

pecially . . .
gin: Latin; First Known
aqui-fer \a-kwə-fər/ *n* 1. An
rock, sediment (usually sand
The pore spaces in aquifers are
connected, so that water flows
solidated gravels, and porous
They can range from a few
square kilometers in size;
rock, sand, or gravel; 3. a
containing water t
(adj); 1



Glossary

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Affected Water Company means any public or private water company owning or operating a public water supply well within an Aquifer Protection Area (CGS § 22a-354h).

Agency means the board or commission authorized by the municipality under CGS § 22a-354o to administer the local Aquifer Protection Area Program (CGS § 1-1(q)).

Agriculture means cultivation of the soil, dairying, forestry, raising or harvesting any agricultural or horticultural commodity, including the raising, shearing, feeding, caring for, training and management of livestock, including horses, bees, poultry, fur-bearing animals and wildlife, and the raising or harvesting of oysters, clams, mussels, other molluscan shellfish or fish; the operation, management, conservation, improvement or maintenance of a farm and its buildings, tools and equipment, or salvaging timber or cleared land of brush or other debris left by a storm, as an incident to such farming operations; the production or harvesting of maple syrup or maple sugar, or any agricultural commodity, including lumber, as an incident to ordinary farming operations or the harvesting of mushrooms, the hatching of poultry, or the construction, operation or maintenance of ditches, canals, reservoirs or waterways used exclusively for farming purposes; handling, planting, drying, packing, packaging, processing, freezing, grading, storing or delivering to storage or to market, or to a carrier for transportation to market, or for direct sale any agricultural or horticultural commodity as an incident to ordinary farming operations, or, in the case of fruits and vegetables, as an incident to the preparation of such fruits or vegetables for market or for direct sale.

Applicant means, as appropriate in context, a person who applies for an exemption under RCSA Sec. 22a-354i-6, a permit under RCSA Sec. 22a-354i-8 or a permit under Section 9 of the APA Regulations.

Application means, as appropriate in context, an application for an exemption under RCSA Sec. 22a-354i-6, an application for a permit under RCSA Sec. 22a-354i-8, or an application for a permit under Section 9 of the APA Regulations.

Aquifer means any soil or rock formation that is capable of yielding usable amounts of water to a water supply well.

Aquifer Protection Area means any area consisting of well fields, areas of contribution and recharge areas, identified on maps approved by the Commissioner of Environmental Protection pursuant to RCSA Sec. 22a-354b to 22a-354d, inclusive, within which land uses or activities shall be required to comply with regulations adopted pursuant to RCSA Sec. 22a-354p by the municipality where the Aquifer Protection Area is located (CGS § 22a-354h).

Area of Contribution means the area where the water table or other potentiometric surface is lowered due to the pumping of a well and groundwater flows directly to the well (CGS § 22a-354h).

Bedrock (consolidated material) – solid rock, commonly called ledge, usually buried below soil.

Bulk Storage Facility means property where oil or petroleum liquids are received by tank vessel, pipeline, railroad car or tank vehicle for the purpose of storage for wholesale distribution.

Certified Hazardous Materials Manager means a hazardous materials manager certified by the Institute of Hazardous Materials Management and who is qualified by reason of relevant specialized training and relevant specialized experience to conduct audits of regulated activities to ensure compliance with applicable laws and identify appropriate pollution prevention practices for such activities.

Commissioner means the Commissioner of Energy and Environmental Protection, or his or her agent.

Delineation of Aquifer Protection Areas means the accurate transfer of the boundaries of the Aquifer Protection Area from the Level A Mapping conducted by the water companies and approved by DEEP to the municipal Zoning Map or Inland Water Resources Map.

Deicing Chemical means sodium chloride, calcium chloride, or calcium magnesium acetate.

Domestic Sewage means sewage that consists of water and human excretions or other waterborne wastes incidental to the occupancy of a residential building or a non-residential building, but not including manufacturing process water, cooling water, wastewater from water softening equipment, commercial laundry wastewater, blowdown from heating or cooling equipment, water from cellar or floor drains or surface water from roofs, paved surfaces or yard drains (RCSA Sec. 22a-430-3(a)).

Drift means sediments deposited by glaciers that repeatedly advanced and retreated across our landscape until about 10,000 years ago.

Facility means property where a regulated activity is conducted by any person, including without limitation, any buildings located on the property that are owned or leased by that person; and includes contiguous land owned, leased, or for which there is an option to purchase by that person.

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Floor Drain means any opening in a floor or surface, which opening or surface receives materials spilled or deposited thereon.

Groundwater means water that lies below the surface of the earth, filling the spaces or pores in soil and rock.

Hazardous Material means (A) any hazardous substance as defined in 40 CFR 302.4 and listed therein at Table 302.4, excluding mixtures with a total concentration of less than 1% hazardous substances based on volume, (B) any hazardous waste as defined in RCRA Sec. 22a-449(c)-101, (C) any pesticide as defined in CGS § 22a-47, or (D) any oil or petroleum as defined in CGS § 22a-448. This definition broadly includes both raw hazardous chemicals and hazardous wastes.

Hazardous Substance means any material, either singularly or in combination, which may pose a present or potential hazard to human health or to the environment if released. The specific hazardous substances are listed in federal regulation 40 CFR 302 (CERCLA list). They generally include substances that are ignitable, corrosive, reactive or toxic. (For full text go to: www.epa.gov/epahome/cfr40.htm. The website contains all of 40 CFR. Navigating to the CERCLA list is as follows: Go to Chapter 1 (Parts 1-799); go to Subchapter J (Parts 300-399); go to Part 302; go to Section 302.4; and finally scroll down to the table.)

Hazardous Waste means a solid, liquid or gaseous waste that meets one of the following conditions: (1) Is listed in Subpart D of 40 CFR 261 (For full text go to: www.epa.gov/epahome/cfr40.htm); (2) Exhibits a characteristic defined in Subpart C of 40 CFR part 261 that include ignitability, corrosivity, reactivity and toxicity; (3) Is a mixture containing a listed hazardous waste and a non-hazardous solid waste; (4) Is derived from storage, treatment or disposal of a hazardous waste (For example: leachate is derived from disposal); or (5) Is not excluded from regulation as a hazardous waste (RSCA Sec. 22a-449(c)-101).

Impervious Surfaces means surfaces, such as roofs and pavement, through which water does not drain.

Industrial Laundry means a facility for washing clothes, cloth or other fabric used in industrial operations.

Infiltration Device means any discharge device installed below or above the ground surface that is designed to discharge liquid to the ground.

Inland Wetland and Watercourse Areas Map means a map pursuant to CGS § 22a-42a.

ISO 14001 Environmental Management System Certification means a current ISO 14001 environmental management system certification issued by an ISO 14001 environmental management system registrar that is accredited by the American National Standards Institute (ANSI) – American Society for Quality (ASQ) National Accreditation Board (ANAB).

Level A Mapping means the lines as shown on Level A maps approved or prepared by the Commissioner pursuant to CGS § 22a-354c, § 22a-354d or § 22a-354z encompassing the area of contribution and recharge areas.

Lubricating Oil means oil that contains less than 1% chlorinated solvents and is used for the sole purpose of lubricating, cutting, grinding, machining, stamping or quenching metals.

Municipality means any town, consolidated town and city, consolidated town and borough, city or borough (CGS § 22a-354h).

Oil or Petroleum means oil or petroleum of any kind or in any form, including but not limited to waste oils and distillation products such as fuel oil, kerosene, naphtha, gasoline and benzene, or their vapors (CGS § 22a-448).

Owner means the owner or lessee of the facility in question.

Permeability means the ability of a material to transmit water, a measure of the interconnectedness of the open spaces in a material.

Person means any individual, firm, partnership, association, syndicate, company, trust, corporation, limited liability company, municipality, agency, political or administrative subdivision of the state, or other legal entity of any kind.

Pesticide means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant (CGS § 22a-47).

Pollution means harmful thermal effect or the contamination or rendering unclean or impure of any waters of the state by reason of any waste or other materials discharged or deposited therein by any public or private sewer or otherwise so directly or indirectly to come in contact with any waters. This includes, but is not limited to, erosion and sedimentation resulting from any filling, land clearing or excavation activity (CGS § 22a-423).

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Pollution Prevention means the use of processes and materials so as to reduce or minimize the amount of hazardous materials used or the quantity and concentration of pollutants in waste generated.

Porosity means the volume of open spaces in rock or soil; if pores are large and abundant, more water can be stored.

Professional Engineer means a professional engineer licensed in accordance with CGS Chapter 391, and who is qualified by reason of relevant specialized training and relevant specialized experience to conduct audits of regulated activities to ensure compliance with applicable law and identify appropriate pollution prevention practices for such activities.

Publicly Owned Treatment Works means a system used for collection, treatment and/or disposal of sewage from more than one lot as defined in section RCSA 22a-430-1, and which discharges to the waters of the state, and which is owned by a municipality or the state (RCSA Sec. 22a-430-3).

Public Service Company means electric, electric distribution, gas, telephone, telegraph, pipeline, sewage, water and community antenna television companies, owning, leasing, maintaining, operating, managing or controlling plants or parts of plants or equipment, and all express companies having special privileges on railroads within this state, but shall not include telegraph company functions concerning intrastate money order service, towns, cities, boroughs, any municipal corporation or department thereof, whether separately incorporated or not, a private power producer, as defined in section 16-243b, or an exempt wholesale generator, as defined in 15 USC 79z-5a (CGS § 16-1).

Public Supply Well means a water supply well used or made available by a water company to two or more consumers (RCSA Sec. 19-13-B51b).

Recharge Area means the area from which groundwater flows directly to the area of contribution, as mapped in accordance with RCSA Sec. 22a-354b-1 (CGS § 22a-354h).

Registered Regulated Activity means a regulated activity which has been registered under Sec. 22a-354i-7 of the Regulations of Connecticut State Agencies or Section 8 of the APA Regulations, and is conducted at the facility identified in such registration.

Registrant means a person, who or which, has submitted a registration for an existing regulated activity under RCSA Sec. 22a-354i-7 or Section 4 of the APA Regulations.

Regulated Activity means any of the following activities, which are located or conducted, wholly or partially, in an Aquifer Protection Area, except as provided for in RCSA Sec. 22a-354i-5(c) and Sec. 22a-354i-6, or Section 4 of the APA Regulations:

- (A) underground storage or transmission of oil or petroleum, to the extent such activity is not pre-empted by federal law, or hazardous material, except for (i) an underground storage tank that contains number two (2) fuel oil and is located more than five hundred (500) feet from a public supply well subject to regulation under CGS § 22a-354c or § 22a-354z, or (ii) underground electrical facilities such as transformers, breakers, or cables containing oil for cooling or insulation purposes which are owned and operated by a public service company,
- (B) oil or petroleum dispensing for the purpose of retail, wholesale or fleet use,
- (C) on-site storage of hazardous materials for the purpose of wholesale sale,
- (D) repair or maintenance of vehicles or internal combustion engines of vehicles, involving the use, storage or disposal of hazardous materials, including solvents, lubricants, paints, brake fluids, transmission fluids or the generation of hazardous wastes,
- (E) salvage operations of metal or vehicle parts,
- (F) wastewater discharges to groundwater other than domestic sewage and stormwater, except for discharges from the following that have received a permit from the Commissioner pursuant to CGS § 22a-430: (i) a pump and treat system for groundwater remediation, (ii) a potable water treatment system, (iii) heat pump system, (iv) non-contact cooling water system, (v) swimming pools,
- (G) car or truck washing, unless all wastewaters from such activity are lawfully disposed of through a connection to a publicly owned treatment works,
- (H) production or refining of chemicals including, without limitation, hazardous materials or asphalt,
- (I) clothes or cloth cleaning service which involves the use, storage or disposal of hazardous materials including, without limitation, dry-cleaning solvents,
- (J) industrial laundry activity that involves the cleaning of clothes or cloth contaminated by hazardous material, unless all wastewaters from such activity are lawfully

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disposed of through a connection to a publicly owned treatment works,

- (K) generation of electrical power by means of fossil fuels, except for (i) generation of electrical power by an emergency engine as defined by RCSA Sec. 22a-174-22(a)(2), or (ii) generation of electrical power by means of natural gas or propane,
- (L) production of electronic boards, electrical components, or other electrical equipment involving the use, storage or disposal of any hazardous material or involving metal plating, degreasing of parts or equipment, or etching operations,
- (M) embalming or crematory services which involve the use, storage or disposal of hazardous material, unless all wastewaters from such activity are lawfully disposed of through a connection to a publicly owned treatment works,
- (N) furniture stripping operations which involve the use, storage or disposal of hazardous materials,
- (O) furniture finishing operations which involve the use, storage or disposal of hazardous materials, unless all wastewaters from such activity are lawfully disposed of through a connection to a publicly owned treatment works,
- (P) storage, treatment or disposal of hazardous waste subject to a permit under RCSA Sec. 22a-449(c)-100 to Sec. 22a-449(c)-110, inclusive,
- (Q) biological or chemical testing, analysis or research which involves the use, storage or disposal of hazardous material, unless all wastewaters from such activity are lawfully disposed of through a connection to a publicly owned treatment works, and provided that on-site testing of a public supply well by a public water utility is not a regulated activity,
- (R) pest control services which involve storage, mixing or loading of pesticides or other hazardous materials,
- (S) photographic finishing which involves the use, storage or disposal of hazardous materials, unless all wastewaters from such activity are lawfully disposed of through a connection to a publicly owned treatment works,
- (T) production or fabrication of metal products which involves the use, storage or disposal of hazardous materials including (i) metal cleaning or degreasing with industrial solvents, (ii) metal plating, or (iii) metal etching,

(U) printing, plate making, lithography, photoengraving, or gravure, which involves the use, storage or disposal of hazardous materials,

(V) accumulation or storage of waste oil, antifreeze or spent lead-acid batteries which are subject to a general permit issued by the Commissioner under CGS § 22a-208(i) and § 22a-454(e)(1). Facilities subject to a general permit include transfer stations, landfills, household hazardous waste collection sites, and certain recycling facilities. For full text, see Appendices,

(W) production of rubber, resin cements, elastomers or plastic, which involves the use, storage or disposal of hazardous materials,

(X) storage of deicing chemicals, unless such storage takes place within a weathertight waterproof structure for the purpose of retail sale or for the purpose of deicing parking areas or access roads to parking areas,

(Y) accumulation, storage, handling, recycling, disposal, reduction, processing, burning, transfer or composting of solid waste which is subject to a permit issued by the Commissioner pursuant to CGS § 22a-207b, § 22a-208a, and § 22a-208c, except for a potable water treatment sludge disposal area. Solid wastes facilities subject to a permit include solid waste disposal areas, volume reduction plants, transfer stations, wood-burning facilities and biomedical waste treatment facilities. (This does not apply to facilities that only compost leaves.)

(Z) dyeing, coating or printing of textiles, or tanning or finishing of leather, which activity involves the use, storage or disposal of hazardous materials,

(AA) production of wood veneer, plywood, reconstituted wood or pressure-treated wood, which involves the use, storage or disposal of hazardous material, and

(BB) pulp production processes that involve bleaching.

Release means any spilling, leaking, pumping, pouring, emptying, discharging, injecting, escaping, leaching, dumping or disposing of a hazardous material (RCSA Sec. 22a-133k-1).

Secondary Containment means a second barrier or an outer wall of a double enclosure which will contain any leak or spill from a storage container. Secondary containment helps protect the surface water, groundwater and soils, and reduce worker exposure to regulated substances. This enclosure is usually needed wherever regulated substances are being handled and stored in tanks, totes, drums, small pails, or other

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containers. Secondary containment systems can be very simple or complex. The containment area may be in a detached shed or building, an underground vault, in a separate room, or in a dedicated portion of a larger space. It may include liquid-tight storage cabinets, berms, curbs, sills, sunken floors, special liners, drip pans or buckets, double-walled tanks, or other structures. Containment systems can be purchased as ready-made units or custom-built on site.

Solid Waste means unwanted or discarded solid, liquid, semisolid or contained gaseous material, including, but not limited to, demolition debris, material burned or otherwise processed at a resources recovery facility, or incinerator, material processed at a recycling facility and sludge or other residue from a water pollution abatement facility, water supply treatment plant or air pollution control facility (CGS § 22a-207(3)).

State Aquifer Protection Regulations means RSCA Sec. 22a-354i-1 to Sec. 22a-354i-10, inclusive.

Storage means the holding or possession of any hazardous material.

Storage tank means a stationary device which is designed to store hazardous materials, and is constructed of non-earthen materials including, without limitation, concrete, steel, fiberglass or plastic.

Stratified Drift means melt-water sediments deposited from glaciers in layers of similar-size particles.

Topographic Feature means an object, whether natural or man-made, located on the earth's surface and of sufficient size that it appears on a 1:24,000 scale topographic quadrangle map drawn by the United States Geological Survey.

Underground when referring to a storage tank or storage tank component means that ten percent or more of the volumetric capacity of such tank or component is below the surface of the ground, and that portion which is below the surface of the ground is not fully visible for inspection.

Vehicle or **Vehicles** means a vessel and any vehicle propelled or drawn by any non-muscular power including, without limitation, an automobile, aircraft, all-terrain vehicle, tractor, lawn mower or snowmobile.

Vessel means every description of watercraft, other than a seaplane on water, used or capable of being used as a means of transportation on water (CGS § 15-170).

Water Table means the top of the saturated zone.

Waters means all tidal waters, harbors, estuaries, rivers, brooks, watercourses, waterways, wells, springs, lakes, ponds, marshes, drainage systems, and all other surface or underground streams, bodies or accumulations of water, natural or artificial, public or private, which are contained within, flow through or border upon this state or any portion thereof (CGS § 22a-423).

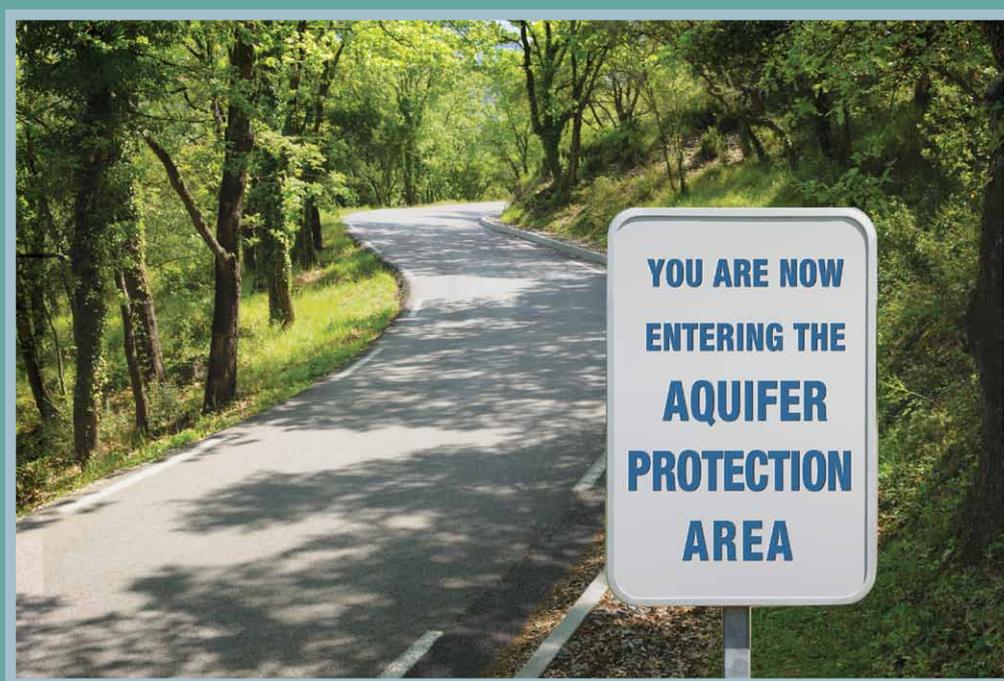
Wellfield means the immediate area surrounding a public drinking water supply well or group of wells.

Zoning District Map means any map showing zoning districts prepared in accordance with maps adopted pursuant to CGS § 8-3.

The Importance of Aquifer Protection in Connecticut

Groundwater has been called the great hidden resource. Beneath the ground surface it moves slowly through the earth's pores and cracks, and it is replenished locally. Groundwater resources are sensitive and can be easily contaminated. The quality and quantity of Connecticut's waters is a reflection of our use and in some cases misuse of our water resources. It is through careful planning and managing land use activities that we can reduce and prevent groundwater contamination. Local aquifer protection programs can increase the potential for clean and adequate supplies of water now and future generations.

As a Member of a Municipal Aquifer Protection Agency, you are the environmental stewards protecting our aquifer resources.



Thank you for protecting groundwater!



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and Environmental Protection (DEEP)
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