

ERB Acronym and Glossary – V

Acronym	Term	Definition
V	Vanadium	A white, soft, ductile metal. It is used in x-rays, manufacture of alloy metals, and as a catalyst for sulfuric acid and synthetic rubber production. It can be mobile in aquatic conditions depending on the state it is in, which depends on the physical and chemical characteristics of the local environment. Industrial exposure can lead to gastrointestinal distress, cardiac and nervous depression, and kidney damage. The liver, adrenals and bone marrow may also be adversely affected.
v	velocity	A measure of the direction and rate of movement.
VADEQ	Virginia Department of Environmental Quality	Protects and enhances Virginia's environment, and promotes the health and well being of the citizens of the Commonwealth.
VC	Vinyl Chloride	A volatile chemical compound, used in producing some plastics, that is believed to cause cancer. VC is a breakdown product of chlorinated ethenes like tetrachloroethene, trichloroethene, and dichloroethene.
VDWM	Virginia Department of Waste Management	Solid wastes and hazardous wastes in Virginia are regulated by the Department of Environmental Quality, the Virginia Waste Management Board, and the EPA.
VF	Volatilization Factor	A measure of the tendency of a chemical to volatilize from soil to vapor.
VFD	variable frequency drive	Device that allows the speed of a motor to be changed by adjusting the frequency of the alternating current supplied to the motor.
VHWMR	Virginia Hazardous Waste Management Regulations	Regulations that closely follows federal standards established under the Resource Conservation and Recovery Act, but are specific to Virginia.
VI	Vapor Intrusion	The migration of volatile chemicals from the subsurface into overlying buildings.
VOA	Volatile Organic Analytes/Analysis	Often used when speaking about analysis of volatile organics. Viles refer to the 40 ml containers used for aqueous sampling of volatile compounds.
VOC	Volatile Organic Compound	1) Carbon-containing substances released by both natural processes and human activities that readily evaporate; their reaction with nitrogen oxides in the presence of sunlight produces photochemical smog. 2) Compounds amenable to analysis by the purge and trap techniques. Used synonymously with purgable compounds. 3) Any organic compound that participates in atmospheric photochemical reactions except those designated by EPA as having negligible photochemical reactivity.
VP	Vapor Pressure	The pressure exerted by a chemical vapor in equilibrium with its solid or liquid form at a given temperature. It is used to calculate the rate of volatilization of a pure substance from a surface or in estimating a Henry's Law constant for chemicals with low water solubility. The higher the vapor pressure, the more likely a chemical is to volatilize and exist in a gaseous state.
VR	Virginia Regulation	State Regulations for Virginia.

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VS	Flow Velocity	A measure of the direction and speed of flow.
VSI	Visual Site Inspection	A part of the RCRA Facility Assessment. A site assessment of all areas of potential contamination on contiguous facility.
VSS	Volatile Suspended Solids	Solids lost on ignition (heating to 500 degrees C). It gives an approximation of the amount of organic material present in the solid fraction of wastewater and industrial wastes.
VSWCB	Virginia State Water Control Board	One of three regulatory boards, composed of Virginia citizens appointed by the Governor, are responsible for adopting Virginia's environmental regulations.
VSWMR	Virginia Solid Waste Management Regulations	Solid wastes and hazardous wastes in Virginia are regulated by the Department of Environmental Quality, the Virginia Waste Management Board, and the EPA.

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	vacuum extraction	A remediation process that involves using advective flow induced by an applied negative pressure to extract contaminated groundwater for subsequent on- or off-site treatment and/or disposal.
	vacuum pump	A unit of mechanical equipment used to increase the pressure in a gas stream and providing a nearly complete vacuum at the suction flange.
	vacuum-enhanced pumping	Use of a vacuum pump to lift groundwater, or other liquids or gases, from a well while producing a reduced pressure in the well.
	vadose zone	The zone of geologic material that occurs above the water table and capillary fringe, in which the pores are only partially filled with water (soil moisture is less than porosity), and the fluid pressure is less than atmospheric. Also unsaturated zone.
	valence	Number of excess or deficient electrons an atom or molecule may have in a certain state. Indicates the charge of an atom.
	validation	See Data Validation.
	vapor	The gaseous phase of substances.
	vapor density	The weight of a pure vapor or gas compared with the weight of an equal volume of dry air at the same temperature and pressure. If the vapor density is less than one, the material is lighter than air and may rise. If the vapor density is greater than one, the material is heavier than air and will stay low to the ground.
	vaporization	Transfer of a chemical substance from the liquid or solid state to the gaseous state.
	variability	Refers to observed difference attributable to heterogeneity or diversity in a population. Sources of variability are the results of natural random processes and stem from environmental differences among the elements of the population. Variability is not usually

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		reducible by further measurement but can be better estimated by increased sampling.
	variance	1) Government permission for a delay or exception in the application of a given law, ordinance, or regulation. 2) The sum of the squares of the difference between the individual values of a set of numbers and the arithmetic mean of the set, divided by one less than the number of values.
	vector	A measure that has magnitude and direction, e.g., acceleration of a moving car.
	vegetative controls	Nonpoint source pollution control practices that involve vegetative cover to reduce erosion and minimize loss of pollutants.
	vent well	A well designed to facilitate injection or extraction of air to/from a contaminated soil area.
	ventilation/suction	The act of admitting fresh air into a space in order to replace stale or contaminated air; achieved by blowing air into the space. Similarly, suction represents the admission of fresh air into an interior space by lowering the pressure outside of the space, thereby drawing the contaminated air outward.
	vitrification	The process of immobilizing waste by converting it into a high strength glass or glass-like substance. The process can treat excavated waste or soil in situ. Commonly used to treat radioactive material, and soil contaminated with volatile organics and metals.
	volatile	1) Any substance that evaporates readily. 2) Evaporating readily at normal temperature and pressures.
	volatile liquids	Liquids which easily vaporize or evaporate at room temperature.
	volatile solids	Those solids in water or other liquids that are lost on ignition of the dry solids at 550° C.
	volatility	The measure of a substance's tendency to vaporize at standard temperature and pressure
	volatilization	To evaporate or cause to evaporate. The mass transfer of a solute from a liquid solvent to a gas; in the case of contaminated sediment or water, the mass transfer of contaminants from sediments of water into the atmosphere above the sediments or water body.
	volumetric tank test	One of several tests to determine the physical integrity of a storage tank; the volume of fluid in the tank is measured directly or calculated from product-level changes. A marked drop in volume indicates a leak.