: Government standards that establish limits on discharges of pollutants into the environment (usually in reference to air)
ergy recovery	
finition: To capture energy from waste through any of a variety of processes (e.g., burning). Many new technology incinerators ste-to-energy recovery units.	are
vironmental assessment	
finition: A preliminary, written, environmental analysis required by NEPA (see the Federal Law section) to determine whether a	t
eral activity such as building airports or highways would significantly affect the environment; may require preparation of more	

rm
etailed Environmental Impact Statement.
cronym: EA
nvironmental audit
efinition: An independent assessment (not conducted by EPA) of a facility's compliance policies, practices, and controls. Many Indicion prevention initiatives require an audit to determine where wastes may be reduced or eliminated or energy conserved. Many
upplemental environmental projects that offset a penalty use audits to identify ways to reduce the harmful effects of a violation. Invironmental impact statement
efinition: A document prepared by or for EPA which identifies and analyzes, in detail, environmental impacts of a proposed action. s a tool for decision-making, the EIS describes positive and negative effects and lists alternatives for an undertaking, such as evelopment of a wilderness area. cronym: EIS
nvironmental justice
efinition: The fair treatment of people of all races, cultures, incomes, and educational levels with respect to the development and nforcement of environmental laws, regulations, and policies. Fair treatment implies that no population should be forced to shoulder a sproportionate share of exposure to the negative effects of pollution due to lack of political or economic strength.
nvironmental response team
efinition: EPA's group of highly trained scientists and engineers based in Edison, NJ and Cincinnati, OH who back up the federal n-Scene Coordinator. The ERT's capabilities include multimedia sampling and analysis, hazard assessment, hazardous substance

Term
feedstock
Definition: Raw material supplied to a machine or processing plant from which other products can be made. For example, polyvinyl
chloride and polyethylene are raw chemicals used to produce plastic tiles, mats, fenders, cushions, and traffic cones.
financial assurance
Definition: A means (such as insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer) by the operator of a
facility such as a landfill to assure financial capability for cleaning up possible environmental releases and closure of that facility.
first draw
Definition: The water that comes out when a faucet in the kitchen or bathroom is first opened, which is likely to have the highest level
of lead contamination from old plumbing solder and pipes.
flare
Definition: A device that burns gaseous materials to prevent them from being released into the environment. Flares may operate
continuously or intermittently and are usually found on top of a stack. Flares also burn off methane gas in a landfill.
floodplain
Definition: Mostly level land along rivers and streams that may be submerged by floodwater. A 100-year floodplain is an area which
can be expected to flood once in every 100 years.
flue gas desulfurization

Term
Definition: The removal of sulfur oxides from exhaust gases of a boiler or industrial process; usually a wet scrubbing operation which concentrates hazardous materials in a slurry, requiring proper disposal.
fugitive emissions
Definition: Air pollutants released to the air other than those from stacks or vents; typically small releases from leaks in plant equipment such as valves, pump seals, flanges, sampling connections, etc.
fungicide
Definition: A pesticide used to control or destroy fungi on food or grain crops. generator
Definition: A facility or mobile source that emits pollutants into the air; any person who produces a hazardous waste that is listed by EPA and therefore subject to regulation.
grab sample
Definition: A single sample of soil or of water taken without regard to time or flow.
ground water
Definition: Water found below the surface of the land, usually in porous rock formations. Ground water is the source of water found in wells and springs and is used frequently for drinking.

Term
Definition: A subset of solid wastes that pose substantial or potential threats to public health or the environment and meet any of the
following criteria: -is specifically listed as a hazardous waste by EPA; - exhibits one or more of the characteristics of hazardous
wastes (ignitability, corrosiveness, reactivity, and/or toxicity); - is generated by the treatment of hazardous waste; or is contained in a
hazardous waste.
hazardous waste landfill
Definition: A precially permitted, every stad or engineered area in which befordaus waste is depented and envered. Dreper
Definition: A specially permitted, excavated or engineered area in which hazardous waste is deposited and covered. Proper
protection of the environment from the materials to be deposited in such a landfill requires careful site selection, the cataloging of
types of wastes, good design (including a liner and a leachate collection and treatment system), proper operation, and thorough final
closure.
health assessment
Definition: An evaluation of available data on existing or potential risks posed by a Superfund site. Every site on the National Priorities
List has a health assessment prepared by the Agency for Toxic Substances and Disease Registry.
heavy metal
Definition: A common hazardous waste; can damage organisms at low concentrations and tends to accumulate in the food chain.
herbicide
Definition: A pesticide designed to control or kill plants, weeds, or grasses. Almost 70% of all pesticide used by farmers and ranchers
Deminition. A pesticide designed to control of kill plants, weeds, of glasses. Almost 70% of all pesticide dsed by farmers and farchers

are herbicides. These chemicals have wide- ranging effects on non-target species (other than those the pesticide is meant to control).

n
usehold or domestic waste
finition: Solid waste, composed of garbage and rubbish, which normally originates from residential, private households, or artment buildings. Domestic waste may contain a significant amount of toxic or hazardous waste from improperly discarded sticides, paints, batteries, and cleaners.
Irocarbons
finition: Chemicals that consist entirely of hydrogen and carbon. Hydrocarbons contribute to air pollution problems like smog. ntification code
finition: The unique code assigned to each generator, transporter, and treatment, storage, or disposal facility by EPA to facilitate ntification and tracking of hazardous waste. Superfund sites also have assigned I.D. numbers.
ineration
finition: The destruction of solid, liquid, or gaseous wastes by controlled burning at high temperatures. Hazardous organic npounds are converted to ash, carbon dioxide, and water. Burning destroys organics, reduces the volume of waste, and vaporize ter and other liquids the wastes may contain. The residue ash produced may contain some hazardous material, such as non- nbustible heavy metals, concentrated from the original waste.
irect discharge
finition: The introduction of pollutants from a non-domestic source into a publicly owned wastewater treatment system. Indirect chargers can be commercial or industrial facilities who must pre-treat their wastes before discharge into local sewers.

Term
indoor air
Definition: Breathing air inside a habitable structure, often highly polluted because of lack of exchange with fresh oxygen from outdoors. Solvents, smoke, paints, furniture glues, carpet padding, and other synthetic chemicals trapped inside contribute to an often unhealthy environment.
industrial waste
Definition: Unwanted materials produced in or eliminated from an industrial operation and categorized under a variety of headings, such as liquid wastes, sludge, solid wastes, and hazardous wastes.
inert ingredients
Definition: Substances that are not "active," such as water, petroleum distillates, talc, corn meal, or soaps. When discussing
pesticides, inert ingredients do not attack a particular pest, but some are chemically or biologically active, causing health and
environmental problems.
innovative technology
Definition: New or inventive methods to treat hazardous wastes, conserve energy, or prevent pollution.
integrated pest management
Definition: A combination of biological, cultural, and genetic pest control methods with use of pesticides as the last resort. IPM
development to reduce the population. Land use practices are examined for possible change; other animals, birds, or reptiles in the
ecosystem are used as natural predators.

Term
Acronym: IPM
interstate commerce
Definition: A clause of the United States Constitution which reserves to the federal government the right to regulate the conduct of
business across state lines. Under this clause, the U.S. Supreme Court has ruled that states may not restrict the disposal of wastes
originating out-of-state more than that of waste originating in-state.
inversion
Definition: An atmospheric condition caused by increasing temperature with elevation, resulting in a layer of warm air preventing the
rise of cooler air trapped beneath. This condition prevents the rise of pollutants that might otherwise be dispersed. Trapping pollutants near the ground increases ozone to harmful levels.
irradiated food
Definition: Food that has been briefly exposed to radioactivity (usually gamma rays) to kill insects, bacteria, and mold. Irradiated food
can be stored without refrigeration or chemical preservatives and has a long "shelf life."
lagoon
Definition: A shallow, artificial treatment pond where sunlight, bacterial action, and oxygen work to purify wastewater; a stabilization
pond. An aerated lagoon is a treatment pond that uses oxygen to speed up the natural process of biological decomposition of organic
wastes. A lagoon is regulated as a point source under the Clean Water Act if there is a direct surface water discharge. Some lagoons
that discharge into ground water also are regulated if they have a direct hydrogeologic connection to surface water. In other areas,
lagoons were historically used to dump various liquid, solid, and hazardous wastes from manufacturing or industrial processes. These

Term
wastes typically flooded and polluted surrounding environs or seeped underground. Such lagoons are now regulated under RCRA
but some must be cleaned up under Superfund.
land ban
land disposal restrictions
Definition: Mandated by the 1984 amendments to RCRA; prohibits the disposal of hazardous wastes into or on the land.
landfill
Definition: A method for final disposal of solid waste on land. The refuse is spread and compacted and a cover of soil applied so that
effects on the environment (including public health and safety) are minimized. Under current regulations, landfills are required to have
liners and leachate treatment systems to prevent contamination of ground water and surface waters. An industrial landfill disposes of
non-hazardous industrial wastes. A municipal landfill disposes of domestic waste including garbage, paper, etc. This waste may
include toxins that are used in the home, such as insect sprays and powders, engine oil, paints, solvents, and weed killers.
large quantity generator
Definition: Person or facility which generates more than 2,200 pounds of hazardous waste per month. In 1989, only 1% of more than
20,000 generators fell into this category. Those generators produced nearly 97% of the nation's hazardous waste. These generators
are subject to all requirements of RCRA.
leachate

Definition: Liquid (mainly water) that percolates through a landfill and has picked up dissolved, suspended, and/or microbial

Term
contaminants from the waste. Leachate can be compared to coffee: water that has percolated down through the ground coffee.
lethal concentration 50
Definition: A concentration of a pollutant or effluent at which 50% of the test organisms die; a common measure of acute toxicity. Acronym: LC 50
lethal dose 50
Definition: The dose of a toxicant that will kill 50% of test organisms within a designated period of time. The lower the LD 50, the more toxic the compound. Acronym: LD 50
limited degradation
Definition: A policy that allows for some lowering of natural environmental quality to a given level beneath an established health standard.
liner
Definition: Structure of natural clay or manufactured material (plastic) which serves as a barrier to restrict leachate from reaching or mixing with ground water in landfills, lagoons, etc.
litter
Definition: The highly visible portion of solid waste (usually packaging material) which is generated by the consumer and carelessly discarded outside of the regular garbage disposal system, as on the highways or in streets.

Term
local emergency planning committee
Definition: The body appointed by the State Emergency Response Commission (SERC), as required by EPCRA, which develops comprehensive emergency plans for Local Emergency Planning Districts, collects MSDS forms and chemical release reports, and provides this information to the public. Each county and some large city governments participate in an LEPC. Acronym: LEPC
Material Safety Data Sheet
Definition: Printed material concerning a hazardous chemical, or Extremely Hazardous Substance, including its physical properties, hazards to personnel, fire and explosion potential, safe handling recommendations, health effects, fire fighting techniques, reactivity, and proper disposal. Originally established for employee safety by OSHA. Acronym: MSDS
Maximum Achievable Control Technology
Definition: Generally, the best available control technology, taking into account cost and technical feasibility. Acronym: MACT
Maximum Contaminant Level
Definition: The maximum level of certain contaminants permitted in drinking water supplied by a public water system as set by EPA under the federal Safe Drinking Water Act. Acronym: MCL
Maximum Contaminant Level Goal

Term

Definition: The maximum level of a contaminant that is associated with no adverse health effects from drinking water containing that contaminant over a lifetime. For chemicals believed to cause cancer, the MCLGs are set at zero. MCLGs are not enforceable, but are ideal, health-based goals which are set in the National Primary Drinking Water Standards developed by EPA. MCLs are set as close to MCLGs as possible, considering costs and technology.

Acronym: MCLG

medical waste

Definition: All wastes from hospitals, clinics, or other health care facilities ("Red Bag Waste") that contain or have come into contact with diseased tissues or infectious microorganisms. Also referred to as infectious waste which is hazardous waste with infectious characteristics, including: contaminated animal waste, human blood and blood products, pathological waste, and discarded sharps (needles, scalpels, or broken medical instruments).

microorganisms

Definition: Bacteria, yeasts, simple fungi, algae, protozoans, and a number of other organisms that are microscopic in size. Most are beneficial but some produce disease. Others are involved in composting and sewage treatment.

milligrams/liter

Definition: A measure of concentration used in the measurement of fluids. Mg/l is the most common way to present a concentration in water and is roughly equivalent to parts per million.

Acronym: mg/l

minimization

Term
Definition: Measures or techniques that reduce the amount of wastes generated during industrial production processes; this term also is applied to recycling and other efforts to reduce the volume of waste going to landfills. This term is interchangeable with waste reduction and waste minimization.
mutagenicity
Definition: The property of a chemical that causes the genetic characteristics of an organism to change in such a way that future generations are permanently affected.
National Ambient Air Quality Standards
Definition: Maximum air pollutant standards that EPA set under the Clean Air Act for attainment by each state. The standards were to be achieved by 1975, along with state implementation plans to control industrial sources in each state. Acronym: NAAQS
National Pollutant Discharge Elimination System
Definition: The primary permitting program under the Clean Water Act which regulates all discharges to surface water. Acronym: NPDES
National Priorities List
Definition: A list of sites, many nominated by the states, for hazardous waste cleanup under Superfund. Acronym: NPL
National Response Center

Term

Definition: The primary communications center operated by the U.S. Coast Guard to receive reports of major chemical and oil spills and other hazardous substances into the environment. The NRC immediately relays reports to a predesignated federal On-Scene Coordinator.

Acronym: NRC

National Response Team

Definition: Representatives from 15 federal agencies with interests and expertise in various aspects of emergency response to pollution incidents. EPA serves as chair and the U.S. Coast Guard serves as vice-chair. The NRT is primarily a national planning, policy, and coordinating body and does not respond directly to incidents. The NRT provides policy guidance prior to an incident and assistance as requested by a federal On-Scene Coordinator via a Regional Response Team during an incident. NRT assistance usually takes the form of technical advice, access to additional resources or equipment, or coordination with other RRTs. Acronym: NRT

National Strike Force

Definition: Operated by the U.S. Coast Guard, the NSF is composed of three strategically located teams (Atlantic, Pacific, and Gulf coasts) who back up the federal On-Scene Coordinator. These teams are extensively trained and equipped to respond to major oil spills and chemical releases. These capabilities are especially suited to incidents in a marine environment but also include site assessment, safety, action plan development, and documentation for both inland and coastal zone incidents. The NSF Coordination Center is at Elizabeth City, NC.

Acronym: NSF

neutralization

Term
Definition: The chamical process in which the acidic or basic characteristics of a fluid are changed to these of water $(nH = 7)$
Definition: The chemical process in which the acidic or basic characteristics of a fluid are changed to those of water (pH = 7).
No Observed Adverse Effect Level
Definition: A level of exposure which does not cause observable harm.
Acronym: NOAEL
No Observed Effect Level
Definition: A level of exposure which does not cause observable harm.
Acronym: NOEL
non-attainment
Definition: Refers to areas of the United States that have not met air standards for human health by deadlines set in the Clean Air
Act.
nonpoint source
Definition: Any source of pollution not associated with a distinct discharge point. Includes sources such as rainwater, runoff from
agricultural lands, industrial sites, parking lots, and timber operations, as well as escaping gases from pipes and fittings.
odor threshold
Definition: The lowest concentration of a substance in air that can be smelled. Odor thresholds are highly variable because of the

Term
differing ability of individuals to detect odors.
On-Scene Coordinator
Definition: The federal official responsible for the coordination of a hazardous materials response action, as specified in individual
Regional Contingency Plans. OSCs are predesignated by EPA for inland areas and by the U.S. Coast Guard for coastal areas. The
OSC coordinates all federal containment, removal, and disposal efforts and resources during a pollution incident. The OSC is the
point of contact for the coordination of federal efforts with those of the local response community. The OSC has access to extensive
federal resources, including the National Strike Force, the Environmental Response Team, and Scientific Support Coordinators. The
OSC can be a source of valuable support and information to the community.
Acronym: OSC
on site
Definition: On the same, or adjacent, property.
organically grown
Definition: Food, feed crops, and livestock grown within an intentionally-diversified, self-sustaining agro-ecosystem. In practice,
farmers build up nutrients in the soil using compost, agricultural wastes, and cover crops instead of synthetically derived fertilizers to
increase productivity, rotate crops, weed mechanically, and reduce dramatically their dependence on the entire family of pesticides.
Farmers must be certified to characterize crops as organically grown and can only use approved natural and synthetic biochemicals,
agents, and materials for three consecutive years prior to harvest. Livestock must be fed a diet that includes grains and forages that
have been organically grown and cannot receive hormones, sub-therapeutic antibiotics, or other growth promoters.
organism

Term
Definition: Any living being, whether plant, mammal, bird, insect, reptile, fish, crustacean, aquatic or estuarine animal, or bacterium.
oxidant
Definition: A substance containing oxygen that reacts chemically with other materials to produce new substances. Oxidants are the primary ingredients in smog.
ozone
Definition: Three molecule oxygen compound found in two layers of the earth's atmosphere. One layer of beneficial ozone occurs at seven to 18 miles above the surface and shields the earth from ultraviolet light. Several holes in this protective layer have been documented by scientists. Ozone also concentrates at the surface as a result of reactions between by-products of fossil fuel combustion and sunlight, having harmful health effects.
parts per billion
Definition: One ppb is comparable to one kernel of corn in a filled, 45-foot silo, 16 feet in diameter. Acronym: ppb
parts per million
Definition: One ppm is comparable to one drop of gasoline in a tankful of gas (full-size car).
Acronym: ppm
parts per trillion

Term
Definition: One ppt is comparable to one drop in a swimming pool covering the area of a football field 43 ft. deep.
Acronym: ppt
pathogen
Definition: A bacterial organism typically found in the intestinal tracts of mammals, capable of producing disease.
permeability
Definition: The ease with which water, or other fluid, passes through a substance.
Permissible Exposure Limit
Definition: Workplace exposure limits for contaminants established by OSHA.
Acronym: PEL
permit
Definition: A legal document issued by state and/or federal authorities containing a detailed description of the proposed activity and
operating procedures as well as appropriate requirements and regulations. The permitting process includes provisions for public
comment.
pesticide
Definition: Substances intended to repel, kill, or control any species designated a "pest" including weeds, insects, rodents, fungi,
bacteria, or other organisms. The family of pesticides includes herbicides, insecticides, rodenticides, fungicides, and bactericides.

Term
рН
Definition: The measure of acidity or alkalinity of a chemical solution, from 0-14. Anything neutral, for example, has a pH of 7. Acids
have a pH less than 7, bases (alkaline) greater than 7.
plume
Definition: A concentration of contaminants in air, soil, or water usually extending from a distinct source.
point source
Definition: A stationary location or fixed facility such as an industry or municipality that discharges pollutants into air or surface water
through pipes, ditches, lagoons, wells, or stacks; a single identifiable source such as a ship or a mine.
pollution
Definition: Any substances in water, soil, or air that degrade the natural quality of the environment, offend the senses of sight, taste,
or smell, or cause a health hazard. The usefulness of the natural resource is usually impaired by the presence of pollutants and
contaminants.
pollution prevention
Definition: Actively identifying equipment, processes, and activities which generate excessive wastes or use toxic chemicals and then
making substitutions, alterations, or product improvements. Conserving energy and minimizing wastes are pollution prevention
concepts used in manufacturing, sustainable agriculture, recycling, and clean air/clean water technologies.
Polychlorinated Biphenyls

Term
Definition: A group of toxic, persistent chemicals used in electrical transformers and capacitors for insulating purposes, and in gas pipeline systems as a lubricant. The sale and new use of PCBs were banned by law in 1979. Acronym: PCBs
potable water
Definition: Raw or treated water that is considered safe to drink.
pretreatment
Definition: Methods used by industry and other non-household sources of wastewater to remove, reduce, or alter the pollutants in
wastewater before discharge to a POTW.
primary treatment
Definition: First stage of wastewater treatment in which solids are removed by screening and settling.
public comment period
Definition: The time allowed for the members of an affected community to express views and concerns regarding an action proposed
to be taken by EPA, such as a rulemaking, permit, or Superfund remedy selection.
public water system
Definition: Any water system that regularly supplies piped water to the public for consumption, serving at least an average of 25

Term
ndividuals per day for at least 60 days per year, or has at least 15 service connections.
Publicly Owned Treatment Works
Definition: A municipal or public service district sewage treatment system. Acronym: POTW
quality assurance/quality control
Definition: A system of procedures, checks, audits, and corrective actions to ensure that all technical, operational, monitoring, and
reporting activities are of the highest achievable quality.
radioactive waste
Definition: Any waste that emits energy as rays, waves, or streams of energetic particles. Radioactive materials are often mixed with hazardous waste, usually from nuclear reactors, research institutions, or hospitals.
radon
Definition: A colorless, naturally occurring gas formed by radioactive decay of radium atoms. Radon accumulating in basements and
other areas of buildings without proper ventilation has been identified as a leading cause of lung cancer.
reactivity
Definition: Refers to those hazardous wastes that are normally unstable and readily undergo violent chemical change but do not explode.

Term
remedial action
Definition: The actual construction or clean-up phase of a Superfund site cleanup.
reportable quantity
Definition: Amount of a hazardous or extremely hazardous substance that, if released into the environment, must be reported to the NRC, the SERC, and the LEPC under Section 304 of EPCRA. Acronym: RQ
residual risk
Definition: The risk associated with pollutants after the application of maximum achievable control technology or MACT. resource recovery
Definition: The extraction of useful materials or energy from solid waste. Such materials can include paper, glass, and metals that can be reprocessed for re-use. Resource recovery also is employed in pollution prevention.
responsiveness summary
Definition: A summary of oral and written comments received by EPA during a public comment period on key documents or actions proposed to be taken, and EPA's response to those comments.
risk assessment

Term
Definition: A process to determine the increased risk from exposure to environmental pollutants together with an estimate of the severity of impact. Risk assessments use specific chemical information plus risk factors.
risk communication
Definition: The process of exchanging information about levels or significance of health or environmental risk.
risk factor
Definition: A characteristic (e.g., race, sex, age, obesity) or variable (e.g., smoking, exposure) associated with increased chance of toxic effects. Some standard risk factors used in general risk assessment calculations include average breathing rates, average weight, and average human life span.
sanitary water
Definition: Water discharged from restrooms, showers, food preparation facilities, or other nonindustrial operations; also known as "gray water."
Scientific Support Coordinators
Definition: Scientific and technical advisors in coastal and marine areas from the National Oceanic and Atmospheric Administration (NOAA) who serve as members of the federal On-Scene Coordinator's staff. Their capabilities include contingency planning, surface/subsurface trajectory forecasting and hindcasting, resource risk analysis, and liaison to other scientists. Acronym: SSC
scrubbing

efinition: A common method of reducing stack air emissions; removal of impurities by spraying a liquid that concentrates the npurities into waste. econdary treatment efinition: The second step taken by a Publicly Owned Treatment Works in which bacteria consume the organic parts of the waste. his treatment usually removes about 90% of all solids and oxygen-demanding substances.
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ediment
efinition: Topsoil, sand, and minerals washed from the land into water, usually after rain or snow melt. Sediments collecting in rivers,
eservoirs, and harbors can destroy fish and wildlife habitat and cloud the water so that sunlight cannot reach aquatic plants. Loss of
psoil from farming, mining, or building activities can be prevented through a variety of erosion-control techniques.
eptic tank
efinition: An underground tank to collect wastes from homes that are not connected to a municipal sewer system. Waste goes from
he home to the tank and is decomposed by bacteria. Solids and dead bacteria settle to the bottom as sludge while the liquid portion
ows into the ground through drains. While properly placed and maintained septic systems can effectively treat domestic wastewater,
thers are a major source of ground water and surface water pollution.
udge
efinition: The residue (solids and some water) produced as a result of raw or wastewater treatment.
lurry

Term
Definition: A pumpable mixture of solids and fluid.
smog
Definition: Dust, smoke, or chemical fumes that pollute the air and make hazy, unhealthy conditions (literally, the word is a blend of smoke and fog). Automobile, truck, bus, and other vehicle exhausts and particulates are usually trapped close to the ground, obscuring visibility and contributing to a number of respiratory problems.
solid waste
Definition: As defined under RCRA, any solid, semi-solid, liquid, or contained gaseous materials discarded from industrial, commercial, mining, or agricultural operations, and from community activities. Solid waste includes garbage, construction debris, commercial refuse, sludge from water supply or waste treatment plants, or air pollution control facilities, and other discarded materials.
Solid Waste Management Facility
Definition: Any disposal or resource recovery system; any system, program, or facility for resource conservation; any facility for the treatment of solid wastes.
source reduction
Definition: The design, manufacture, purchase, or use of materials (such as products and packaging) to reduce the amount or toxicity of garbage generated. Source reduction can help reduce waste disposal and handling charges because the costs of recycling, municipal composting, landfilling, and combustion are avoided. Source reduction conserves resources and reduces pollution. source separation

nition: Organizing materials by type (such as paper, metal, plastic, and glass) so that these items can be recycled instead of In away. For example, many of us separate these items from the rest of our household and office wastes. Industries also Inize materials in this fashion.
dard Industrial Classification Code
nition: A method of grouping industries with similar products or services and assigning codes to these groups. nym: SIC Code
Emergency Response Commission
nition: The agency appointed by the Governor to oversee the administration of EPCRA at the state level. This commission gnates and appoints members to LEPCs and reviews emergency response plans for cities and counties. nym: SERC
ce water
nition: All water naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, seas, estuaries) and all springs, , or other collectors directly influenced by surface water.
ainable agriculture
nition: Environmentally friendly methods of farming that allow the production of crops or livestock without damage to the farm a cosystem, including effects on soil, water supplies, biodiversity, or other surrounding natural resources. The concept of ainable agriculture is an "intergenerational" one in which we pass on a conserved or improved natural resource base instead o

Term
one which has been depleted or polluted. Terms often associated with farms or ranches that are self-sustaining include "low-input," organic, "ecological," "biodynamic," and "permaculture."
synergism
Definition: The cooperative action of two or more organisms producing a greater total result than the sum of their independent effects; chemicals or muscles in synergy enhance the effectiveness of one another beyond what an individual could have produced.
ten-to-the-minus-sixth
Definition: Used in risk assessments to refer to the probability of risk. Literally means a chance of one in a million. Similarly, ten-to- the-minus-fifth means a probability of one in 100,000, and so on.
teratogen
Definition: A substance capable of causing birth defects. tertiary treatment
Definition: An enhancement of normal sewage treatment operations to provide water of potable quality using further chemical and physical treatment; the highest drinking water standard achieved in the U.S.
threshold limit value
Definition: The concentration of an airborne substance that a healthy person can be exposed to for a 40-hour work week without adverse effect; a workplace exposure standard.
Acronym: TLV

Term
total dissolved solids
Definition: The quantity of dissolved material in a given volume of water.
Acronym: TDS
toxic chemical
Definition: Substances that can cause severe illness, poisoning, birth defects, disease, or death when ingested, inhaled, or absorbed by living organisms.
toxic cloud
Definition: An airborne mass of gases, vapors, fumes, or aerosols of toxic materials.
Toxic Release Inventory
Definition: A database of annual toxic releases from certain manufacturers compiled from EPCRA Section 313 reports. Manufacturers must report annually to EPA and the states the amounts of almost 350 toxic chemicals and 22 chemical categories that they release directly to air, water, or land, inject underground, or transfer to off-site facilities. EPA compiles these reports and makes the information available to the public under the "Community Right-to-Know" portion of the law.
Acronym: TRI
toxic substance
Definition: A chemical or mixture that can cause illness, death, disease, or birth defects. The quantities and exposures necessary to cause these effects can vary widely. Many toxic substances are pollutants and contaminants in the environment.

Term
Toxicity Characteristic Leaching Procedure
Definition: A test designed to determine whether a waste is hazardous or requires treatment to become less hazardous; also can be used to monitor treatment techniques for effectiveness. Acronym: TCLP
trade secret
Definition: Any confidential formula, pattern, process, device, information, or set of data that is used in a business to give the owner a competitive advantage. Such information may be excluded from public review.
Treatment, Storage, and Disposal Facility
Definition: Refers to any facility which treats, stores, or disposes of hazardous wastes. Acronym: TSD
ultraviolet rays
Definition: Radiation from the sun in the invisible portion of the spectrum. Some UV rays (UV-A) enhance plant life and are useful in certain medical and dental procedures. Other UV rays (UV-B) can cause skin cancer or other tissue damage. The ozone layer in the atmosphere partly shields us from ultraviolet rays reaching the earth's surface.
underground storage tank
Definition: A tank and any underground piping connected to the tank that has 10% or more of its volume (including pipe volume) beneath the surface of the ground. USTs are designed to hold gasoline, other petroleum products, and hazardous materials.

Term
Acronym: UST
vapor
Definition: The gas given off by substances that are solids or liquids at ordinary atmospheric pressure and temperatures.
vapor recovery system
Definition: A system by which the volatile gases from gasoline are captured instead of being released into the atmosphere. Recovery
systems may be required for gasoline stations in some cities and other non-attainment areas.
vent
Definition: The connection and piping through which gases enter and exit a piece of equipment.
volatile organic compounds
Definition: Any organic compound which evaporates readily to the atmosphere. VOCs contribute significantly to photochemical smog
production and certain health problems.
Acronym: VOC
wastewater treatment plant
Definition: A facility containing a series of tanks, screens, filters, and other processes by which pollutants are removed from water. Most treatments include chlorination to attain safe drinking water standards.
water quality standard

erm	
Definition: The combination of a designated use and the maximum concentration of a pollutant which will protect that use for given body of water. For example, in a trout stream, the concentration of iron should not exceed 1 mg/l. Acronym: WQS	any
vater table	
Definition: The boundary between the saturated and unsaturated zones. Generally, the level to which water will rise in a well artesian wells).	(except
vellhead protection area	
Definition: A protected surface and subsurface zone surrounding a well or well field that supplies a public water system and t which contaminants could likely reach well water. wetlands	through
Definition: Areas that are soaked or flooded by surface or ground water frequently enough or for sufficient duration to suppor birds, animals, and aquatic life. Wetlands generally include swamps, marshes, bogs, estuaries, and other inland and coastal and are federally protected. Wetlands frequently serve as recharge/discharge areas and are known as "nature's kidneys" sin help purify water. Wetlands also have been referred to as natural sponges that absorb flood waters, functioning like natural to collect overflow. Wetlands are important wildlife habitats, breeding grounds, and nurseries because of their biodiversity. Man endangered species as well as countless estuarine and marine fish and shellfish, mammals, waterfowl, and other migratory b vetland habitat for growth, reproduction, food, and shelter. Wetlands are among the most fertile, natural ecosystems in the w since they produce great volumes of food (plant material).	l areas, nce they tubs to ny birds use

Term
xenobiotic
Definition: A term for non-natural or man-made substances found in the environment (i.e., synthetics, plastics).
z-list
Definition: OCUME Taxis and Henerdous Cubataneos Tables (7.4.7.2. and 7.2) of air conteminants, any material found on these
Definition: OSHA's Toxic and Hazardous Substances Tables (Z-1, Z-2, and Z-3) of air contaminants; any material found on these tables is considered hazardous.
zone of saturation
Definition: The layer beneath the surface of the land in which all openings are filled with water.