

# **Update on Connecticut's Aquifer Protection Program**

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## **I. Introduction**

On February 2, 2004, the Connecticut Department of Environmental Protection's ("DEP") long-awaited Aquifer Protection Land Use Regulations became effective. The adoption of these regulations is a key step in the implementation of Connecticut's Aquifer Protection Program, which is intended to protect major public water supply wells in sand and gravel aquifers to ensure a plentiful supply of public drinking water for present and future generations. To accomplish this goal, DEP will oversee the designation of Aquifer Protection Areas around well fields in Connecticut that serve more than 1,000 people. The Program also requires that land use controls be imposed in these areas to minimize the potential for contamination of the well fields. The broad statutory scheme establishing the Aquifer Protection Program is summarized in the following section.

The DEP's adoption of its Aquifer Protection Land Use Regulations triggers a series of steps resulting in municipal regulation of "regulated activities" in Aquifer Protection Areas. As described further in Section III below, this will involve the delineation of Aquifer Protection Area boundaries on the local zoning or inland wetlands map, adoption of new municipal land use regulations governing such areas, and a requirement that businesses register existing regulated activities and obtain a permit from the local aquifer protection agency or the DEP to conduct new regulated activities within Aquifer Protection Areas.

As the Aquifer Protection Program will govern a wide array of business activities and affect roughly half the cities and towns in Connecticut, businesses, municipal officials, consultants and attorneys will need to familiarize themselves with the new requirements. The following is only a brief summary of the requirements and cannot replace a detailed review of the statutes and regulations to determine their applicability in a particular situation. The regulations, guidance and program status can be found on the DEP's website at: [www.ct.gov/dep/aquiferprotection](http://www.ct.gov/dep/aquiferprotection).

## II. Statutory Structure and Background

Over one million Connecticut residents are supplied their drinking water by groundwater from aquifers. In 1988, after receiving the report of a task force it had empaneled, the state legislature required the DEP to establish standards for mapping the location of all areas of contribution and recharge areas for existing wells located in stratified drift aquifers that are within water company water supply areas. Conn. Gen. Stat. § 22a-354b. Two standards of mapping, Level A and Level B, were established, with Level A being the more detailed mapping. Preliminary or Level B mapping must be done by each public or private water company serving 1,000 or more persons. Final or Level A mapping must be completed by each public and private water company serving 1,000 or more persons by June 1, 2008, which is three years after DEP adopted its model municipal aquifer protection ordinance. Conn. Gen. Stat. § 22a-354c(a).

After it received the report of its second Aquifer Protection Task Force in February 1989, the legislature passed Public Act 89-305, the Aquifer Protection Act, which is codified at Conn. Gen. Stat. §§ 22a-354a through 22a-354bb. The principal objective of this legislation, similar to the Inland Wetlands and Watercourses Act, is to require municipalities to regulate land use in Aquifer Protection Areas consistent with model regulations provided by the DEP.

The triggering event for municipal regulation in Aquifer Protection Areas is the requirement that the DEP adopt regulations for land use controls in these Areas. Conn. Gen. Stat. § 22a-354i.<sup>1</sup> The regulations must establish best management practices for, and prohibitions of, certain regulated activities in Aquifer Protection Areas. "Regulated activity" is defined in the statute as any action, process or condition which the Commissioner determines, by regulation, "to involve the production, handling, use, storage or disposal of material that may pose a threat to groundwater," including structures and appurtenances related to the activity. § 22a-354h(1).

Following adoption of the DEP's regulations, the planning and zoning commission in each town containing an aquifer protection area is required to delineate on the zoning map the boundaries of those areas. § 22a-354n. Each such municipality also must designate an existing board to act as its "aquifer protection agency" within three months after the DEP adopts its regulations (or May 2, 2004). § 22a-354o(a). Within six months after the DEP approves Level A mapping, the aquifer protection agency must adopt regulations for aquifer protection. § 22a-354o(b). The statutes require notice and a public

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<sup>1</sup> As discussed further below, the DEP regulations have been adopted and went into effect on February 2, 2004. The Commissioner was also required to prepare a model municipal ordinance, consistent with the regulations, for use by municipalities in adopting their regulations. Conn. Gen. Stat. § 22a-354l. DEP published the model ordinance in June 2005.

hearing before an aquifer protection agency may adopt or amend regulations. § 22a-354p(b). The DEP must determine that a local aquifer protection agency's regulations "are reasonably related to the purpose of groundwater protection and not inconsistent with" the DEP's aquifer protection regulations before the local regulations can take effect. However, a local regulation can establish a greater level of protection than the DEP. § 22a-354p(f).

Once the municipal regulations are adopted, no regulated activity may be conducted within any aquifer protection area without a permit from the town's aquifer protection agency. § 22a-354p(c). A public hearing on an application for a permit is authorized but not required. The timelines for decision as provided in the statute are identical to the old 65-45-35 day wetlands timeframes; however, the DEP amended its model municipal regulation in October 2007 to conform to the uniform 65-35-65 day land use decision timeline provided in Conn. Gen. Stat. § 8-7d. The agency may require a filing fee in an amount sufficient to cover the reasonable cost of reviewing and acting on an application, including but not limited to the costs of processing the application and monitoring compliance with permit conditions. § 22a-354p(e). The agency must state upon the record its reason for decision on a permit application. It may suspend or revoke a permit if it finds, after notice and opportunity to be heard, that the applicant has not complied with the conditions or limitations set forth in the permit or has exceeded the scope of work described in the application. § 22a-354p(d).

The statutes provide for an appeal by a person aggrieved by any regulation or decision of the DEP or an aquifer protection agency in a manner similar to the statutory appeal from local inland wetlands agency decisions. § 22a-354q. They also contain familiar enforcement provisions including the issuance of an order to stop or correct the activity, assessment of a fine of up to \$1,000 per day, criminal penalties, and recovery of all costs, fees and expenses, including reasonable attorney's fees. § 22a-354s.

### III. DEP's Land Use Regulations

#### A. Background

In May 2000, the DEP published notice of its intent to adopt the "Aquifer Protection Areas – Land Use Controls Regulation" ("Land Use Regulations") and held a public hearing in June 2000. For the next approximately three years, the DEP responded to comments and consulted with the Attorney General's office concerning statutory consistency, which resulted in numerous changes to the Land Use Regulations. The hearing officer's hearing report, containing the statement of reasons for adoption of the regulations, was issued on August 29, 2003 and is available on the DEP website.<sup>2</sup> A

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<sup>2</sup> The DEP's website (at the address noted above) also contains several other helpful documents, including a summary the regulations, a flow chart on their applicability, a map

revised version was released in September 2003, approved by the Legislative Regulations Review Committee on January 27, 2004, and filed with the Secretary of State on February 2, 2004. The Land Use Regulations have been codified in the Regulations of Connecticut State Agencies (“Regs.”) at sections 22a-354i-1 through 22a-354i-10.

B. Applicability

The DEP Land Use Regulations apply only to regulated activities located within the Level A mapping boundary of a protected aquifer. Out of the 169 municipalities in Connecticut, 81 are likely to have aquifer protection areas. Thus, approximately one-half of Connecticut’s municipalities will now need to designate an aquifer protection agency and shortly thereafter adopt new regulations. However, the DEP’s hearing report states that aquifer protection areas comprise only 2% of the total land area in the state.

C. Definitions

The definitions in the Land Use Regulations are detailed and highly important, and therefore must be read carefully to determine if an activity is regulated. The key definition in the Regulations is that of a “regulated activity,” which is defined by listing 28 categories of business activities which are located or conducted, wholly or partially, in an aquifer protection area. Regs. § 22a-354i-1(34). After the adoption of local regulations (as described further below), regulated activities will be prohibited in an aquifer protection area unless they are properly registered or receive a permit.

As examples, regulated activities include, among other things:

- underground storage of oil or petroleum;
- dispensing of oil or petroleum for retail, wholesale or fleet use;
- vehicle repair or maintenance;
- car or truck washing;
- dry-cleaning or industrial laundry service;
- generation of electrical power by means of fossil fuels;
- production of electronic boards or components;

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of Connecticut aquifer protection areas, the program implementation schedule, and municipal forms and information (including model ordinances).

- furniture stripping or finishing operations;
- storage, treatment or disposal of hazardous waste;
- pest control services;
- photographic finishing;
- production or fabrication of metal products;
- printing or photoengraving;
- handling, disposal, reduction, transfer, etc. of solid waste which is subject to a permit from DEP for a solid waste facility or disposal area; and
- textile printing and leather tanning.

D. Delineation of Boundaries and Adoption of Municipal Regulations

When final Level A mapping confirms the presence of an aquifer protection area boundary in a town, DEP will send notice to that town.<sup>3</sup> Within four months after being notified by DEP that a Level A mapping boundary is located within its town, the planning and zoning commission for that town must delineate such boundaries on its zoning map (or inland wetlands map if it has no zoning map), designate them as aquifer protection areas, and publish notice of the delineation in the newspaper. Regs. § 22a-354i-2.

Within six months after receiving notice that an aquifer protection area is located within its town, the aquifer protection agency for that town must adopt land use regulations governing aquifer protection areas. DEP published a model municipal ordinance on June 1, 2005. As noted above, the Commissioner will submit written notification of approval or disapproval of local regulations and of any amendments thereto pursuant to the statutory standard described above. A municipal aquifer protection agency may request that the Commissioner extend a boundary to coincide with the nearest property line, municipal boundary or topographic feature. Regs. § 22a-354i-4.

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<sup>3</sup> As of January 2008, Level A mapping has begun for 91 aquifer protection areas in the state; of these 43 have been approved by DEP. Nineteen municipalities with final Level A mapping have delineated the aquifer protection area boundary on the town's zoning map, and 16 municipalities have adopted local aquifer protection area regulations consistent with the state regulations.

#### E. Prohibited and Regulated Activities

The heart of the DEP's Land Use Regulations is the mandate that all regulated activities are prohibited in aquifer protection areas unless they are: (1) a registered regulated activity; (2) a regulated activity which has received a permit pursuant to the regulations; or (3) an otherwise regulated activity that has been granted an exemption by the Commissioner. Regs. § 22a-354i-5. However, the following activities are specifically listed as not constituting regulated activities:

- (1) any activity conducted at a residence without compensation;
- (2) any activity involving the use or storage of no more than 2.5 gallons of each type of hazardous material on-site at any one time, provided the total of all hazardous materials does not exceed 55 gallons;
- (3) any agricultural activity regulated pursuant to a farm resources management plan as described in § 22a-354m of the General Statutes;
- (4) an activity that takes place solely within an enclosed building on an impermeable floor, and involves no more than 10% of the floor area, provided several other conditions are met;
- (5) any activity solely involving the use of lubricating oil provided several other conditions are satisfied; and
- (6) any activity involving the dispensing of oil or petroleum from above-ground storage tanks with an aggregate volume of 2,000 gallons or less provided several other conditions are satisfied.

A business may obtain an exemption from the Land Use Regulations for a regulated activity if the Commissioner determines that "such activity does not and will not pose a threat to any public supply well subject to regulation" under the Aquifer Protection Act. Regs. § 22a-354i-6. The owner of such activity must clearly and convincingly demonstrate that, if any hazardous material is released into the ground from the regulated activity, treatment would not be required to render the groundwater suitable for drinking. The regulations list the requirements of an application for an exemption and describe the process by which such an application is considered and decided.

#### F. Registration of Pre-existing Regulated Activities

A regulated activity must be registered -- and therefore is grandfathered from having to obtain a permit -- if, before February 2, 2004 (the effective date of the Land Use Regulations) or before the date that an applicable aquifer protection area is designated on a municipal zoning or inland wetlands map, whichever occurs later, the regulated activity:

(1) was substantially commenced, (2) was in active operation within the past five years, or (3) received a municipal building permit. Regs. § 22a-354i-7. The registration must be submitted within six months after adoption of local aquifer protection regulations or the delineation of aquifer protection area boundaries on the local zoning map or inland wetlands map, whichever occurs later.

The registration must be submitted to the DEP if the person proposing the regulated activity is any one of the following: a person to whom the DEP has issued an individual permit for water discharge or for a hazardous waste treatment, storage or disposal facility; a “public service company” providing gas, electric, pipeline, water or telephone service; a large quantity generator of hazardous waste; or any state department, agency or instrumentality other than a local or regional board of education. All other registrations must be submitted to the municipal aquifer protection agency.

The requirements for the information to be submitted along with a registration are relatively light when compared with the requirements for a permit, discussed below. Essentially, a registration must include contact information for the registrant, the location of the facility, an identification of the regulated activity, and a certification by the registrant that the activity is in compliance with the best management practices set forth in the Land Use Regulations. Neither a storm water management plan nor a materials management plan are automatically required; however, the DEP or local aquifer protection agency may require either one to be submitted when deemed necessary to protect a public supply well.

A registration may be modified, suspended or revoked if any information provided by the registrant later proves to be false, deceptive, incomplete or inaccurate. Registrations expire five years from the date of receipt by the DEP or local agency and the registrant must apply to renew the registration at such time. A registrant may apply to transfer the registration for a facility by using a form prescribed by the DEP or local aquifer protection agency as appropriate.

#### G. Permit Requirements

Unless a regulated activity satisfies the grandfathering criteria for a registration discussed above, new regulated activities in aquifer protection areas are prohibited by the Land Use Regulations without a permit. The regulations allow for a permit to be issued to add a regulated activity to a facility where a registered regulated activity already occurs. The same categories of registrants as listed in the preceding section must submit permit applications to the DEP, while all other permit applications must be submitted to the municipal aquifer protection agency. Regs. § 22a-354i-8.

An application for a permit must contain the same information as a registration, along with additional confirmations and certifications, a materials management plan, a

storm water management plan, and environmental compliance information concerning environmental violations at the subject facility within the preceding five years.

In order to obtain a permit, the applicant must demonstrate to the satisfaction of the DEP or municipal aquifer protection agency that several standards and criteria have been met, including the following:

- the proposed regulated activity shall take place at a facility where a registered regulated activity occurs;
- the activity shall not increase the number or storage capacity of underground storage tanks used for hazardous materials except for the replacement of an existing tank;
- the applicant has submitted a confirmation and commitment that all regulated activities are and shall remain in compliance with all local, state and federal environmental laws;
- the applicant's compliance record does not indicate that any noncompliance resulted from indifference to or disregard for legal requirements, an unwillingness or inability to devote necessary resources to compliance, or that instances of noncompliance have led to serious harm to the environment or human health or safety;
- the proposed regulated activity will be conducted (and the registered regulated activity is being conducted) in accordance with the best management practices set forth in the Land Use Regulations.

The permitting agency may impose reasonable conditions or limitations on any permit to assure protection of the groundwater, including but not limited to best management practices in addition to those set forth in the regulations and groundwater monitoring. Like a registration, a permit may be modified, suspended or revoked if any information provided turns out to be false, deceptive, incomplete or inaccurate. Permits expire ten years from the date of issuance. The permittee must apply to renew the permit, but renewals must be granted unless a substantial change in the permitted activity has been made or enforcement action with regard to the regulated activity has been taken, in which case a new permit application complying with all of the standards must be submitted. Permits may be modified or transferred pursuant to the regulations.

#### H. Best Management Practices for Regulated Activities

The Land Use Regulations provide detailed best management practices that every regulated activity must follow. Regs. § 22a-354i-9. These include: the conditions under which hazardous materials may be stored above ground in an aquifer protection area; a

prohibition on increasing the number of underground storage tanks used to store hazardous materials; a prohibition on using or installing floor drains or dry wells unless granted a water discharge permit by the DEP; a detailed list of requirements for a materials management plan; and the requirements for a storm water management plan -- including compliance with the DEP's General Permit for the Discharge of Storm Water Associated with a Commercial Activity.

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