



State of Connecticut

Department of Environmental Protection



Reference Document for Model Municipal Regulations Aquifer Protection Areas

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The Connecticut Department of Environmental Protection has developed this reference document to provide the reader with a quick reference to the statutory and regulatory citations used in the Model Municipal Aquifer Protection Area Regulations. Additionally, the document provides explanations and clarifications to other citations and references in the regulations. The reference document is arranged by section of the model regulations in which the citation occurs. Municipalities may utilize this document as a companion to the regulations and modify the section numbers to coincide with their local regulations if necessary. DEP will revise this document if there are changes to the statutory and regulatory language of the citations or other references. Municipalities are encouraged to adopt the model regulations with the statutory and regulatory citations and use this document as reference, thereby allowing revisions to the reference document if changes are made to the citations without going through the formal process to revise local regulations.

Model Municipal Regulations Aquifer Protection Areas

Section 1 Title and Authority

Section 2 Definitions

2(a)(1) CGS §22a-354h reads:

“Affected Water Company” means any public or private water company owning or operating a public water supply well within an aquifer protection area.

2(a)(3) CGS §1-1(q) reads:

“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.

2(a)(6) CGS §22a-354h reads:

“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 § 22a-354b to 22a-354d, inclusive, within which land uses or activities shall be required to comply with regulations adopted pursuant to § 22a-354p by the municipality where the aquifer protection area is located.

2(a)(7) CGS §22a-354h reads:

“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.

2(a)(9) Institute of Hazardous Materials Managers web site: <http://www.ihmm.org>

2(a)(11) CGS §22a-430-3(a) reads:

“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.

2(a)(14) Hazardous material 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: <http://www.epa.gov/epahome/cfr40.htm>. The web site 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.)

CGS §22a-47 reads: "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-448 reads: "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.

2(a)(15) 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: <http://www.epa.gov/epahome/cfr40.htm>. The web site contains all of 40 CFR. Navigate to Subpart D as follows: Go to Chapter 1 (Parts 1-799); go to Subchapter I (Parts 260-265); go to (Part 261); go to Subpart D; and finally to Appendix VIII to Part 261 (Hazardous Constituents).)
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)
5. Is not excluded from regulation as a hazardous waste (Exclusions are limited and include very specific wastes treated in specific ways. For example: wastewater treatment plant sludges generated from electroplating operations and stored in on-site land fill)

For more information, call the DEP's Hazardous Waste Compliance Assistance Program at 1-888-424-4193 (toll free).

2(a)(16) Note: Industrial laundry facilities are regulated in addition to dry cleaners and they may or may not use dry cleaning solvents in their operations.

2(a)(19) For more information on ISO 14001, visit www.anab.org.

2(a)(20) Level A Mapping defines the land area contributing ground water to the public water supply well field. The water company owning the well field maps the area according to the mapping regulations (section 22a-354b-1 of the Regulations of Connecticut State Agencies). DEP approves the mapping.

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

For the purposes of these regulations, "Municipality" means the town of _____.

2(a)(26) CGS §22a-423 reads:

"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.

2(a)(29) RCSA §22a-430-3 reads:

“Publicly Owned Treatment Works” or “POTW” means a system used for collection, treatment and/or disposal of sewage from more than one lot as defined in section 22a-430-1 of the Regulations of Connecticut State Agencies and which discharges to the waters of the state and which is owned by a municipality or the state.

2(a)(30) CGS §16-1 reads:

“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.

2(a)(31) RCSA §19-13-B51b reads:

“Public supply well” means a water supply well used or made available by a water company to two or more consumers.

2(a)(32) CGS §22a-354h reads:

“Recharge area” means the area from which groundwater flows directly to the area of contribution.

2(a)(35)(K) RCSA §22a-174-22(a)(2) reads:

"Emergency engine" means a stationary reciprocating engine or a turbine engine which is used as a means of providing mechanical or electrical power only during periods of testing and scheduled maintenance or during either an emergency or in accordance with a contract intended to ensure an adequate supply of electricity for use within the state of Connecticut during the loss of electrical power derived from nuclear facilities. The term does not include an engine for which the owner or operator of such engine is party to any other agreement to sell electrical power from such engine to a electricricity supplier, or otherwise receives any reduction in the cost of electrical power for agreeing to produce power during periods of reduced voltage or reduced power availability.

RCSA §22a-174-22(a)(3) reads:

"Emergency" means an unforeseeable condition that is beyond the control of the owner or operator of an emergency engine, and that:

- (a) results in an interruption of electrical power from the utility to the premise;
- (b) results in a deviation in the voltage from the electricity supplier to the premises of greater than three percent (+3%) above or five percent (-5%) below the standard nominal voltage in accordance with section 16-11-115(a) of the Regulations of Connecticut State Agencies;
- (c) requires an interruption of electrical power from the electricity supplier to the premises enabling the owner or operator to perform emergency repairs; or
- (d) requires the operation of the emergency engine to minimize damage from fire, flood, or any other catastrophic event, natural or man-made.

2(a)(35)(P) Facilities that store, treat or dispose of hazardous waste are subject to a permit under federal and state law. The state laws incorporate the federal laws by reference. Under RCRA, storage means the containment of hazardous wastes either on a temporary basis or for a period of years in such a manner as not to constitute disposal of such hazardous waste; treatment means any method, technique or process including neutralization designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste or so as to render such waste non-hazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume; disposal means the discharge, deposit, injection, dumping, spilling, leaking, or placing of waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment.

For more information, call the DEP's Hazardous Waste Compliance Assistance Program at 1-888-424-4193 (toll free).

2(a)(35)(V) Facilities subject to a general permit include transfer stations, solid waste disposal areas, household hazardous waste collection sites, and certain recycling facilities.

2(a)(35)(Y) 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.)

CGS §22a-207(3) reads:

“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.

2(a)(36) RCSA §22a-133k-1 reads:

“Release” means any spilling, leaking, pumping, pouring, emptying, discharging, injecting, escaping, leaching, dumping or disposing of a hazardous material.

2(a)(42) CGS §15-170 reads:

"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.

2(a)(43) CGS §22a-423 reads:

"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.

2(a)(44) CGS §22a-354h reads:

“Well field” means the immediate area surrounding a public drinking water supply well or group of wells.

Section 3 Delineation of Aquifer Protection Area Boundaries

3(a) If the Agency is not the zoning commission, planning commission or the planning and zoning commission, then the other agency appointed as the aquifer protection agency must work with those commissions to have the aquifer protection area delineated on the official zoning map in accordance with section 3 of the APA Regulations.

3(b) DEP recommends limiting the extension of the boundary to the absolute minimum required area necessary to administer the program. See guidance for further information.

Section 4 Prohibited and Regulated Activities

4(b)(3) 40 CFR 271 is the section of the federal code that authorizes a memorandum of agreement (MOA) between EPA and the states to have the lead on Hazardous Waste under Section 3006 of RCRA. Under the MOA between CT DEP & EPA, the state has the lead on RCRA Corrective Action where sites are undergoing remedial cleanup of contamination. Our current records show there are 234 sites in CT in RCRA Corrective Action Program and of these, 12 are in APAs. At least 8 sites are active and would be able to register directly under APA program. Of the remaining sites, we are aware of only one site (Century Brass site in New Milford) which is municipally owned and would therefore be allowed the extended time frame to register.

4(c)(3) See definition of agriculture under section 2 of the APA Regulations.

Section 5 Activities Regulated by the State

5(a) CGS §22a-354p(g) gives the Commissioner the sole authority for aquifer protection registrations and permits for:

(A) any person to whom the commissioner has issued an individual permit under the national pollutant discharge elimination system (NPDES) of the federal Clean Water Act (33 USC 1251 et seq.) or under the state pollutant discharge elimination system (SPDES) pursuant to section 22a-430 or any person to whom the commissioner has issued a permit under the provisions of the federal Resource Conservation and Recovery Act (RCRA) (42 USC 6901 et seq.) for a treatment, storage or disposal facility,

(B) any public service company, as defined in section 16-1, providing gas, electric, pipeline, water or telephone service,

(C) any large quantity generator, as defined in regulations adopted by the commissioner under section 22a-449, or

(D) any state department, agency or instrumentality, except any local or regional board of education.

5(c) CGS §22a-354p(g) says:

Such authority may be exercised only after an advisory decision on such permit has been rendered to the commissioner by the aquifer protection agency of the municipality within which such aquifer protection area is located or thirty-five (35) days after receipt by the commissioner of the application for such permit, whichever occurs first.

Section 6 Application for Exemption from Prohibition or Regulation

Section 7 General Registration, Permit Application and Transfer Procedures

7 (b) The time frame is specified by statute under Connecticut General Statute 22a-354p(c).

Section 8 Registration Requirements

8(a) See section 4(b)(3) of this reference document for explanation of 40 CFR 271.

8(a)(1) See section 5(a) of these regulations for explanation of §22a-354p(g).

8(a)(2) See section 4(b)(3) of this reference document for explanation of 40 CFR 271.

8(f)(3) See section 7(b) for definition of date of receipt.

8(h) A transfer in ownership requires submittal of a form to the Agency that changes the name on the registration and the new owner must certify compliance with best management practices. The expiration date of the registration remains the same.

Section 9 Permit Requirements

9(b) See section 5(a) of these regulations for explanation of §22a-354p(g).

9(c) Connecticut General Statutes §22a-354p(c) specifies the number of days to take action on permit applications.

9(e) Please note that the time frame differs from the 60 days allowed in state regulations. The 30-day time period is established due to CGS section 22a-354p(c) requiring all local applications to be acted on by the agency within 65 days of receipt, in the absence of a public hearing.

9(k) The number of days the Agency has to notify the applicant or permittee of the decision of the permit is specified in Connecticut General Statute 22a-354p(d).

9(m) A transfer in ownership requires submittal of a form to the Agency that changes the name on the permit and the new owner must certify compliance with best management practices. The expiration date of the permit remains the same.

Section 10 Public Hearings Regarding Permit Applications

10(a) The number of days is specified in Connecticut General Statute 22a-354p(c). The time frames were intended to be consistent with Inland Wetlands but Inland Wetlands time frames have changed.

Section 11 Bond and Insurance Relevant to Permit Applications

Section 12 Best Management Practices

12(a)(5)(B) ISO 14001 is an internationally accepted specification for an environmental management system. It specifies requirements for establishing an environmental policy, determining environmental aspects & impacts of products/activities/services, planning environmental objectives and measurable targets, implementation & operation of programs to meet objectives & targets, checking & corrective action, and management review. For more information visit their web site at: <http://www.iso14000.com>.

12(b) A stormwater plan must meet the requirements of the commercial stormwater general permit. The permit requires the plan have the following components: Stormwater conveyance and management, pollution prevention, spill control/response, pavement sweeping, maintenance and inspection. The basic stormwater principals in aquifer protection areas are: prevent illicit discharges or releases to the ground, provide impervious pavement in areas of potential release, and provide measures where possible to infiltrate clean water. See guidance for additional information. The DEP 2004 Connecticut Stormwater Quality Manual provides comprehensive stormwater guidance and is available on the DEP's website at <http://www.dep.state.ct.us/wtr/stormwater/strmwtrman.htm>

Section 13 Other State, Federal and Local Laws

Section 14 Enforcement

14(d) CGS §22a-354s(b) reads:

(b) Any person who commits, takes part in, or assists in any violation of any provision of sections 22a-354o to 22a-354t, inclusive, or section 14 of public act 89-305* or any ordinance or regulation promulgated by municipalities pursuant to the grant of authority herein contained, shall be assessed a civil penalty of not more than one thousand dollars for each offense. Each violation of said sections shall be a separate and distinct offense, and, in the case of a continuing violation, each day's continuance thereof shall be deemed to be a separate and distinct offense. The Superior Court, in an action brought by the commissioner, municipality, district or any person shall have jurisdiction to restrain a continuing violation of said sections, to issue orders directing that the violation be corrected or removed, and to assess civil penalties pursuant to this section. All costs, fees and expenses in connection with such action shall be assessed as damages against the violator together with reasonable attorney's fees which may be allowed, all of which shall be awarded to the municipality, district or person bringing such action.

(Sections 22a-354o to 22a-354t are the sections of the statute pertaining to municipal regulation of aquifer protection areas. Section 14 of public act 89-305 refers to a transportation study that DEP and Department of Transportation are required to conduct.)

CGS §22a-354s(c) reads:

(c) Any person who wilfully or knowingly violates any provision of sections 22a-354o to 22a-354t, inclusive, or section 14 of public act 89-305* shall be fined not more than one thousand dollars for each day during which such violation continues or be imprisoned not more than six months or both. For a subsequent violation, such person shall be fined not more than two thousand dollars for each day during which such violation continues or be imprisoned not more than one year or both. For the purposes of this subsection, "person" shall be construed to include any responsible corporate officer.

Section 15 Amendments

Section 16 Appeals

16(a) Within fifteen (15) days of publication of the regulation, order, decision or action, the aggrieved person may appeal to superior court.

Section 17 Conflict and Severance

Section 18 Application and Registration Fees

Section 19 Effective Date of Regulations