



## Connecticut's Aquifer Protection Area Program



Conserving, protecting and improving the natural resources and environment of the state.

# Connecticut's Aquifer Protection Area Program

## Municipal Manual



Connecticut Department of  
Energy and Environmental Protection

Bureau of Water Protection and Land Reuse  
Hartford, Connecticut

2011



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Aquifer Protection Area Program

Connecticut's Aquifer Protection Area Program Municipal Manual is available online at:

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## Connecticut's Aquifer Protection Area Program Municipal Manual

Water is a vital natural resource, essential to all life on earth. In Connecticut, many of our residents rely on groundwater for their drinking water supply, whether it is from private wells or public water supply wells. Groundwater is extracted through wells from underground water sources known as aquifers. Aquifers can provide a clean, safe, reliable source of drinking water now and in the future, but are vulnerable to contamination from overlying land use activities.

The Aquifer Protection Area Program was developed to protect the state's largest public water supply aquifers. This is a proactive program, intended to prevent contamination of public water supplies by managing land use activities in critical aquifer areas. The program is a three-way partnership between the State, water companies and municipalities. The State provides oversight and technical support to both the water companies and the municipalities. Water companies do the work necessary to map the land areas that need to be protected. Municipalities are responsible for adopting and enforcing land use regulations to minimize the contaminant threats to our aquifers.

The Aquifer Protection Area program balances protection of our public drinking water sources with the needs of continued economic growth. New high-risk land uses are not permitted to locate in Aquifer Protection Areas. Existing high-risk land uses in these areas, while subject to best management practices to minimize contaminant threats, are allowed to continue to operate, change and grow to keep pace with the economy. As the state's primary land use control agents, the Municipal Aquifer Protection Agencies serve as the keystone of the Aquifer Protection Program. This manual provides Connecticut's Municipal Aquifer Protection Agencies with the guidance and reference materials needed to regulate aquifer protection areas.

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# Foreword



Dear Aquifer Protection Agency Staff and Members:

We commend you for recognizing the value and importance of protecting and preserving the quality of groundwater in our state. As you know, groundwater is a precious resource that requires careful stewardship to ensure an abundant and clean supply. In Connecticut, more than half of the population relies on groundwater for their drinking supply, and this percentage is increasing. As the state's population grows, communities are turning to community wells to meet the demand for water. It is through the efforts of committed people, like you, that Connecticut will succeed in protecting its groundwater and drinking water supplies.

The Connecticut Aquifer Protection Area Program (Connecticut General Statutes [CGS] § 22a-354a through § 22a-354bb) was established for the purpose of identifying critical water supply aquifer areas and protecting them from pollution. By managing land use activities in these areas, we can protect our water supply aquifer areas from contamination.

This manual provides the basic tools necessary for making decisions on regulated land uses and management of the state's Aquifer Protection Areas. It instructs Aquifer Protection Agency Staff and Members how to use these tools and to evaluate and make decisions about land use activities that threaten groundwater quality. The Department of Energy and Environmental Protection supports municipal Aquifer Protection Agencies through education, training and technical assistance.

The Connecticut Aquifer Protection Area Program requires a commitment from state and local government, businesses, water companies and individual residents, but the reward – clean drinking water for now and the future – is well worth the effort.

Thank you for supporting our goal of protecting and improving the quality of Connecticut's groundwater for this and future generations.

Sincerely,

Daniel C. Esty  
Commissioner

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# Acronyms

LIST OF ACRONYMS	
<b>APA</b>	Aquifer Protection Area
<b>BMPs</b>	Best Management Practices
<b>CFR</b>	Code of Federal Regulations
<b>CGS</b>	Connecticut General Statutes
<b>DEEP</b>	Department of Energy and Environmental Protection
<b>GIS</b>	Geographic Information Systems
<b>GPS</b>	Global Positioning Satellite
<b>LID</b>	Low Impact Development
<b>MMP</b>	Materials Management Plan
<b>NPDES</b>	National Pollutant Discharge Elimination System
<b>POTW</b>	Publicly Owned Treatment Works
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RCSA</b>	Regulations of Connecticut State Agencies
<b>RRF</b>	Resource Recovery Facility
<b>SDWA</b>	Federal Safe Drinking Water Act
<b>SPCS</b>	Significant Potential Contaminant Sources
<b>SPDES</b>	State Pollutant Discharge Elimination System
<b>SPPCP</b>	Stormwater Pollution Prevention Counter Plan
<b>SWAP</b>	Source Water Assessment Program
<b>SWMP</b>	Stormwater Management Plan
<b>TSDF</b>	Treatment, Storage or Disposal Facility
<b>UST</b>	Underground Storage Tank

# Introduction

Connecticut citizens have long relied on groundwater for drinking water – both from private residential wells and public supply wells. Currently, over two million Connecticut residents rely, at least in part, on groundwater as their source of drinking water. In the late 1970s and early 1980s, many public supply wells were found to be contaminated by various pollutants. In 1987 the Connecticut General Assembly passed Special Act 87-63 that established a Legislative Aquifer Protection Task Force to evaluate the need for a regulatory framework to improve the protection of Connecticut’s groundwater resources. The Task Force held numerous meetings and public hearings, conducted research over a two-year period and prepared two reports to the General Assembly concerning aquifer protection. The first Task Force report, dated March 1988, recommended that legislation be enacted to require more comprehensive mapping of groundwater resources contributing to large public supply well fields in stratified drift aquifers. Legislation passed in 1988 required the Department to develop mapping guidelines for Level B (preliminary) mapping and regulations for Level A (final) mapping of Aquifer Protection Areas, and authorized the Task Force to continue its work.

The Task Force continued to meet for another year to consider the need for a regulatory management framework to improve the protection of aquifers. A second Task Force report was subsequently submitted to the General Assembly in February 1989. That report recommended a comprehensive regulatory management framework be enacted to protect Connecticut’s largest public supply wells in stratified drift aquifers, including minimum state standards necessary to protect the most sensitive aquifer areas in Connecticut. The Connecticut General Assembly responded to the report in 1989 with unanimous passage of the Aquifer Protection Act (Connecticut General Statutes [CGS] § 22a-354a through 22a-354bb).

## The General Assembly found that:

1. aquifers are an essential natural resource and a major source of public drinking water;
2. reliance on groundwater will increase because opportunities for development of new surface water supplies are diminishing due to the rising cost of land and increasingly intense development;
3. numerous drinking water wells have been contaminated by certain land use activities and other wells are now threatened;
4. protection of existing and future groundwater supplies demand greater action by state and local government;

5. a groundwater protection program requires identification and delineation of present and future water supplies in stratified drift aquifers supplying drinking water wells;
6. a comprehensive and coordinated system of land use regulations should be established that includes state regulations which protect public drinking water wells located in stratified drift aquifers;
7. municipalities with existing or proposed public drinking water wells in stratified drift aquifers should designate aquifer protection agencies; and
8. the state should provide technical assistance and education programs on aquifer protection to ensure a plentiful supply of public drinking water for present and future generations.

The Aquifer Protection Act set forth a schedule for implementation, which started with the adoption of the state Land Use Regulations. The Land Use Regulations are a culmination of over 10 years of effort involving the Department, members of the Department’s Aquifer Protection Land Use Advisory Committee (“Advisory Committee”), and numerous other interested parties. The Advisory Committee included representatives of businesses, water companies, municipal governments, regional planning agencies and environmental groups. The regulations cover twenty-eight (28) land use activities that pose a threat to groundwater. The regulations which went into effect on February 2, 2004, set deadlines for the appointment of municipal Aquifer Protection Agencies, completion of Level A mapping, delineation of Level A boundaries on municipal zoning maps, and municipal adoption of aquifer protection regulations.

Model Municipal Aquifer Protection Area Regulations were published on June 1, 2005, and revised on January 1, 2006, October 1, 2007, and October 1, 2010. Municipalities with Aquifer Protection Areas are required to adopt land use regulations based on the state’s Model Regulations. The timing of local adoption varies depending on the approval of Level A mapping for each well field.

Implementation of the Aquifer Protection Area Program has been gradual. As Level A mapping is completed for each well field by the water company, towns must delineate the Aquifer Protection Area boundaries on local zoning maps and adopt local regulations. The deadline for water companies to complete the mapping was June 2008, although a number of well fields have yet to be completed.

# Groundwater Basics

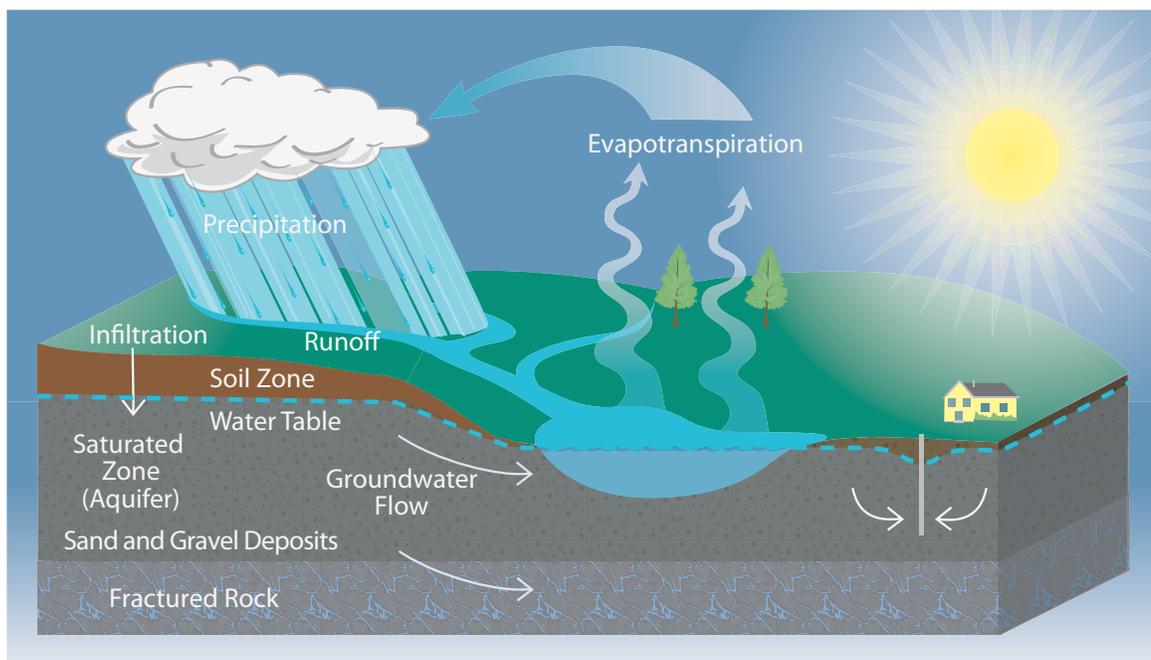
In order for an Aquifer Protection Agency to be effective, they must be knowledgeable about the natural resource they are protecting. A good understanding of the basic concepts of groundwater and how it can become contaminated will provide the Agency the information needed to make important land use decisions as they implement the Aquifer Protection Area Program.

## Groundwater Basics

Water is a precious resource, essential to all life on earth. Seventy-five percent (75%) of the Earth's surface is covered with water. However, only a small fraction of the Earth's water is available as fresh water. Unlike energy, which comes in a variety of forms, there are no substitutes for pure, fresh water. We all use water. Water is a basic necessity and is used every day for drinking, washing, cooking and watering lawns. It is also used in large quantities for industry, agriculture, manufacturing, fire protection and energy production. Most of these uses require clean, safe sources of supply.

## The Hydrologic Cycle

All water on Earth and in the atmosphere is part of the hydrologic cycle. The hydrologic cycle is the continuous circulation of water from the oceans to the atmosphere to the land and back to the oceans. This complex cycle provides us with a renewable supply of water on land. Water falls from the atmosphere to the land in the form of precipitation (rain, snow, sleet or hail). Once on land, some of the precipitation may accumulate as surface water – in streams, rivers, lakes, ponds, reservoirs, wetlands, and oceans. Some water may seep downward through the soil where it is stored as groundwater. Here the spaces between sand grains and gravel or cracks in the rock are filled with water. Groundwater moves very slowly – measured in feet per day – as compared with the speed of surface water, which is measured in feet per second.



**Figure 1. The Hydrologic Cycle**

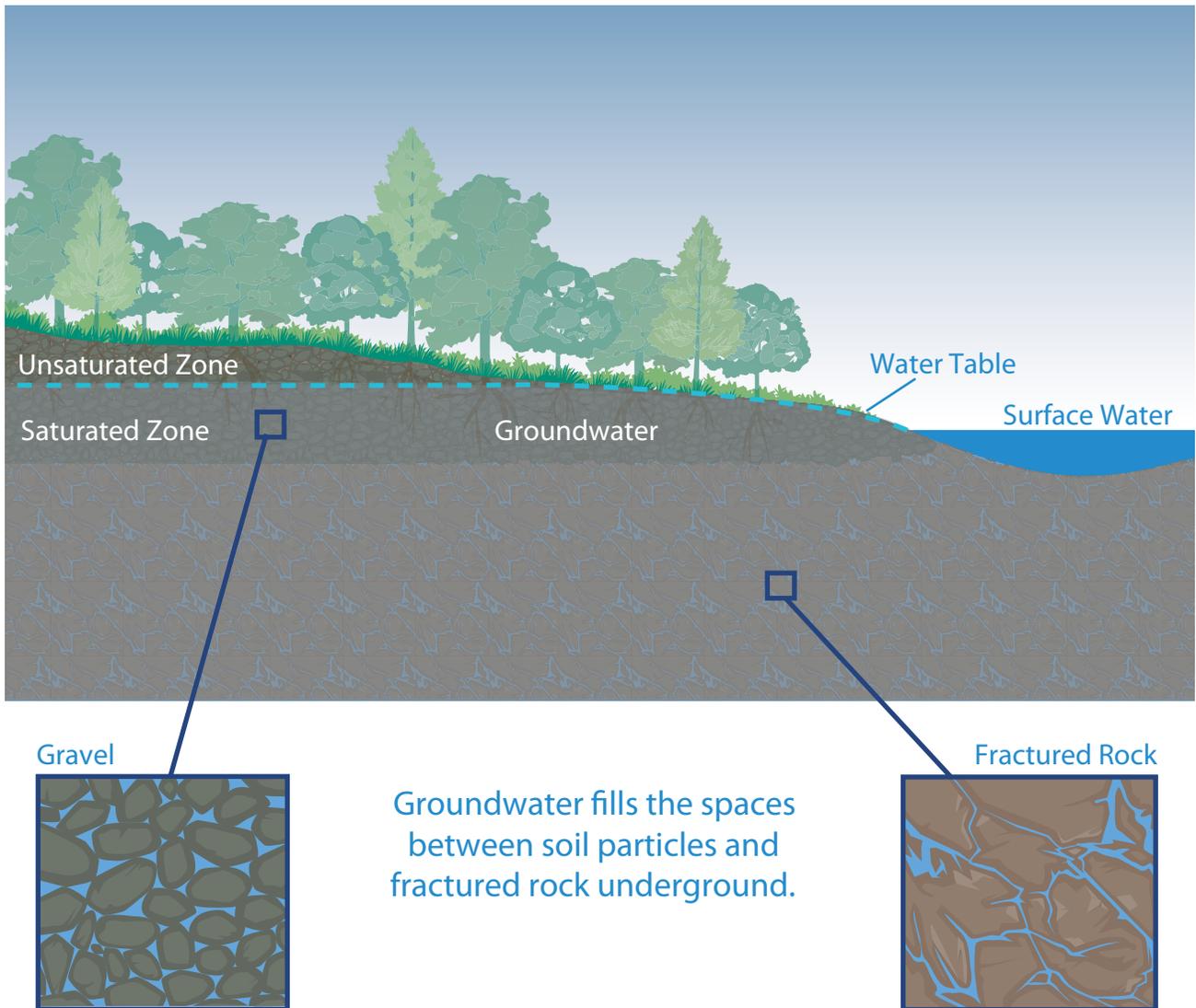
Water cycles from the oceans to the atmosphere to the land and back to the oceans. Once on land, the water may: (1) evaporate from land and re-enter the atmosphere directly, (2) flow into rivers and streams, or (3) seep downward in the soil and become groundwater. Every molecule of water is continuously moving through the hydrologic cycle.

# Groundwater Basics

## What Is Groundwater?

Contrary to what a lot of people think, groundwater is rarely found in underground rivers or lakes in caverns. Instead, groundwater is water that fills the pores of soil, sand, gravel and cracks in rock that lie beneath the surface of the earth – much the way water saturates a sponge. Groundwater occurs in the zone of saturation in the subsurface where the materials are permeable and have connected spaces that allow water to flow through. Groundwater moves through the soil and rock under the forces of gravity, capillary action, pressure and concentration gradients, and eventually makes its way back to rivers, lakes and the oceans.

Figure 2. Groundwater

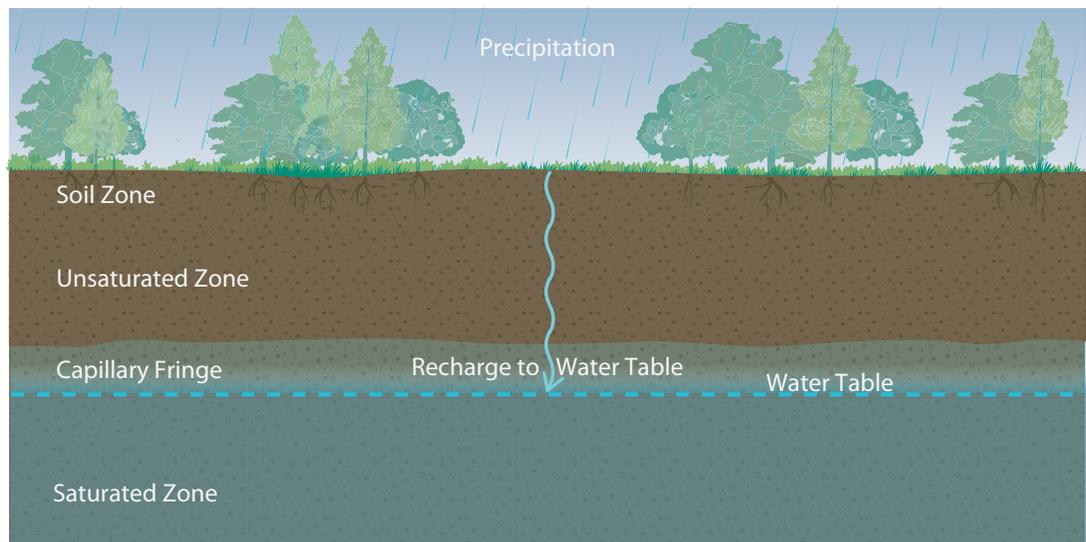


# Groundwater Basics

## Where Does Groundwater Come From?

Groundwater begins as precipitation that falls onto the ground. Some of it runs off the land, evaporates into the atmosphere, or is taken up immediately by plant roots and transpired. The precipitation that soaks into the ground and makes it beyond the root zone is pulled down by gravity until it reaches the water table. Below the water table, all the pore spaces in the soil are filled with water. This is the saturated zone.

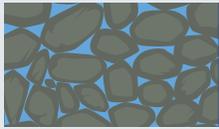
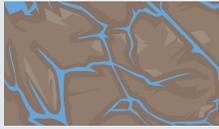
**Figure 3. Recharge to the Water Table**



## How Is Groundwater Stored?

Groundwater is stored in **aquifers**. An aquifer is any soil or rock formation that is capable of yielding usable amounts of water to a water supply well. Connecticut has two main types of aquifers that are capable of supplying water to a drinking water well. These are stratified drift aquifers and bedrock aquifers. Figure 4 summarizes some of the characteristics of these aquifer types.

**Figure 4. Connecticut's Aquifers**

<p><b>Stratified Drift Aquifer</b></p> 	<p>Consists of stratified layers of sand and gravel            Most productive aquifers            High permeability/moderate porosity            Susceptible to pollution</p>
<p><b>Bedrock Aquifer</b></p> 	<p>Water is contained within fractures in the bedrock            Generally, least productive aquifers            Low permeability/low porosity            Can yield sufficient volume of water for a private well</p>

# Groundwater Basics

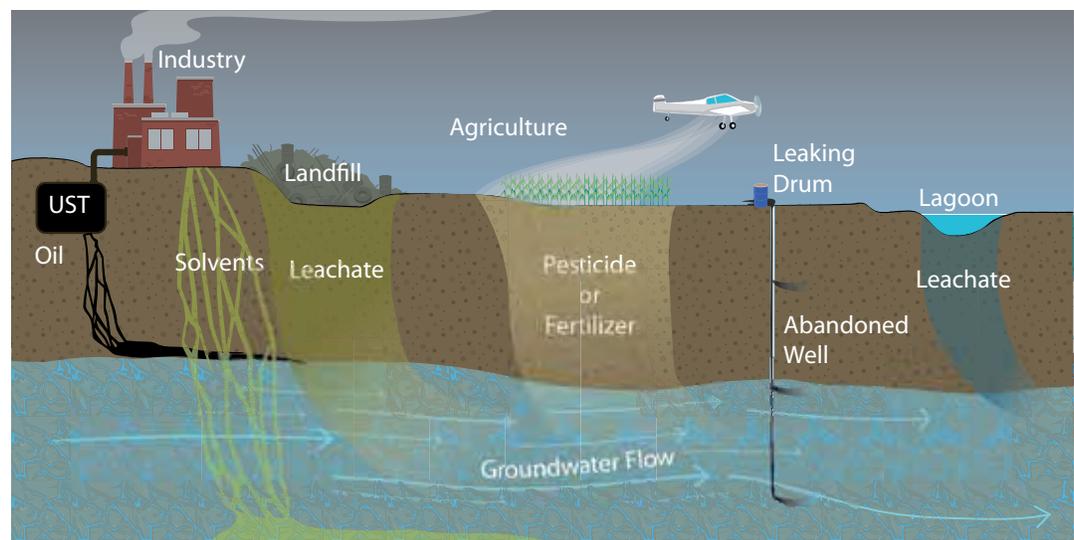
## How Can Groundwater Be Contaminated?

As groundwater infiltrates down to the water table, it can pick up contaminants from the ground surface or underlying soil and move the contaminants through the groundwater system. Even though groundwater travels very slowly, contaminants can be transported great distances from their source. The contaminants can form a concentrated plume that follows the groundwater flow path.

## What Are the Potential Sources of Contamination?

There are many different potential sources of contamination. Any site that has or uses hazardous materials can be considered a potential source. Some of the commonly known sources are landfills, industries, dry cleaners, underground storage tanks (USTs), chemical leaks and spills, improper waste disposal practices, improper pesticide and fertilizer use, and improper storage of road deicing materials.

**Figure 5. Groundwater Contamination**



## What Are The Effects of Groundwater Contamination?

Groundwater contaminated with chemicals, pesticides, gasoline or oil can cause serious human and animal health problems. Those who drink it or come in contact with it can suffer diseases, nervous system disorders, liver or kidney failure, or cancer. Detection and treatment of contaminated water can be very expensive, much more expensive than taking steps to prevent the contamination from occurring in the first place.

## How Is Groundwater Contamination Prevented?

Best management practices can be used to minimize the risk of groundwater contamination. For example, providing secondary containment, using leak detection systems, having an emergency spill response plan and employing waste minimization techniques can lower the risk of contamination. However, siting controls and prohibition of high risk land uses in sensitive areas can be the most effective tool available to reduce the contamination risk.



# The Municipal Aquifer Protection Agency

# 1 | The Municipal Aquifer Protection Agency

## 1.1 | Purpose of the Aquifer Protection Area Program

In Connecticut, more than half of the population relies on groundwater for their drinking water supply. This groundwater is extracted through wells from under groundwater supplies known as aquifers (geologic formations able to yield water to wells). Unfortunately, over 1,400 incidents of public or private water supply well contamination have been documented during the past few decades. To address this problem, Connecticut established the Aquifer Protection Area (APA) Program [CGS § 22a-354a et. sec.]. The purpose of the program is to identify critical water supply aquifer areas and to protect them from pollution by managing land use.

Municipalities are the primary regulatory body for the APA program. To carry out this role, each municipality must appoint an Aquifer Protection Agency.

## 1.2 | Authorization of the Aquifer Protection Agency

Section 22a-354o(a) of the CGS requires each municipality in the APA Program to appoint an existing board or commission to act as the Aquifer Protection Agency. The designation must be accomplished by local ordinance.

The ordinance authorizing the Agency determines the number of members and alternate members, the length of their terms, the method of selection and removal, and the manner for filling vacancies. A sample ordinance is included in the Model Documents section as "Model Ordinance to Designate the Municipal Aquifer Protection Agency."

Since this program involves regulating land use activities as well as pollution controls, towns may consider appointing the Planning and Zoning, the Inland Wetlands, the Conservation Commission, or the Water Pollution Control Authority as the Aquifer Protection Agency.

## 1.3 | Powers and Duties of the Aquifer Protection Agency

The Agency plays an integral role in the local protection of Aquifer Protection Areas. A good understanding of state and local laws regarding aquifer protection is necessary to accomplish an effective local Aquifer Protection Area program.

At least one member of the Agency or staff of the Agency must complete the course in technical training from DEEP, as required by CGS § 22a-354o(c). The technical training course uses this manual during the training, and afterward serves as a resource for implementing the program.

The Agency is responsible for local program administration and enforcement.

Their duties include:

- Completing a Land Use Inventory
- Delineating the Aquifer Protection Area Boundary
- Adopting Municipal Aquifer Protection Area Regulations
- Registering and Permitting Regulated Activities
- Enforcing the Program and Ensuring Compliance

The duties listed above are described in detail in the chapters that follow.

## 1.4 | Conducting Agency Business

The Aquifer Protection Agency, being an existing board or commission, will have the basic knowledge of how to conduct business. The Agency will be essentially wearing two hats; one for their existing board or commission such as the Zoning Commission or Planning Commission, and one for the Aquifer Protection Agency. Since they will be wearing two hats and sitting on two boards, it is important to follow these guidelines to avoid confusion and to keep an accurate record.

- The Aquifer Protection Agency must hold its own separate meetings, proceedings and hearings and not combine them with any other Board or Commission. They may conduct back-to-back meetings, proceedings and hearings for efficiency.

For example, if the Agency is also the Zoning Commission, and both meetings are held on the third Thursday of the month, a single public notice may be issued noticing the Zoning Commission meeting at 7:00 p.m. on Thursday, September 25, and the Aquifer Protection Agency meeting will follow "immediately thereafter." Separate agendas should be prepared and the Zoning Commission meeting must be formally adjourned before the Aquifer Protection Agency meeting opens.

- Making the Record – The Agency should keep a notebook of Agency business and include APA regulations, meeting minutes and proceedings, decisions, correspondence, notes, and emails to make the Record. Bring the notebook to all meetings and use as a reference.

# 1 | The Municipal Aquifer Protection Agency

- In addition to the Aquifer Protection Area Act (CGS § 22a-354a et seq.), the US and CT Constitutions, Freedom of Information Act (CGS § 1-200 et seq.), Connecticut Environmental Protection Act (CGS § 22a-1a et seq.), the municipal charter, municipal ordinances and Agency bylaws apply to the proceedings of the Agency.
- Agency proceedings are informal, but rules of “fundamental fairness” apply. This includes a number of common sense components:
  - all decisions must be made by an impartial, unbiased agency and stated clearly in the record;
  - members must be aware of any potential “conflicts of interest,” including a direct or indirect interest in a personal or financial sense by any member (The test is not whether there is a conflict, but whether it reasonably might conflict.); recusal is required to be stated on the record; and
  - all evidence must be received at the meetings or hearings, as all parties and the public have the right to know the basis upon which an Agency is making its decision.
- Site and facility walks may be used for the purposes of orientation, not discussion, and always have permission of the owner before conducting a site walk.
- All decisions of the Agency must be in writing.
- It is a good idea to tape-record all meetings and public hearings for a complete record.
- It is recommended that Agencies schedule regular meetings, generally on a monthly basis to ensure application action timeframes do not become a problem. If there are no applications to act on, meetings can be cancelled.

If Agencies have questions on conduct, your Town Counsel or DEEP may be able to help.



# Land Use Inventory

## 2 | Land Use Inventory

In order to carry out the purposes of the Aquifer Protection Area Program, the municipal Aquifer Protection Agency is required to conduct an inventory of land uses within the APA to assess and determine potential contamination sources. [CGS § 22a-354e]

The inventory identifies land uses that pose a threat to the aquifer and it generates data on potentially regulated facilities in the Aquifer Protection Area which may be required to register under the program.

An initial statewide inventory of potentially regulated facilities in Aquifer Protection Areas was completed during 1999 and 2000. Figure 6 below summarizes the results of the inventory. These inventories satisfy the regulatory requirements of CGS § 22a-354e. However, the inventories are dated and many land use changes may have occurred. It is recommended that the Agency update the existing inventories, using them as a starting point.

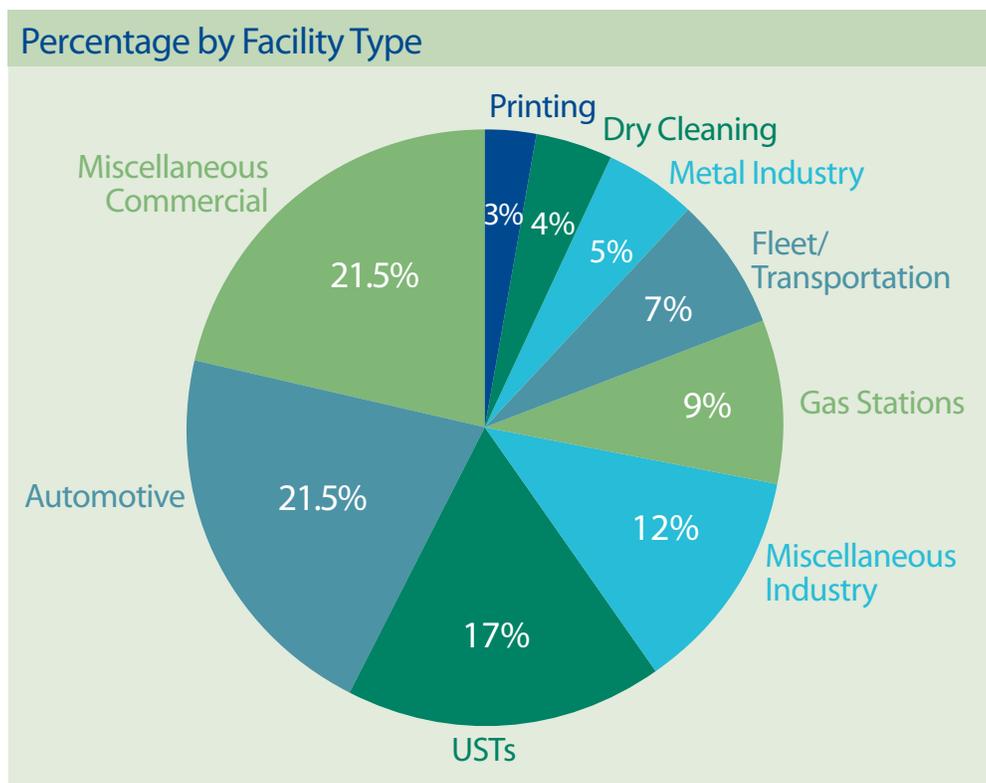
### 2.1 | Inventory Guidelines

The inventory is a conservative working list of potentially regulated activities and businesses that may be required to register under the Aquifer Protection Area Program. A facility conducting a regulated activity may ultimately be excluded from the program, if, for example, they are connected to a public sewer (e.g., car washes). Others may fall below the thresholds for amounts of hazardous materials used. The inventory should include everything that might be regulated. As the program is implemented and facilities are required to register, details about the facility will be obtained through the registration process, and determinations as to what facilities must register can be made. The inventory list of “potentially regulated facilities” will then evolve into a list of “registered facilities.”

Registered facilities are businesses that conduct regulated land use activities that use, store, and/or handle hazardous materials that potentially threaten groundwater. Examples of regulated activities include automotive and engine service stations, gas stations, industries and dry cleaners.

**Figure 6. Inventory of Potentially Regulated Facilities in CT Aquifer Protection Areas.**

Source: CT DEP 2002.



## 2 | Land Use Inventory

Before beginning the inventory, it is important to review the following information and tables, and become familiar with the types of regulated businesses and activities. The businesses and activities regulated under the program are listed in the tables on the following pages.

The inventory for each potentially regulated business in the Aquifer Protection Area should consist of the following:

1. Name of facility/business
2. Address of facility/business (include street number, street name, zip code)
3. Owner of facility/business (if known)
4. Property owner (if known)
5. Type of facility/business or potentially regulated activity
6. Status of facility/business (active/inactive) (if known)
7. Sewer system (municipal or septic) (if known)
8. Global Positioning Satellite (GPS) location (if known).

### 2.2 | Completing or Updating the Inventory

To complete or update the inventory, the Aquifer Protection Agent or Agency Members should begin by reviewing the inventory provided by DEEP and, using their knowledge of local businesses and town resources or databases, compare the list of potentially regulated facilities with the known list of businesses. As these businesses are identified, changes are then made to the inventory list. It may be necessary to conduct a drive-by of each property and follow up with a site visit to confirm whether the business is conducting a regulated activity.

The Agency should coordinate with the town planner or zoning enforcement officer, who is likely the most knowledgeable local person to assist with completing or updating the inventory. Water utilities may have conducted land use surveys or inspections and may be an additional source of information. Regional Planning Organizations or Regional Health Districts may also be able to provide information and technical assistance. Another resource to help complete the inventory is available on the CT Department of Revenue Services website at [www.concord-sots.ct.gov](http://www.concord-sots.ct.gov) or call Taxpayer Services at 860-297-5962. Businesses can be looked up using this C.O.N.C.O.R.D. system.

A sample inventory form and a sample inventory table are included at the end of this section and may be used to collect and record businesses that may be regulated.

### 2.3 | Inspecting Potentially Regulated Facilities

In determining if a business is potentially regulated under the program, it may be appropriate to inspect the facility. Guidelines for conducting an inspection are provided in the Appendices of this manual and a form to assist in preparing the inspection report is provided in the Forms and Applications Section and online at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection). Of course, the level of detail needed for an initial inspection to determine if the facility would be regulated is not as substantial as that needed for an enforcement inspection.

**DEEP staff from the Aquifer Protection Area Program is available for assistance. If you have any questions, please call 860-424-3020.**

### Registered Facilities

Registered facilities are businesses that conduct regulated land use activities that use, store, and/or handle hazardous materials that potentially threaten groundwater.



## 2 | Land Use Inventory

### 2.4 | Table of Potentially Regulated Businesses and Facilities

BUSINESS/FACILITY	POTENTIALLY REGULATED UNDER MODEL MUNICIPAL REGULATION SECTION:
<b>Aircraft Repair</b>	Model Section 2(a)(35)(D)
<b>Asphalt Plant</b>	Model Section 2(a)(35)(B), (G), (H)
<b>Autobody Repair</b>	Model Section 2(a)(35)(D), (G)
<b>Automobile Sales, Service, Rental Facilities</b>	Model Section 2(a)(35)(D), (G)
<b>Biological Research Facility</b>	Model Section 2(a)(35)(Q)
<b>Biomedical Waste Treatment Facility</b>	Model Section 2(a)(35)(Y)
<b>Boat Dealer</b>	Model Section 2(a)(35)(B), (D), (G)
<b>Car Dealer</b>	Model Section 2(a)(35)(B), (D), (G)
<b>Car Wash</b>	Model Section 2(a)(35)(G)
<b>Cardboard Manufacturer</b>	Model Section 2(a)(35)(BB)
<b>Chemical Production or Refining</b>	Model Section 2(a)(35)(H)
<b>Chemical Research Facility</b>	Model Section 2(a)(35)(Q)
<b>Chemical Warehouse</b>	Model Section 2(a)(35)(C)
<b>Clay – Finishing, Etching or Painting</b>	Not regulated under APA Program
<b>College</b>	Model Section 2(a)(35)(A), (B), (D), (K), (Q), (Y)
<b>Composting Facility</b>	Model Section 2(a)(35)(Y)
<b>Concrete – Finishing or Etching</b>	Not regulated under APA Program
<b>Concrete Operations</b>	Model Section 2(a)(35)(B), (D), (G)
<b>Construction Equipment Sales, Service, Rental Facilities</b>	Model Section 2(a)(35)(B), (D), (G)
<b>Cosmetic Manufacturing Facility</b>	Model Section 2(a)(35)(H)
<b>Crematory</b>	Model Section 2(a)(35)(M)
<b>Discharge of Wastewater to Groundwater</b>	Model Section 2(a)(35)(F)
<b>Dry Cleaners</b>	Model Section 2(a)(35)(I)
<b>Elastomer Manufacturer</b>	Model Section 2(a)(35)(W)
<b>Electrical Equipment Manufacturer</b>	Model Section 2(a)(35)(L)

## 2 | Land Use Inventory

### 2.4 | Table of Potentially Regulated Businesses and Facilities (continued)

BUSINESS/FACILITY	POTENTIALLY REGULATED UNDER MODEL MUNICIPAL REGULATION SECTION:
<b>Fabric Coating</b>	Model Section 2(a)(35)(W)
<b>Farm Vehicle Sales, Service, Rental Facilities</b>	Model Section 2(a)(35)(D)
<b>Fleet Garage with UST</b>	Model Section 2(a)(35)(A)
<b>Fleet Maintenance Garage (Including Transportation Centers)</b>	Model Section 2(a)(35)(D)
<b>Fuel Oil Distributing or Dispensing Services</b>	Model Section 2(a)(35)(B)
<b>Funeral Home</b>	Model Section 2(a)(35)(M)
<b>Furniture Manufacturer</b>	Model Section 2(a)(35)(O)
<b>Furniture Repair</b>	Model Section 2(a)(35)(O)
<b>Furniture Restoration</b>	Model Section 2(a)(35)(O)
<b>Furniture Stripping Facility</b>	Model Section 2(a)(35)(N)
<b>Garage, Municipal Public Works</b>	Model Section 2(a)(35)(D)
<b>Garage, State Public Works</b>	Model Section 2(a)(35)(A)
<b>Gasoline and Diesel Distributing or Dispensing Services</b>	Model Section 2(a)(35)(B)
<b>Gasoline/Diesel Sales (retail)</b>	Model Section 2(a)(35)(A)
<b>Glass Finishing or Etching</b>	Not regulated under APA Program
<b>Golf Course</b>	Model Section 2(a)(35)(R)
<b>Greenhouses/Nurseries</b>	Model Section 2(a)(35)(R)
<b>Hazardous Waste, Storage/Use/Generation of</b>	Model Section 2(a)(35)(A)
<b>Heating Oil Underground Storage Tank, Commercial</b>	Model Section 2(a)(35)(A)
<b>High School (Public or Private)</b>	Model Section 2(a)(35)(Q)
<b>Hospital</b>	Model Section 2(a)(35)(Q)
<b>Industrial Laundry</b>	Model Section 2(a)(35)(J)
<b>Junkyard</b>	Model Section 2(a)(35)(E)
<b>Laboratory, Analytical</b>	Model Section 2(a)(35)(Q)
<b>Landfill</b>	Model Section 2(a)(35)(Y)

## 2 | Land Use Inventory

### 2.4 | Table of Potentially Regulated Businesses and Facilities (continued)

BUSINESS/FACILITY	POTENTIALLY REGULATED UNDER MODEL MUNICIPAL REGULATION SECTION:
Lawn Care Company	Model Section 2(a)(35)(R)
Lawn Care Equipment Sales, Service, Rental Facilities	Model Section 2(a)(35)(D)
Leather Tannery	Model Section 2(a)(35)(Z)
Lithographer	Model Section 2(a)(35)(U)
Marine Vehicle Sales, Service, Rental Facilities	Model Section 2(a)(35)(B), (D), (G)
Medical Laboratory	Model Section 2(a)(35)(Q)
Metal Products Business	Model Section 2(a)(35)(T)
Metal Salvage Yard	Model Section 2(a)(35)(E)
Mining Operations	Model Section 2(a)(35)(B), (D), (G)
Motorcycle Sales, Service, Rental Facilities	Model Section 2(a)(35)(B), (D), (G)
Oil & Petroleum, Distributing or Dispensing Services	Model Section 2(a)(35)(B)
Oil & Petroleum, Underground Storage/Transmission of	Model Section 2(a)(35)(A)
Paint or Other Chemical Finish Manufacturer	Model Section 2(a)(35)(H)
Paper Manufacturer	Model Section 2(a)(35)(BB)
Pesticide Manufacturer	Model Section 2(a)(35)(H)
Pesticide Services	Model Section 2(a)(35)(R)
Pet Crematory	Model Section 2(a)(35)(M)
Pharmaceutical Manufacturing Facility	Model Section 2(a)(35)(H)
Photoengraving	Model Section 2(a)(35)(U)
Photographic Finishing Laboratory	Model Section 2(a)(35)(S)
Plastic Manufacturer	Model Section 2(a)(35)(W)
Plywood Production	Model Section 2(a)(35)(AA)
Power Plant	Model Section 2(a)(35)(K)
Printer	Model Section 2(a)(35)(U)

# 2 | Land Use Inventory

## 2.5 | Table of APA Regulated Land Use Activities

REGULATED ACTIVITY <sup>1</sup>	INCLUSIONS / EXCEPTIONS	TYPICAL LAND USE <sup>2</sup>	ACTIVITY	CHEMICAL OF CONCERN
<b>Model Section 2(35)(A)</b> Underground Storage or Transmission of Oil, Petroleum or Hazardous Material	Includes all except: 1. Activities pre-empted by federal law (pipelines, etc.) 2. Underground storage tanks containing #2 fuel oil located >500 feet from an APA well 3. 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	Gas stations, automotive or fleet garages, miscellaneous businesses	Tank, pipeline or joint leaks or breaks	Liquid fuel hazardous material
<b>Model Section 2(35)(B)</b> Oil or Petroleum Dispensing	Includes all retail, wholesale or fleet use except above-ground storage of <2,000 gallons, subject to conditions – see RCSA Sec. 22a-354i 5(c)(6)	Gas stations, automotive or fleet garages, fuel oil dealers, miscellaneous businesses	Leaks, drips, tank ruptures	Hydrocarbons, benzene and other contaminants
<b>Model Section 2(35)(C)</b> Wholesale Hazardous Materials	Includes all on-site storage of hazardous materials for the purpose of wholesale sale	Chemical warehouses, bulk storage facilities, tank farms	Large volumes of various materials and products handled, stored and distributed that might contaminate groundwater as a result of accidents, poor management practices, flooding or fires	Solvents, organic and inorganic chemicals, and hydrocarbon contamination threats
<b>Model Section 2(35)(D)</b> Vehicle Repair or Maintenance	Includes all repair/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	Auto service, car dealers, auto body repair, aircraft repair, boat or marine dealer repair, fleet/municipal garages, marine, recreational, motorcycle dealers, construction equipment repair/rental, tractor/lawnmower repair	Fuel storage, use and storage of oils, paints, thinners, various solvents, brake and transmission fluids	Hydrocarbons, solvents, benzene
<b>Model Section 2(35)(E)</b> Salvage Operations	Includes all salvage operations of metal or vehicle parts	Junkyards, salvage yards	Fuel storage, use and storage of oils, paints, thinners, various solvents, brake and transmission fluids	Hydrocarbons, solvents, benzene
<b>Model Section 2(35)(F)</b> Non-Domestic Wastewater Discharges to Ground	Includes all except: 1. Domestic sewage 2. Stormwater (see BMPs) 3. The following if have a DEEP discharge permit: (i) pump and treat system for groundwater remediation, (ii) potable water treatment system, (iii) heat pump system, (iv) non-contact cooling water system, or (v) swimming pools	Miscellaneous industrial businesses or commercial service facilities	Discharge of non-biodegradable waste to groundwater	Persistent organic and inorganic compounds
<b>Model Section 2(35)(G)</b> Car or Truck Washing	Includes all vehicle washing, except if the discharge of wastewaters is to a publically-owned treatment works (sewer system)	Car washes, truck stops, car or truck dealers	Discharge of non-biodegradable waste to groundwater	Hydrocarbons, solvents, benzene
<b>Model Section 2(35)(H)</b> Chemical Production	Includes all production or refining of chemicals, including hazardous materials or asphalt	Chemical, petroleum, asphalt, pesticide manufacturers	Storage, use and production of chemicals, equipment cleaning and maintenance, hazardous waste generation	Organic and inorganic chemicals
<b>Model Section 2(35)(I)</b> Clothes or Cloth Cleaning Service	Includes clothes or cloth cleaning services that involve the use, storage or disposal of hazardous materials, including dry-cleaning solvents	Dry cleaners (on-site processing)	Storage, use, and disposal of chemicals, hazardous waste generation	Solvents
<b>Model Section 2(35)(J)</b> Industrial Laundry Service	Includes cleaning of clothes or cloth contaminated by hazardous material, except if the discharge of wastewaters is to a publically owned treatment works (sewer service)	Industrial laundries (but which does not use dry-cleaning solvents for cleaning); dry cleaners are regulated under (I)	Discharge of wastewaters that may contain hazardous material	Organic and inorganic chemicals
<b>Model Section 2(35)(K)</b> Power Generation	Includes all generation of electrical power by means of fossil fuels except generation: 1. By an emergency engine (as defined in section 22a-174-22(a)(3) of the RCSA) 2. By means of natural gas or propane	Power plants	Fuels storage/use, large quantities of waste generation, equipment maintenance, machine shops	Hydrocarbons, solvents
<b>Model Section 2(35)(L)</b> Electrical, Electronics Production	Includes 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	Electrical equipment or electronics manufacturers	Storage/use of hazardous material, hazardous waste generation, equipment cleaning and maintenance, machine shops	Heavy metals, chlorinated solvents, strong acids and alkalis, paint and thinner wastes and waste oils

<sup>1</sup> **Please note:** The intent of this table is to provide guidance, and the language of the regulation is simplified for ease of use. See the Model Municipal Regulation Section 2(35) for specific language.

<sup>2</sup> This is not an exhaustive list of land uses, just examples of the types of land use to clarify categories.

## 2 | Land Use Inventory

### 2.5 | Table of APA Regulated Land Use Activities (continued)

REGULATED ACTIVITY <sup>1</sup>	INCLUSIONS / EXCEPTIONS	TYPICAL LAND USE <sup>2</sup>	ACTIVITY	CHEMICAL OF CONCERN
<b>Model Section 2(35)(M)</b> Embalming or Crematory Services	Includes embalming or crematory services that involve the use, storage or disposal of hazardous materials, except if the discharge of wastewaters is to a publicly owned treatment works (sewer service)	Funeral homes, crematories, pet crematories	Storage/use of hazardous material	Embalming fluids
<b>Model Section 2(35)(N)</b> Furniture Stripping	Includes furniture stripping operations which involve the use, storage or disposal of hazardous materials	Furniture strippers	Storage/use of solvents, hazardous waste generation	Chlorinated solvents
<b>Model Section 2(35)(O)</b> Furniture Finishing	Includes furniture finishing operations which involve the use, storage or disposal of hazardous materials (but not stripping; furniture stripping is regulated under (N))	Furniture manufacturers or repair	Painting and finishing of wood, cleaning and maintenance of equipment	Solvents, preservatives, paint wastes
<b>Model Section 2(35)(P)</b> Hazardous Waste Storage, Treatment or Disposal Facility	Includes all storage, treatment or disposal of hazardous waste subject to a permit under Sections 22a-449(c)-100 to 22a-449(c)-110, inclusive, of the RCSA	Hazardous waste storage, treatment or disposal facilities	Spills, leaks, and possible leachate from storage and processing of wastes	Various potential organic and inorganic contaminants
<b>Model Section 2(35)(Q)</b> Biological or Chemical Testing	Includes testing, analysis or research that involves the use, storage or disposal of hazardous material except: 1. On-site testing of a public supply well by a water utility, or 2. If the discharge of wastewaters is to a publicly owned treatment works (sewer service)	Biological or chemical laboratories, research facilities, school laboratories	Storage/use of various chemicals and waste materials	Numerous
<b>Model Section 2(35)(R)</b> Pest Control Services	Includes pest control services that involve storage, mixing or loading of pesticides or other hazardous materials	Lawn care, pest control services	Storage/mixing of chemicals, equipment cleaning, fueling and maintenance	Pesticides, hydrocarbons, solvents
<b>Model Section 2(35)(S)</b> Photographic Finishing	Includes photographic finishing that involves the use, storage or disposal of hazardous materials except if the discharge of wastewaters is to a publicly owned treatment works (sewer service)	Photographic finishing laboratories	Generation of wastewaters that may contain hazardous materials	Acids, alkalis, heavy metals
<b>Model Section 2(35)(T)</b> Production or Fabrication of Metal	Includes 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	Metal foundries, finishers, machine shops, fabricators, metal plating	Storage and use of hazardous material, hazardous waste generation, equipment cleaning and maintenance, machine shops	Heavy metals, chlorinated solvents, strong acids and alkalis, waste oils, phenols, PCB's, Cyanides
<b>Model Section 2(35)(U)</b> Printing	Includes printing, plate making, lithography, photoengraving, or gravure, which involves the use, storage or disposal of hazardous materials	Printers or publishers	Storage /use of ink chemicals, equipment cleaning, engraving	Chlorinated solvents, phenols, hydrocarbon compounds
<b>Model Section 2(35)(V)</b> Waste Recycling Facility	Includes accumulation or storage of waste oil, antifreeze or spent lead-acid batteries that are subject to a general permit issued under sections 22a-208(i)and 22a-454(e)(1) of the CGS	Recycling facilities, collection or transfer stations	Released leachate generation from waste collection and storage	Numerous chemical constituents
<b>Model Section 2(35)(W)</b> Rubber or Resin Production	Includes production of rubber, resin cements, elastomers or plastic that involve the use, storage or disposal of hazardous materials	Rubber, resin, elastomer or plastic manufacturers	Raw material storage, process hazardous waste generation, machine shops	Waste oils, solvents, phenols, strong organic and inorganic wastes
<b>Model Section 2(35)(X)</b> Storage of Deicing Chemicals	Includes all, unless 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	Salt storage facilities, fleet, state or municipal garages	Stockpiling of road salt for deicing of roads/ parking areas	Sodium chloride, decaking agents
<b>Model Section 2(35)(Y)</b> Solid Waste Facility	Includes accumulation, storage, handling, recycling, disposal, reduction, processing, burning, transfer or composting of solid waste that is subject to a permit issued by the Commissioner pursuant to Sections 22a-207b, 22a-208a, and 22a-208c of the CGS, except a potable water treatment sludge disposal area	Solid waste facilities, landfill, transfer stations, composting facilities, recycling and processing centers	Spills, leaks, and leachate from storage, processing and disposal of wastes	Various potential organic and inorganic contaminants
<b>Model Section 2(35)(Z)</b> Textiles Production	Includes dyeing, coating or printing of textiles, or tanning or finishing of leather, where activity involves the use, storage or disposal of hazardous materials	Textile manufacturers, tanneries	Storage/use of hazardous materials, equipment cleaning, and hazardous wastes	Strong acids and alkalis, dyes, solvents, metals and hydrocarbons
<b>Model Section 2(35)(AA)</b> Reconstituted Wood Production, Wood Treatment	Includes production of wood veneer, plywood, reconstituted wood or pressure-treated wood, that involves the use, storage or disposal of hazardous material	Wood treatment, reconstituted wood manufacturing	Chemical treatment of wood, chemical storage	Creosotes, tars, trichlorophenol, pentachlorophenol, metals, solvents, oils
<b>Model Section 2(35)(BB)</b> Pulp production	Includes pulp production processes that involve bleaching	Pulp, paper, cardboard manufacturers	Storage/use of hazardous and non-hazardous materials, large quantities of waste generation	Toxic organic and inorganic chemicals, metals, chlorinated hydrocarbons

<sup>1</sup> Please note: The intent of this table is to provide guidance, and the language of the regulation is simplified for ease of use. See the Model Municipal Regulation Section 2(35) for specific language.

<sup>2</sup> This is not an exhaustive list of land uses, just examples of the types of land use to clarify categories.

## 2 | Land Use Inventory

### 2.4 | Table of Potentially Regulated Businesses and Facilities (continued)

BUSINESS/FACILITY	POTENTIALLY REGULATED UNDER MODEL MUNICIPAL REGULATION SECTION:
Product Testing Facility	Model Section 2(a)(35)(Q)
Publisher	Model Section 2(a)(35)(U)
Pulp Manufacturer	Model Section 2(a)(35)(BB)
RCRA Large Quantity Generator	Model Section 2(a)(35)(P)
RCRA Treatment, Storage or Disposal Facility (TSDF)	Model Section 2(a)(35)(P)
Recreation Vehicle Sales, Service, Rental Facilities	Model Section 2(a)(35)(B), (D), (G)
Recycling Facility	Model Section 2(a)(35)(V), (Y)
Resin Cement Manufacturer	Model Section 2(a)(35)(W)
Resource Recovery Facility	Model Section 2(a)(35)(Y)
Rubber Manufacturer	Model Section 2(a)(35)(W)
Salt Storage Facility	Model Section 2(a)(35)(B), (D), (G), (X)
Stone – Finishing or Etching	Not regulated under APA Program
Storage of Hazardous Materials for Wholesale	Model Section 2(a)(35)(C)
Tank Farm	Model Section 2(a)(35)(C)
Textile Mill	Model Section 2(a)(35)(Z)
Transfer Station	Model Section 2(a)(35)(V), (Y)
Truck Sales, Service, Rental Facilities	Model Section 2(a)(35)(B), (D), (G)
Truck Wash	Model Section 2(a)(35)(G)
Trucking Company	Model Section 2(a)(35)(B), (D), (G)
University	Model Section 2(a)(35)(A), (B), (D), (K), (Q), (Y)
Vehicle Parts Salvage Yard	Model Section 2(a)(35)(E)
Volume Reduction Plant	Model Section 2(a)(35)(Y)
Wood, Production of Pressure-Treated, Wood Veneer, Reconstituted Wood	Model Section 2(a)(35)(AA)
Wood-Burning Facility	Model Section 2(a)(35)(Y)

### Aquifer Protection Area Inventory Form

Well Field Name \_\_\_\_\_ APA ID \_\_\_\_\_

Facility Name \_\_\_\_\_

Facility Address \_\_\_\_\_

\_\_\_\_\_

Regulated Activity Type \_\_\_\_\_

Regulated Activity Code \_\_\_\_\_

Municipal Sewer or Septic (circle one)

Owner of Property (Name and Address) \_\_\_\_\_

\_\_\_\_\_

Active or Inactive (circle one) If inactive, date became inactive: \_\_\_\_\_

GPS Coordinates: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Download this document at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection)





# Aquifer Protection Area Mapping

# 3 | Aquifer Protection Area Mapping

Aquifer Protection Area maps show the boundaries of the areas supplying groundwater to Connecticut’s largest public water supply wells. These are wells in stratified drift that serve more than 1,000 people. Mapping the contributing areas is the responsibility of the water company that owns the wells.

Groundwater and its movement can’t be seen on the land surface, making groundwater mapping complicated, expensive, and time consuming. Therefore, the mapping is completed in two phases: (1) Level B, or preliminary mapping; and (2) Level A, or final mapping.

The Level B mapping provides only a rough estimate of the contributing areas to the well field. (See Figure 7 below.) This mapping is based upon very limited information about the wells. It is essentially a circle around the well based on the pumping rate, which is extended uphill to encompass areas that topographically drain down into the circle. The Level B mapping was completed for most existing well fields in the 1990s and distributed to the towns for planning and inventory purposes only, as it was not an accurate boundary to be used as a regulatory boundary.

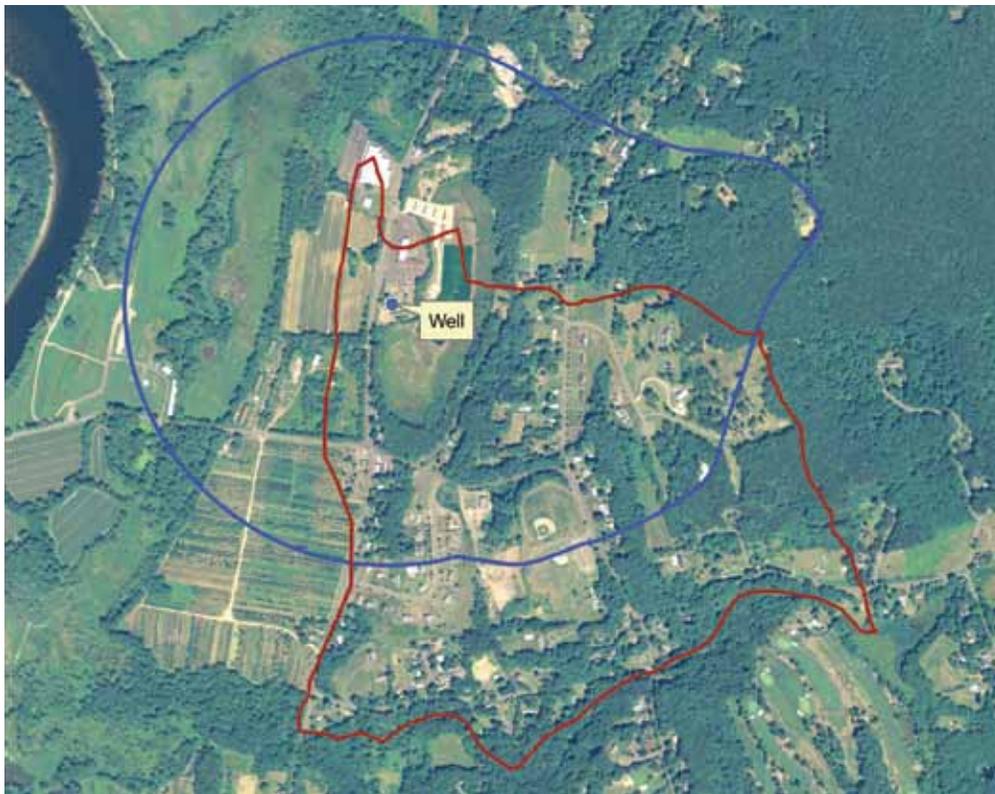
The Level A mapping is a refinement of Level B mapping, and replaces Level B once completed. The Level A mapping is based

on extensive site-specific data and groundwater modeling. This mapping must be conducted in accordance with DEEP’s mapping regulations [Section 22a-354b-1 of the RCSA], and DEEP must review and approve it. The shape and size of the area encompassed by the Level A mapping can be significantly different from the Level B area. (See Figure 7 below.)

The Level A mapping defines the regulated Aquifer Protection Area. When the Level A mapping is completed and approved, an approval letter is sent by DEEP to the water company and the municipal Aquifer Protection Agency receives a copy. This serves as an alert that Agency action will be needed shortly. A separate, formal notification letter is subsequently sent to the town. The notification letter outlines the steps the municipality must take and sets implementation deadlines for the town to establish their local Aquifer Protection Area program.

## 3.1 | Delineation of Aquifer Protection Areas

When DEEP sends the town the formal notification of mapping approval, the approved Level A mapping will be included. The Agency must delineate each Aquifer Protection Area boundary on the town’s official Zoning District Map in accordance with



**Figure 7. Level A and Level B Aquifer Protection Areas.** This map shows both the Level B (Preliminary) indicated by the blue line, and the Level A (Final) mapping indicated with a red line, of an Aquifer Protection Area. The Level B is a rough approximation of the area from which the well is pulling groundwater, with the well essentially centered in the area. The Level A is based on more extensive site-specific information which takes into account the nearby streams and the extent and properties of the aquifer materials. The Level A area is significantly different in shape and location and much more accurately shows the areas contributing groundwater to the well.

# 3 | Aquifer Protection Area Mapping

CGS § 22a-354n. If no Zoning District Map exists, the Agency must delineate the Aquifer Protection Area on the town's Inland Wetlands and Watercourses Map.

The delineation must include the area as shown on Level A maps approved by DEEP. The DEEP provides maps to towns at a 1:12,000 scale, as this is a typical zoning map scale. However, the DEEP can provide maps at any scale the town requests. Electronic copies of the maps are available for download from DEEP's website on the GIS download page at [www.ct.gov/deep/gis](http://www.ct.gov/deep/gis).

The map delineation must be completed within four (4) months of DEEP's notice that Level A mapping is approved. [RCSA Sec. 22a-354i-2]

There may be multiple Aquifer Protection Areas in a town. The mapping for each will not necessarily be completed at the same time, as each well field and Aquifer Protection Area is considered independently. Therefore, the town may need to conduct the delineation procedure more than once, depending on the number of Aquifer Protection Areas, the timing of map completion, and development of future well fields.

### 3.1.1 Delineation Procedures

Once DEEP provides the Level A mapping to the town, the municipal Aquifer Protection Agency must adopt the APA within one hundred twenty (120) days after notification. Because the mapping is based on numerical groundwater modeling, the boundaries do not necessarily follow physical features visible on the land surface, and may cut across property lines, roads, streams, etc. Therefore, the delineation of the boundaries may be done in one of two manners:

- (1) the boundary line on the Level A map can be transferred to the local maps exactly as provided by DEEP, or
- (2) the boundary line may be extended out to the nearest identifiable physical feature to clarify the location for administrative purposes.

These options are described in more detail below. In either case, the boundary must be delineated on the Zoning District Map, or if no Zoning District Map exists, then it must be delineated on the town's Inland Wetlands and Watercourses map. If the Aquifer Protection Agency is not the Agency with jurisdiction over the Zoning map (or Wetlands map if appropriate), there must be cooperation between the two agencies to accomplish the delineation.

#### Option 1: Delineation of APA Boundaries as Provided by DEEP

Delineating the Aquifer Protection Area boundaries consists of transferring the Level A mapping boundaries onto the town's Zoning map. When the boundaries are transferred exactly as provided by DEEP, the adoption process should follow the Regulations of Connecticut State Agencies [RCSA

Sec. 22a-354i-2]. The "Aquifer Protection Area Map Delineation Flow Chart" indicates the necessary actions and timeframes to accomplish the delineation, and it may be used as a checklist for the adoption process. Adopting the boundaries as provided by DEEP is a simpler administrative process than Option 2 below.

#### Option 2: Extension of APA Boundaries for Administrative Purposes

As mentioned above, APA boundaries do not necessarily follow property lines or identifiable physical features. In order to clarify the location of an APA boundary, the Agency may extend the boundary to coincide with the nearest property line, municipal boundary or topographic feature. The extension must, at a minimum, fully encompass the APA bounded by the approved Level A mapping, but shall not exceed the distance necessary to clarify the location of the APA or facilitate the administration of regulations. When APA boundaries are extended for administrative purposes, the adoption process must follow RCSA Sec. 22a-354i-4. The "Extension of APA Boundaries Flow Chart" indicates the necessary additional actions and timeframes to accomplish the extended boundary delineation. The APA boundary may not be extended without written approval of the Commissioner, and requires more extensive public notice than adopting the map as provided by DEEP.

DEEP urges towns to carefully consider any proposed boundary extension and to minimize extensions as much as possible. While boundary extension can facilitate administration of the program, such extensions are vulnerable to challenge by the affected property owners. Zoning district lines and property lines should be examined to see how well they match the APA

## Aquifer Protection Area vs. Zoning

The delineated Aquifer Protection Area drawn on the town's official zoning map is subject to local Aquifer Protection Area regulations.

The APA is *not* a typical zoning district and it is *not* part of local zoning regulations. Unlike zoning, existing land use activities as well as future land use activities are regulated under the APA program.

The statutory authorities and regulations for zoning and Aquifer Protection Areas are separate and distinct. It is therefore very important to differentiate the Aquifer Protection Area from a zoning district.



# 3 | Aquifer Protection Area Mapping

boundary. These lines, road boundaries, topographic features, or easily measurable distances from any such features may be used to extend the boundaries. Existing land use conditions are also an important consideration. For example, in residential areas where the APA regulations have relatively little impact, extending the boundary to existing property lines may simplify administration. However, care should be used, particularly where the boundary line runs through a business property and the portion of the property outside the boundary is large enough to be used for other purposes. In that case, if the boundary line were taken directly from the Level A map, the business could conceivably install new regulated uses on their property outside the APA. The business could therefore reasonably argue against such a boundary extension.

## 3.1.2 Notice Requirements

The Aquifer Protection Agency must carry out the proper public notice requirements for the delineation. The notice should appear in the newspaper and include a map or a detailed description of the Aquifer Protection Area and the name, address and telephone number of a representative of the municipal Aquifer Protection Agency who maybe contacted for more information. Examples of notices are included at the end of this section.

## 3.1.3 Availability of Aquifer Protection Area Map

A map of the delineated Aquifer Protection Area boundaries must be made available for inspection in the Office of the Town Clerk or the Agency during regular office hours.

## 3.1.4 Effective Date of Map

The effective date of the map is important in that it sets the date for the eligibility of facilities to register their land use activities. The effective date is the date of publication of the map in the newspaper or otherwise established by the Agency. To verify completion of the delineation process, send a copy of the map with the effective date to the DEEP Aquifer Protection Area Program at:

Aquifer Protection Area Program  
CT Department of Energy and Environmental Protection  
Bureau of Water Protection and Land Reuse  
79 Elm Street  
Hartford, CT 06106-5127

## 3.1.5 Requesting Maps of Special Scale or Electronic Format

Final (Level A) maps will be (or have been) provided to towns as the mapping is approved by DEEP. However, if the town needs an additional copy, a special scale to match the existing zoning map, or would like the map in electronic format (as a GIS shape file), please contact DEEP at 860-424-3020.

## 3.1.6 Security Issues

Specific water supply well locations should not be shown on delineated maps or made available to the general public, for

security-related reasons. However, regulated entities must be able to determine if they are within 500 feet of the well field, because commercial fuel oil tanks are only regulated under the program if they are within 500 feet of the well field. The DEEP can provide a map to the town showing a 500-foot radius line, if requested. Because the approximate location of the supply wells could be determined from this information, it should not be publicly disseminated. The town may either:

- (1) Make a separate map showing the 500-foot line that is kept on file at the Town Clerk or the Agency's office and may not be copied or borrowed. The businesses within the APA would be required to come in and check the map to determine if they are located within the 500-foot line; or
- (2) The Agency and water utility can review the inventory of land uses within the 500-foot area. Because the area is relatively small and the water company typically owns much of the land within that area, there may be very few facilities within the 500-foot area. It may therefore be more efficient (for both the registrants and the Agency staff) for Agency staff to notify potential registrants that are within the 500-foot area. Additional security issues regarding the mapping can be referred to DEEP or to the water company that owns the wells.

## 3.2 | Challenges to Aquifer Protection Area Boundaries

In accordance with CGS Section 22a-354n, no person may challenge the boundaries of the Aquifer Protection Area at the local level unless the challenge is based solely on a failure by the Agency to properly delineate the boundaries in accordance with state regulations. Any other challenge must be in the form of a petition to the DEEP in accordance with the mapping regulations under RCSA Sec. 22a-345b-1(j).

## 3.3 | Revisions of Aquifer Protection Areas

Water companies may be required to revise the mapping of APAs if, for example, they are adding a new well, removing or decommissioning a well, or if new data on the aquifer becomes available. These situations are infrequent, but if they occur, the water company must first submit a plan for revising the mapping and then the revised mapping from DEEP for DEEP's approval. The Agency would receive a copy of the approval of the plan for revising the mapping, which would serve as notice to the town that the mapping is in the process of being revised. The timeframe between approval of the plan and approval of the revised mapping is typically six months to a year. DEEP will notify the Agency when the revised APA mapping is approved. The Agency will then need to adopt the revised APA and delineate the revised area by following the formal procedures outlined in the above paragraphs.

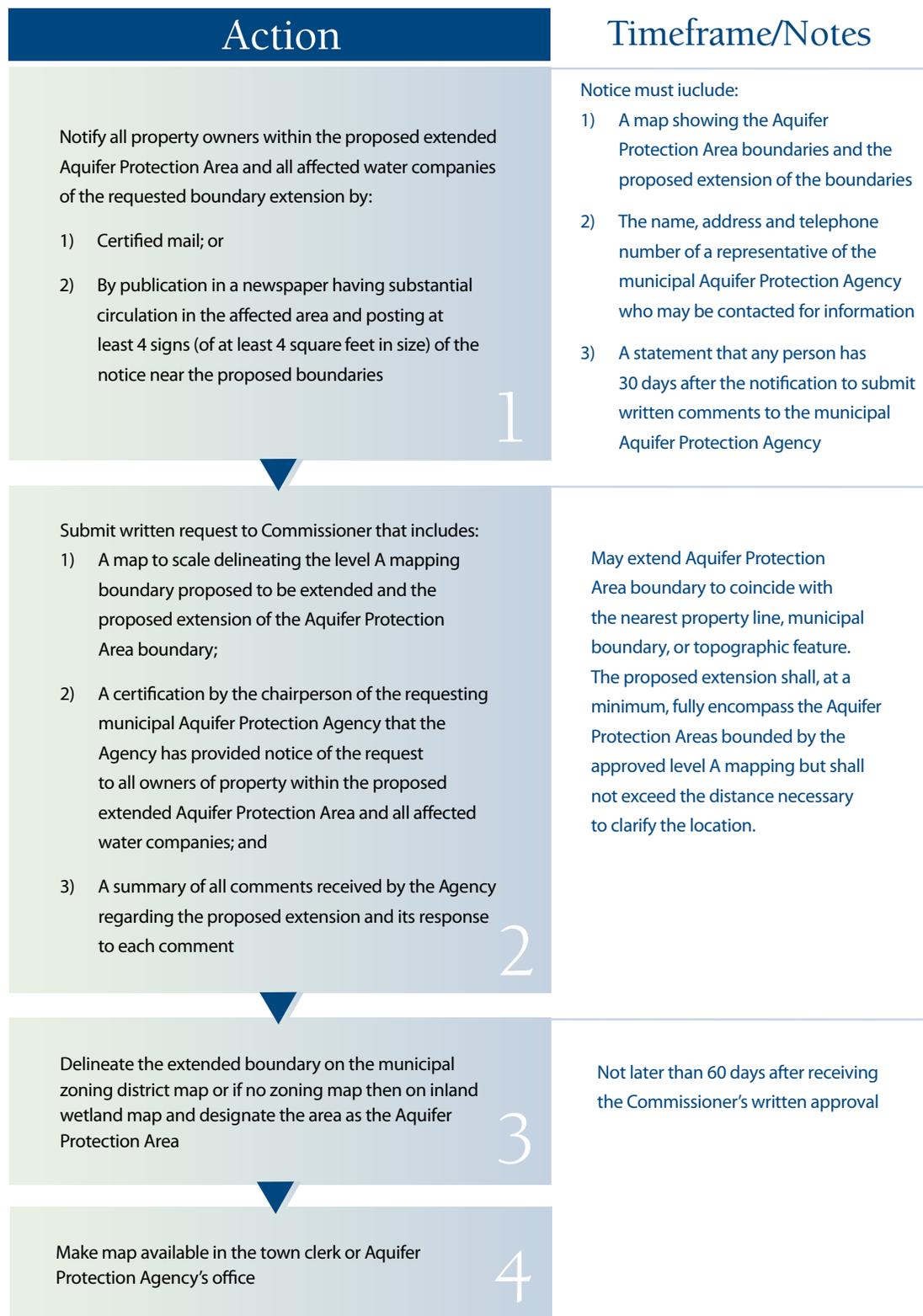
# 3 | Aquifer Protection Area Mapping

## 3.4 | APA Map Delineation Flow Chart [RCSA Sec. 22a-354i-2]

Action	Timeframe/Notes
<p><b>Place boundary</b> on municipal zoning map (or if no zoning map, then wetlands map) and include an effective date of map.</p> <p>1</p>	<p>Delineation must be completed for each well field not later than 120 days after being notified by DEEP of Level A mapping approval.</p> <p>Effective date of the map is the date of publication in the newspaper or another date established by the Agency.</p>
<p><b>Publish notice</b> of delineation in newspaper including: 1) A map or a detailed description of the APA. 2) Name, address, telephone number of a representative of the municipal Aquifer Protection Agency who may be contacted for more information.</p> <p>See example notice at the end of this section.</p> <p>2</p>	
<p><b>Verify delineation</b> of Aquifer Protection Area on zoning map; send a copy of the map with the effective date to DEEP.</p> <p>Send map to: Aquifer Protection Area Program CT DEEP, WPLR 79 Elm Street Hartford, CT 06106-5127</p> <p>3</p>	
<p><b>Make map available</b> in the office of the town clerk or Agency.</p> <p>4</p>	

# 3 | Aquifer Protection Area Mapping

## 3.5 Extension of APA Boundaries Flow Chart [RCSA Sec. 22a-354i-4]



# 3 | Aquifer Protection Area Mapping

## 3.6 | Examples of Public Notices for Map Delineations of Aquifer Protection Area Boundaries

The Aquifer Protection Agency must carry out the proper public notice requirements for the delineation. The notice should appear in the newspaper and include a map or a detailed description of the Aquifer Protection Area and the name, address and telephone number of a representative of the municipal Aquifer Protection Agency who may be contacted for more information.

Figure 8. Example of a public notice with map image.

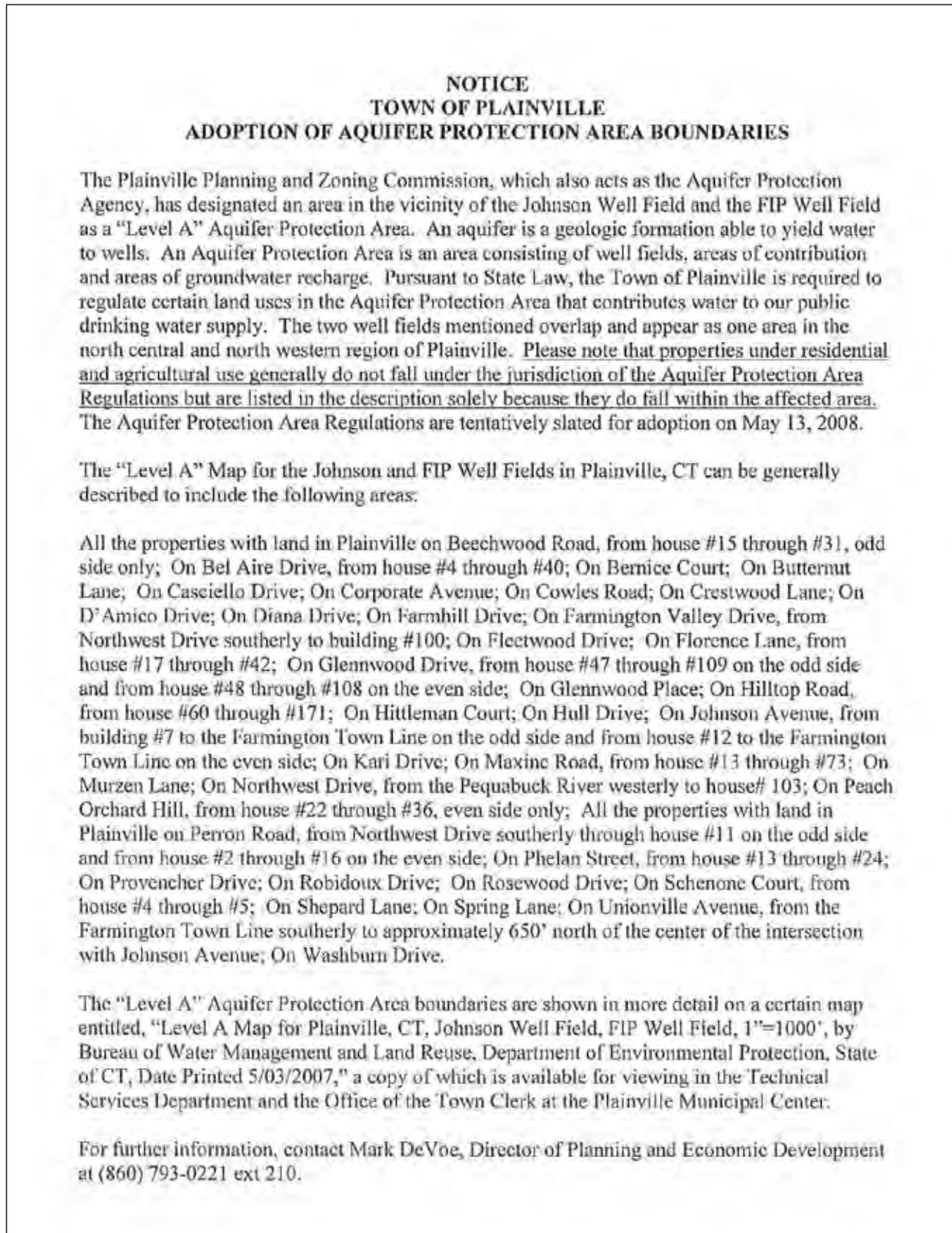
**LEGAL NOTICE - CITY OF BRISTOL**  
**NOTICE OF DELINEATION OF**  
**UPPER AND LOWER WHITE BRIDGE/MIX STREET WELL FIELDS**

In accordance with the State of CT Aquifer Protection Area Program (CGS §22a-354a to §22a-354bb), the Bristol Zoning Commission, acting as the city's duly authorized Municipal Aquifer Protection Agency, hereby delineates the Aquifer Protection Area for the Upper and Lower White Bridge and Mix Street well fields on the City of Bristol's Official Zoning Map, as shown on the map below:

A larger-scale copy of this map is available for public inspection at the Land Use Office, City Hall, 111 North Main St., Bristol, Monday-Friday, 8:30 AM to 5:00 PM, and online at: [www.bristolct.gov/aquiferprotectionagency](http://www.bristolct.gov/aquiferprotectionagency)

For more information, contact Alan L. Weiner, City Planner, at Bristol City Hall, 111 North Main Street, Tel # : (860) 584-6225, E-Mail: [alanweiner@bristolct.gov](mailto:alanweiner@bristolct.gov)

Figure 9. Example of a public notice with text only.





# Regulations

# 4 | Regulations

## 4.1 | Overview

To regulate aquifer protection areas, the Aquifer Protection Agency must adopt aquifer protection regulations as required by CGS § 22a-354p. Since the APA program is a pollution prevention program, it is focused on minimizing the contaminant threats from land use activities that use hazardous materials in critical public water supply aquifer areas. The regulations only apply in the land areas that feed groundwater to the public supply wells in the program. Twenty-eight land use activities fall under the program, ranging from gas stations to metal finishers. These are land use activities that pose the greatest risk of contamination from accidental spills, leaks or mismanagement of the hazardous materials used as part of their operation. The table of regulated activities in the program can be found in the Land Use Inventory section of the manual. For these twenty-eight land use activities, new uses are prohibited from locating in the Aquifer Protection Areas. Existing land uses activities are required to register under the program and adhere to best management practices to minimize the threat of contamination. The Department was required to develop land use regulations at the state level to regulate these activities. The affected municipalities must then each adopt local regulations which are at least as stringent as the state regulations. The municipal process and requirements are discussed below.

It is important to note that aquifer protection regulations are not zoning regulations. The two programs regulate existing uses and future uses quite differently. Aquifer Protection Area authority and regulations are separate and distinct from zoning and are enacted as stand-alone regulations to protect state-identified aquifer areas.



### Aquifer Protection Area regulations must provide for:

1. the manner in which the boundaries of aquifer protection areas shall be established and amended or changed;
2. the form for an application to conduct regulated activities within the area;
3. notice and publication requirements;
4. criteria and procedures for the review of applications; and
5. administration and enforcement.

Conducting a public hearing is a required step in the adoption of the local Aquifer Protection regulations. The regulations must be consistent with the state regulations, and the adopted regulations must be approved by the DEEP before they become effective.

## 4.2 | The Adoption Process

The adoption process must be completed within 180 days from DEEP's notice to the municipality that Level A (final) Aquifer Protection Area mapping has been completed. Care should be taken to ensure that proper notices are provided to the public, DEEP, and the water company/companies. The Aquifer Protection Area Regulations Adoption Flow Chart found at the end of this section indicates the required actions and timeframes necessary to complete the regulation adoption process.

### The process includes:

- Drafting the proposed Aquifer Protection Area regulations;
- Scheduling the public hearing;
- Sending the proposed regulations to DEEP, the water company and the town clerk, along with notice of the public hearing;
- Conducting the public hearing, considering public comment and voting on the regulation adoption;
- Submitting the final regulation to DEEP for approval; and
- Establishing an effective date once DEEP approval is received.

# 4 | Regulations

## 4.3 | Drafting the Proposed Regulations

### 4.3.1 Model Regulations

CGS § 22a-354l required DEEP to prepare a model municipal aquifer protection ordinance<sup>1</sup>, consistent with regulations adopted under CGS § 22a-354i. The “Model Municipal Regulations for Aquifer Protection Areas” (Model) was prepared by DEEP to help municipal agencies adopt regulations consistent with the statutory requirements and state regulations. A copy of the Model is in the Model Documents section of this manual, and a customizable version is available online at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection). DEEP strongly encourages use of the Model to ensure consistency with the state regulations.

DEEP has developed a reference document to provide the reader with a quick annotated reference to the statutory and regulatory citations used in the Model, and provides explanations and clarifications as needed. The reference document is arranged by section of the model regulations in which the citation occurs. Municipalities may use this document as a companion to the regulations and modify the section numbers to coincide with their local regulations. DEEP will revise the document if there are changes to the statutory and regulatory language of the citations or other references. Some municipalities have asked about adopting the language in the reference document as part of their local regulations since the “plain language” is easier to understand. However, if something in the referenced citations is changed by the legislature, it would necessitate going through the formal process to revise the local regulations. DEEP therefore encourages municipalities to adopt the model regulations with the statutory and regulatory citations instead of incorporating the language of the reference document. The reference document can be found in the Model Documents section of this manual.

### 4.3.2 Consistency with State Regulations

The municipal regulations must be consistent with and at least as stringent as state regulations. Although CGS § 22a-354p(f) allows local aquifer protection regulations to provide a greater level of protection than the state regulations, such authority is limited in scope and must be related to the purpose of groundwater protection. The municipality’s ability to change the model regulation is limited to those matters specified in CGS § 22a-354p(a):

1. the manner in which the boundaries of Aquifer Protection Areas shall be established and amended or changed;
2. the form for an application to conduct regulated activities within the area;
3. notice and publication requirements;
4. criteria and procedures for the review of applications; and
5. administration and enforcement.

The Aquifer Protection Act does not authorize municipalities to alter the scope of regulated activities. The authority rests solely with the DEEP Commissioner under CGS § 22a-354i. The Commissioner determines the scope of regulated activities, exceptions or conditions for non-regulated activities, exemptions, and best management practices. When considering more stringent local regulations, care must be taken to ensure they are limited to matters specified in CGS § 22a-354p(a) and are reasonably related to the protection of groundwater. Any municipality considering a greater level of protection than provided in the DEEP Model is advised to discuss those with the DEEP staff first before formally proposing regulations.

Note: Many towns currently have zoning regulations in place for the protection of aquifers. Often, these local aquifer zones are much more extensive than the areas falling under the state Aquifer Protection Program because they cover areas that may be used for future water supply development. Some municipalities are opting to keep the aquifer zones in place; others may opt to replace the aquifer zone with the Aquifer Protection Area. DEEP recommends coordinating zoning with Aquifer Protection Area regulations as necessary for interim aquifer protection or future supply aquifers. DEEP can provide further assistance on this topic.

## Coordinating Zoning

Many towns currently have zoning regulations in place for the protection of aquifers. These zones may include areas not covered by the APA program.

DEEP recommends coordinating zoning with Aquifer Protection Area regulations as necessary to provide protection for future supply aquifers.

DEEP can provide further assistance on this topic.



<sup>1</sup>DEEP recognizes the ordinance as regulations.

## 4 | Regulations

### 4.3.3 Setting Fee Schedules

The Agency has the authority to set a fee schedule to help with costs associated with administering the program. Fees may include registration and permit application fees, fees for reviewing materials management and stormwater management plans, and fees for holding public hearings. The amount of the fee may be sufficient to cover the reasonable cost of reviewing and acting on applications and petitions, including, but not limited to, the costs of certified mailings, publications of notices and decisions, and a monitoring compliance with permit conditions. The Agency may include the fee schedule in the proposed regulations or may cite an ordinance or regulation that sets the fees. Examples of fee schedules for several towns are provided on the following pages.

When setting a fee schedule, the Agency may want to consider the following list of associated costs of implementing the aquifer protection program. These include:

1. Notice and public hearing to appoint APA agency
2. Notice and public hearing of delineation of map boundary
3. Notice and public hearing of municipal regulations
4. Notification and confirmation of mailings to registrants
5. Process and review of registrations
6. Verification of registration information (site visits)
7. Review of stormwater plans and materials management plans, if required
8. Collection and processing of fees
9. Processing and review of permits (may be costly due to review of stormwater and materials management plans; infrequent and few expected per year)
10. Notice and public hearing of permits
11. Collection and processing of fees
12. Training – staff time to attend/travel/out of office
13. Enforcement

An additional optional cost may be the extension of map boundary.

Note: The costs listed above are highly dependent on the size of the area and the number of regulated activities in the area (the inventory).

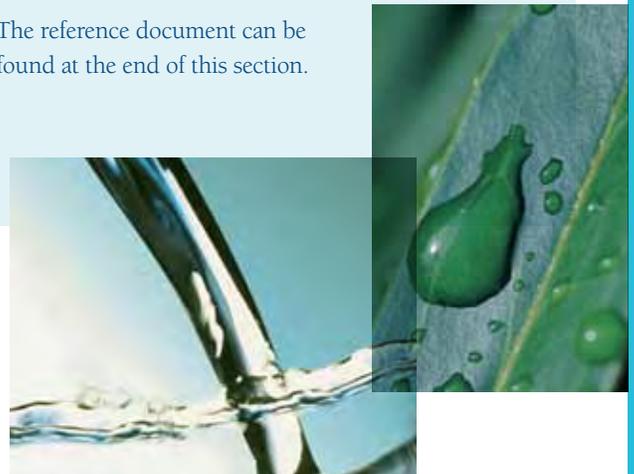
## Reference Document for Model Municipal Aquifer Protection Area Regulations

The DEEP has developed a reference document to provide the reader with a quick annotated 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 the section of the model regulations in which the citation occurs.

Municipalities can use the document as a companion to the regulations and modify the section numbers to coincide with their local regulations, if necessary. DEEP will revise the reference 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 the 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.

The reference document can be found at the end of this section.



# 4 | Regulations

## 4.4 | Examples of Fee Schedules

Figure 10. Example of a fee schedule.

TOWN OF BOLTON'S FEE SCHEDULE			
FACILITY SIZE			
	Small (< 1 acre)	Medium (1-5 acres)	Large (> 5 acres)
<b>Registrations:</b>			
Industrial	\$100	\$200	\$300
Commercial	\$100	\$200	\$300
Other	\$100	\$200	\$300
<b>Permits:</b>			
Industrial	\$100	\$200	\$300
Commercial	\$100	\$200	\$300
Other	\$100	\$200	\$300
<b>Materials Management Plan Reviews</b>	\$100	\$200	\$300
<b>Stormwater Management Plan Reviews</b>	\$100	\$200	\$300
<b>Public Hearing</b>	\$200	\$200	\$200
<b>Facility Inspection/Monitoring</b>	\$150	\$150	\$150
<b>Regulation Petition</b>	\$100	\$100	\$100
<b>Transfer Fee</b>	\$50	\$50	\$50

# 4 | Regulations

## 4.4 | Examples of Fee Schedules (continued)

**Figure 11. Example of a fee schedule.**

TOWN OF KILLINGLY'S FEE SCHEDULE			
FACILITY SIZE			
	Small (< 1 acre)	Medium (1-5 acres)	Large (> 5 acres)
<b>Registrations:</b>			
Industrial	\$250	\$375	\$550
Commercial	\$250	\$375	\$550
Other	\$250	\$375	\$550
<b>Permits:</b>			
Industrial	\$300	\$550	\$800
Commercial	\$300	\$550	\$800
Other	\$300	\$550	\$800
<b>Materials Management Plan Reviews</b>	\$150	\$200	\$250
<b>Stormwater Management Plan Reviews</b>	\$200	\$300	\$350
<b>Combined SMP and MMP Reviews</b>	\$200	\$300	\$350
<b>Public Hearing</b>	\$250	\$250	\$250
<b>Facility Inspection/ Monitoring</b>	\$5.00 per each % of impervious surface	\$10.00 per each % of impervious surface	\$15.00 per each % of impervious surface
<b>Regulation Petition</b>	\$250	\$250	\$250
<b>Transfer of Registration or Permit</b>	\$75	\$75	\$75

# 4 | Regulations

## 4.4 | Examples of Fee Schedules (continued)

**Figure 12. Example of a fee schedule.**

TOWN OF SOUTHBURY'S FEE SCHEDULE			
FACILITY SIZE			
	Small (< 1 acre)	Medium (1-5 acres)	Large (> 5 acres)
<b>Registrations:</b>			
Industrial	\$100	\$200	\$300
Commercial	\$100	\$200	\$300
Other (e.g., Institutional)	\$100	\$200	\$300
<b>Permits:</b>			
Industrial	\$500	\$750	\$1,000
Commercial	\$500	\$750	\$1,000
Other (e.g., Institutional)	\$500	\$750	\$1,000
<b>Materials Management Plan Reviews</b>	\$250	\$350	\$450
<b>Stormwater Management Plan Reviews</b>	\$250	\$450	\$650
<b>Public Hearing</b>	Cost of Notice	Cost of Notice	Cost of Notice
<b>Facility Inspection/Monitoring</b>	\$200	\$300	\$400
<b>Regulation Petition</b>	\$100	\$150	\$200
<b>Transfer of Registration or Permit</b>	\$100	\$100	\$100

Examples of ordinance citations:

### City of Bristol's Fee Schedule

The Agency shall adopt a schedule of fees for the administration of its activities under these Regulations, including registrations, permit applications, inspections, reviews, and transfers.

### Town of Hamden's Fee Schedule

Registration or permit application fees shall be as set forth in Section 33.67A of the Town of Hamden Code of Ordinances.

# 4 | Regulations

## 4.5 | Public Hearing Notice

It is essential that public hearing notices be published properly. The Aquifer Protection Agency must publish notice of the time and place of the hearing in the form of a legal advertisement in a newspaper having substantial circulation in the municipality. The notice must appear at least twice, with at least 2 days intervening between appearances. The first publishing must be not more than twenty-five (25) days nor less than fifteen (15) days before the hearing. The second publishing must be not less than 2 days before the hearing. Example notices can be found at the end of this section.

The Agency must file a copy of the proposed regulation in the town clerk's office for public inspection at least ten (10) days before the hearing. The Agency may also publish the proposed regulations in full in the newspaper.

The Agency must provide a copy of the notice and the proposed regulations or amendments to the town clerk, the DEEP Commissioner, and any affected water company at least 35 days before the hearing. DEEP will provide initial comments on the regulations prior to the public hearing.

### Send DEEP copies to:

Aquifer Protection Area Program  
Connecticut Department of Energy and Environmental Protection  
Bureau of Water Protection and Land Reuse  
79 Elm Street  
Hartford, CT 06106-5127

Water company contact information can be found on the DEEP website at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection).

## 4.6 | Conducting a Public Hearing

### 4.6.1 Format

When conducting a public hearing on the Municipal Aquifer Protection Area Regulations, the agency proceedings may be informal, as strict rules of evidence do not apply. However, the agency must comply with "rules of fundamental fairness" (term from court decision), essentially:

1. Adequate notice of the public hearing must be provided;
2. Parties have a right to produce relevant evidence, to cross-examine witnesses and to offer rebuttal testimony;

3. Parties must have an opportunity to know all the facts on which the agency is going to rely;
4. The decision must be made by an impartial, unbiased agency; and
5. No receipt of evidence should take place outside of the hearing process ("ex parte" receipt of evidence is prohibited).

The Zoning Commission or Inland Wetlands Commission in town likely has a format for holding public hearings, and the format for the Agency should be similar. Your town attorney may also have some suggestions on hearing conduct.

### 4.6.2 Making the Record

The "record" is generally the only thing a judge will review if an appeal is brought from an agency decision. The record consists of:

1. the regulations;
2. all maps and documentation related to the regulations;
3. all evidence received by the agency at the hearing;
4. all correspondence, reports, notes and emails related to the regulations;
5. the notice of the hearing;
6. the decision of the agency on the regulations;
7. the minutes of the hearing and site walk(s); and
8. the transcripts of the hearing, if any.

The Attorney General's Office strongly urges that all public hearings be taped.

It is important to disclose if an individual commissioner has expertise on which the rest of the agency will rely (engineer, geologist, soil scientist, etc.). This must be disclosed on the record for each hearing and other relevant agency proceedings. It is also important to deliberate out loud, discussing what facts are crucial to the decision of the Agency. Finally, it is good practice and always correct to issue all decisions in writing.

Any comments received during the hearing should be specifically addressed in making the decision.

# 4 | Regulations

## 4.7 | Formal Approval by DEEP

After the public hearing, the Agency must send the adopted regulations to DEEP for formal approval. DEEP will review the adopted regulations for consistency and either formally approve them or reject them with a timeframe for re-submission. DEEP is required to provide the Agency with written notice of approval or the reasons the adopted municipal regulations cannot be approved within sixty (60) days of receipt in accordance with Connecticut General Statutes (CGS) § 22a-354p(f).

### Send DEEP copies to:

Aquifer Protection Area Program  
Connecticut Department of Energy and Environmental Protection  
Bureau of Water Protection and Land Reuse  
79 Elm Street  
Hartford, CT 06106-5127

## 4.8 | Effective Date of Regulations

The adopted regulations are not effective unless the Commissioner of DEEP determines that they are reasonably related to the purpose of groundwater protection and are not inconsistent with the state regulations. Once DEEP approves the regulations, the Agency sets the effective date of the regulations and files them in the office of the Agency or the town clerk. The Agency may also choose to set the effective date at the time the regulations are adopted, but keeping with the timeframes, must set the effective date sixty (60) days later so as to allow DEEP the time to formally approve the regulations.

## 4.9 | Amendments to Regulations

Municipal Aquifer Protection Area Regulations may be amended, changed or repealed (CGS § 22a-354p). It may be necessary to amend the regulations if:

1. State statute or regulations are amended such that the law affects the municipal regulations. DEEP will notify the municipality if this occurs; or
2. If the Agency is petitioned to change the regulations. All petitions must be submitted in writing on a form from the Agency. The Agency must consider the petition at a public hearing within ninety (90) days after receipt of the petition and act upon the changes requested in the petition within sixty (60) days after the hearing. The petitioner may consent to extension of the periods provided for a hearing and for adoption or denial or may withdraw such petition. It is important to note that an amendment in response to a statutory change under (a) above is not a petition.

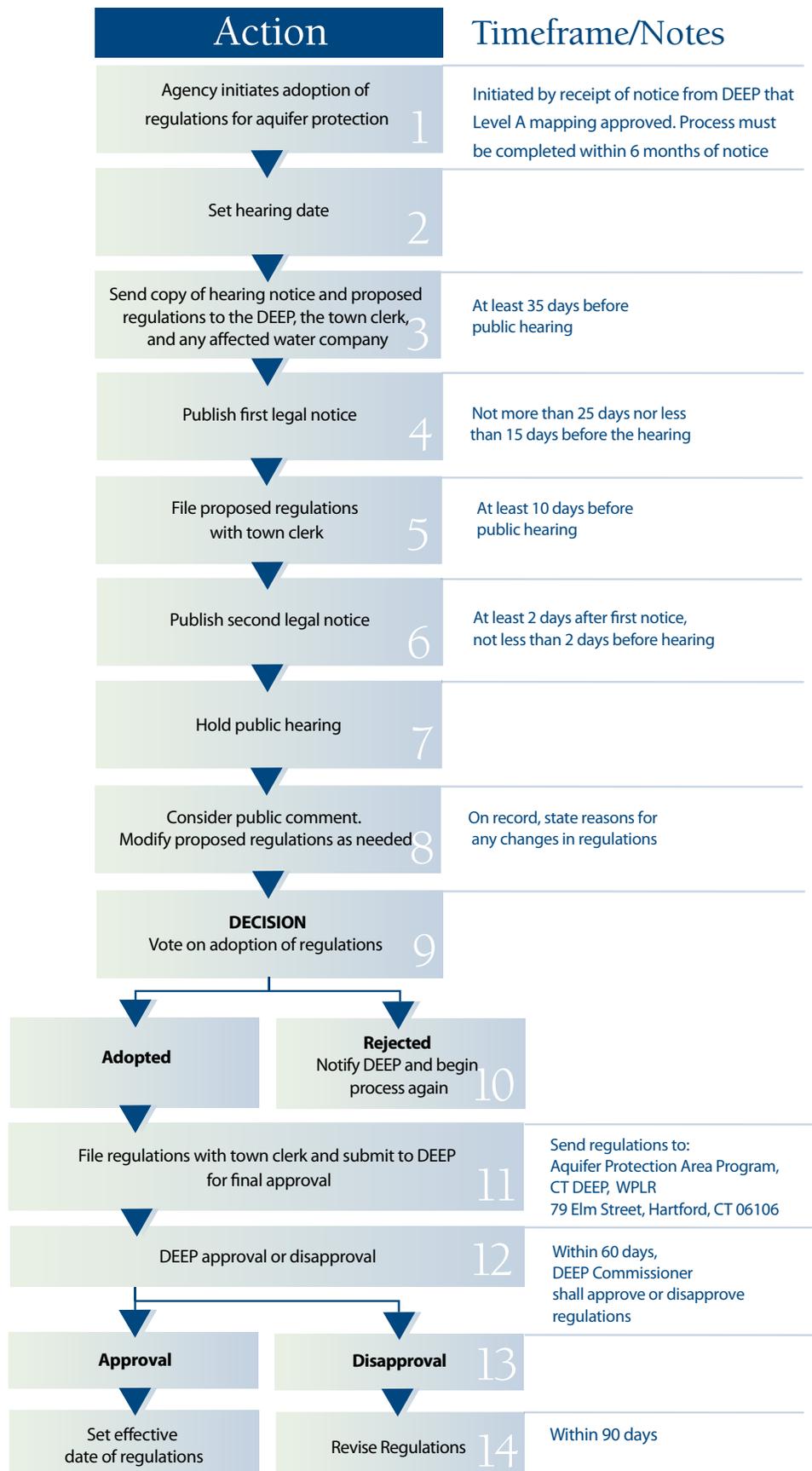
Changes to the Municipal Aquifer Protection Regulations must follow the same process as that for adopting regulations, including holding a public hearing, following the same notification process, and receiving the approval of DEEP. Changes to the regulations become effective as established by the Agency and they must file a copy of the regulation or change in the office of the town clerk. Whenever an Agency makes a change in regulations, it must state upon its records the reason why the change was made.

A flow chart for the amendment process is provided at the end of this section.

# 4 | Regulations

## 4.10 | Regulation Adoption Flow Chart

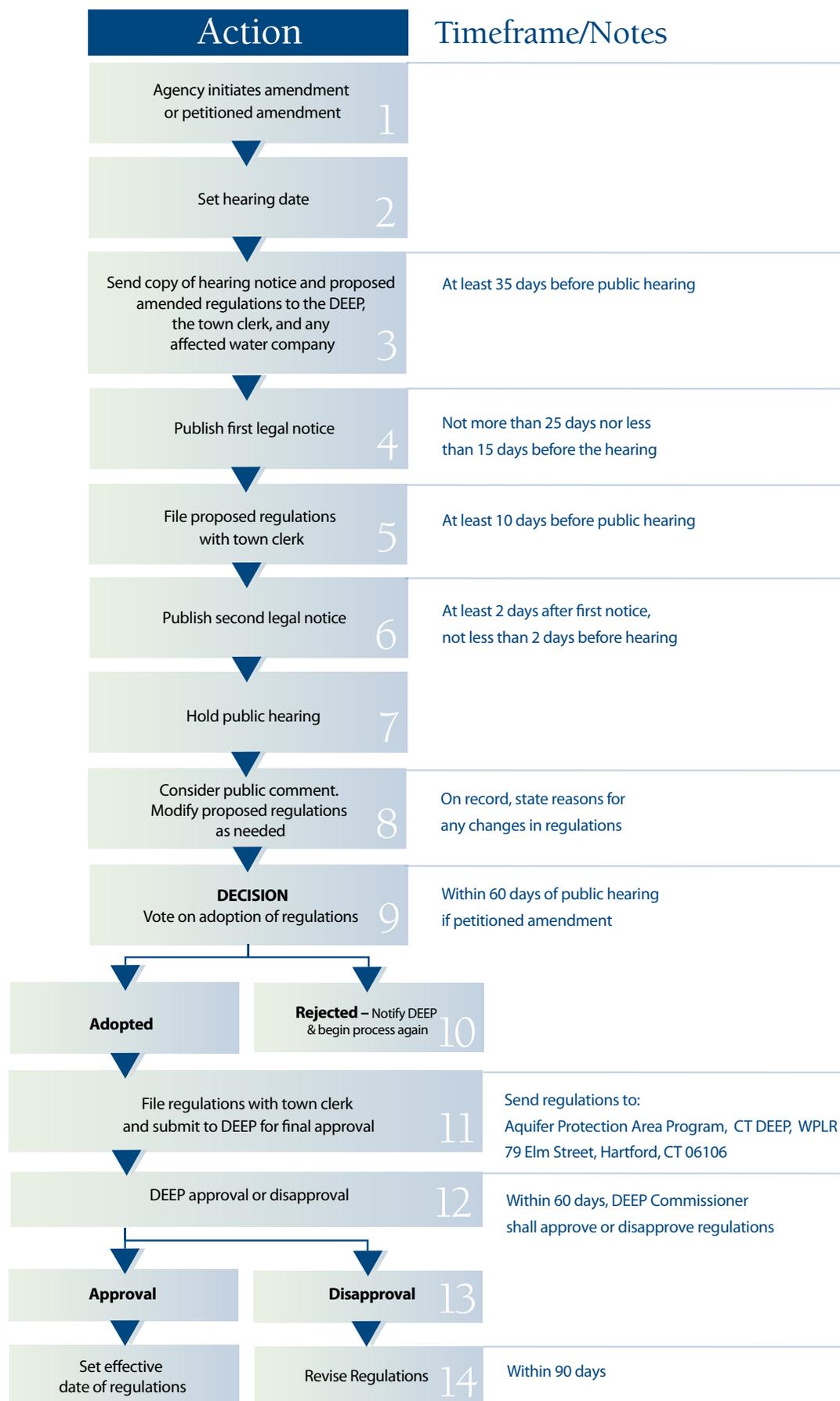
[CGS § 22a-354p and RCSA Sec. 22a-354i-3]



# 4 | Regulations

## 4.11 | Regulation Amendment Flow Chart

[CGS § 22a-354p and RCSA Sec.22a-354i-3]



# 4 | Regulations

## 4.12 | Examples of Public Notices for Aquifer Protection Area Regulations Adoption

The Aquifer Protection Agency must carry out the proper public notice requirements for the adoption of Aquifer Protection Area regulations. The notices should be published with the time and place of the hearing in the form of a legal advertisement in a newspaper having a substantial circulation in the municipality. The notice must appear at least twice, with at least 2 days intervening between appearances. The first publishing must be not more than twenty-five (25) days nor less than fifteen (15) days before the hearing. The last publishing must be not less than 2 days before the hearing.

### Examples of public hearing notices:

Norwalk

Putnam

### Example of public notice of an Agency's action:

Bolton

Figure 13. Example of a public hearing notice.

**CITY OF NORWALK**  
AQUIFER PROTECTION AGENCY  
125 EAST AVE. NORWALK CT 06856  
203-854-7744 phone 203-854-7962 fax

\* LEGAL NOTICE \*  
PUBLISH TWICE

AQUIFER PROTECTION AREA  
REGULATION ADOPTION

In accordance with provisions of Connecticut General Statutes [CGS] Section 22a-354p, notice is hereby given that the Norwalk Aquifer Protection Agency will hold a **public hearing at 7:00 PM on Wednesday, May 27, 2009, in Room A300, 3rd Floor, Norwalk City Hall, 125 East Ave., Norwalk, CT.**

The Agency will hear comments on its proposed Action (#APAR1-09) to adopt the City of Norwalk Aquifer Protection Area Regulations.

At this meeting interested persons may appear and be heard and written communications may be received regarding the proposed adoption of these Regulations.

Copies of the proposed Regulations are available for inspection on-line ([www.norwalkct.org](http://www.norwalkct.org)) and at the Conservation Office (Room 215), City Hall, 125 East Avenue, Norwalk, CT.

Jackie Lightfield, Chairman

**Publish twice in the *Norwalk Hour***  
Wednesday, May 6, 2009 and Wednesday, May 13, 2009

Figure 14. Example of a public hearing notice.

**Town of Putnam  
126 Church Street  
Putnam, CT 06260**

**Aquifer Protection Agency  
AGENDA  
Public Hearing**

The Aquifer Protection Agency will hold a public hearing on Wednesday, January 21, 2009 at 6:30 pm in the Daniel Rovero Chambers, 126 Church Street, Putnam, CT 06260

1. Adoption of the “Aquifer Protection Area Regulations of the Town of Putnam, CT” in accordance with Connecticut General Statutes [CGS] 22 a-354p and regulations of Connecticut State Agencies [RCSA] 22a-354i-3. Full text is available in the Town Clerk’s Office and Land Use Office at 126 Church Street.

All interested parties are urged to attend and be heard.

Dated this date December 17, 2008

Figure 15. Example of a public notice of an Agency's action.

**Notice of Actions  
Town of Bolton  
Bolton Aquifer Protection Agency**

At its Special Meeting of May 20, 2009, the Bolton Aquifer Protection Agency voted unanimously to approve and adopt Aquifer Protection Area Regulations pursuant to CGS, Section 22A-354p(b). The area affected by the Regulations lies within the Bolton Aquifer Protection Area as defined on a map filed in the Office of the Town Clerk. Affected areas generally include: properties north and south of Route 6 & 44, west of Bolton Notch Pond, and extending to the Manchester Town Line; and properties fronting on, and in the vicinity of, portions of Cider Mill Road, Route 85; Williams Street, Morencey, and Mt. Sumner.

A copy of the approved Regulations may be viewed in the Office of the Town Clerk, Town Hall

Dated at Bolton, CT this 22nd day of May, 2009.

Eric Luntta  
Chairman

To be published in the *Hartford Courant* before June 4, 2009.



# Registration Processing

# 5 | Registration Processing

Existing businesses that conduct regulated activities within the APA are allowed to register as an existing regulated activity. This registration allows an existing business to continue to operate and conduct a regulated activity in an APA, and provides the business with the ability to expand the registered regulated activity within the registered facility boundary. In addition, only registered facilities may apply for a permit to add a new regulated activity to that facility.

A Registration Processing Flow Chart and Registration Decision Tree are found at the end of this section.

## 5.1 | Regulated Activities

Regulated activities are those land use activities that use, store, and/or handle hazardous materials that pose a threat to the groundwater, such as RCRA hazardous wastes, hazardous substances regulated under CERCLA, pesticides, and petroleum products. There are twenty-eight (28) regulated activities listed in the definition section (Section 2(a)(35)) of the Model Regulations. These were developed from data on groundwater contamination incidents, chemical usage, and land use activities that typically employ those chemicals. Examples of regulated activities include manufacturing industries, chemical wholesale storage industries, gasoline stations, auto and engine service stations, dry cleaners, and furniture strippers. Some of the 28 regulated activities, like car washes, are not regulated if connected to a municipal sewer system. The primary threat to groundwater from a car wash is the disposal of wastewater generated by that activity. In addition, some exceptions were made for minor activities.

### 5.1.1 Exceptions

Exceptions to the regulated activities list are identified as outright and conditional activities. The following exceptions are not regulated activities in aquifer protection areas:

#### 5.1.2 Outright Exceptions

(Section 4(c)(1), (2) and (3) of the Model Regulations)

1. Any activity conducted at a residence without compensation. For example, a homeowner who repairs small engines such as lawn mowers for friends but who doesn't receive any money for the work would qualify as an exemption.
2. Any activity involving the use or storage of no more than two and one-half (2.5) gallons of each type of hazardous material on site at any one time, provided the total of all hazardous materials on site does not exceed fifty-five (55) gallons at any one time. For example, a furniture finisher is storing small quantities

of concentrated hazardous material and adds water to it to make a usable material. The volume to consider would be the total quantity of the usable product plus the stored concentrate on site at any one time. This total must not exceed the 55 gallon limit to qualify for this exception.

3. Any agricultural activity under CGS § 22a-354m(d). The definition of an agricultural activity under the statutes is very broad. For the complete definition, see the Model Municipal Regulations Reference Document found in the Model Documents Section of the Manual.

#### 5.1.3 Conditional Exceptions

(Section 4(c)(4), (5) and (6) of the Model Regulations)

4. An activity is considered minor and is not regulated if all the following conditions are satisfied:
  - a. The activity takes place solely within an enclosed building in an area with an impermeable floor;
  - b. The activity involves no more than 10% of the floor area in the building where the activity takes place;
  - c. Any hazardous material used in connection with the activity is stored in the building at all times;
  - d. All wastewaters generated by the activity are lawfully disposed through a connection to a publicly owned treatment works (sewer);
  - e. The activity does not involve (A) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with the vehicles, (B) underground storage of any hazardous material, or (C) above-ground storage of more than one hundred and ten (110) gallons of hazardous materials.

An example of an activity that might meet this exception is a small research and development lab at a corporate headquarters.

### Important reminder –

New businesses proposing to conduct regulated activities are prohibited in the APA and not eligible to register for an aquifer protection area registration.

# 5 | Registration Processing

5. An activity solely involving the use of lubricating oil may be an exception if all the following conditions are satisfied:
  - a. The activity does not involve cleaning of metals with chlorinated solvents at the facility;
  - b. The activity takes place solely within an enclosed building in an area with an impermeable floor;
  - c. Any hazardous material used in connection with the activity is stored in the building at all times;
  - d. The activity does not involve (A) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with the vehicles, (B) underground storage of any hazardous material, or (C) above-ground storage of more than one hundred and ten (110) gallons of the lubricating oil and associated hazardous waste.
6. An activity involving the dispensing of oil or petroleum from an above-ground storage tank or tanks with an aggregate volume of 2,000 gallons or less provided all the following conditions are satisfied:
  - a. The dispensing activity takes place solely on a paved surface that is covered by a roof;
  - b. The above-ground storage tank (or tanks) is a double-walled tank with overfill alarms;
  - c. All associated piping either is above ground or has secondary containment.

**Note:** Determining Regulatory Status in Aquifer Protection Areas, in the Forms and Applications Section of this manual, can be used to verify these conditions.

## 5.2 | Determining Regulated Activities

To begin, the Agency should develop a list of the businesses that are likely to be registered. The land use inventory that was provided by DEEP and updated by the Agency is a good starting point and can be used as a list of potential registrants. The Agency can use the inventory to inform potential registrants about the Aquifer Protection Area program and that they may be required to register. A form can be included with the notification letter to help the potential registrant determine if they are a regulated activity. A copy of the form can be collected by the town for each potential registrant. Keeping a copy of each form submitted on file will make it part of the official record and is a good business practice for the Agency. DEEP has developed a form for facilities to use to determine a non-regulated or regulated facility.

A sample form titled “Determining Regulatory Status in Aquifer Protection Areas” and is found in the Forms and Applications Section of this Manual. Also, a “Determining Regulated Status Use Decision Tree” can be found on page 48.

## 5.3 | Registration of Existing Facilities

Within six (6) months of adoption of local Aquifer Protection Area regulations, existing facilities engaged in regulated activities located in the Aquifer Protection Area must file a registration with the Agency. [RCSA Sec. 22a-354i7(b)] Regulated facilities in the Aquifer Protection Area must register their business activities as an existing use of the property. Registration allows the facility to preserve their right to continue to conduct business on the property at a site that is within the Aquifer Protection Area. Failure to register may result in loss of the existing use at the site. The registration also allows the facility to expand their registered activity within the property boundary of the site.

**Note:** Should a business want to add or change their regulated activity, they must apply for an Aquifer Protection Area Permit. (See the Permit Section.)

### 5.3.1 State Registrations

The DEEP regulates activities within Aquifer Protection Areas that are specified in Section 22a-354p(g) of the Connecticut General Statutes. These facilities are generators of large quantities of hazardous materials or wastewater discharges that require them to hold a DEEP Individual State Permit.

**These facilities include the following:**

- (A) Holders of individual state discharge permits issued under the:
  - National Pollutant Discharge Elimination System (NPDES)
  - State Pollutant Discharge Elimination System (SPDES)
  - Federal Resource Conservation and Recovery Act (RCRA) for a treatment, storage or disposal facility (TSDF)
- (B) Public service companies (utilities)
- (C) Large quantity hazardous waste generators under RCRA
- (D) State agencies (except local or regional boards of education)

Facilities that meet any of the above (A through D) and are located in an Aquifer Protection Area are regulated by the DEEP and are required to register and get an Aquifer Protection Area Registration from the DEEP.

# 5 | Registration Processing

To register with the DEEP, the registrant must complete and submit the Registration Form for Regulated Activities in Aquifer Protection Areas (DEEP-APA-REG-100) to DEEP. This form is available on the Web at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection) or by calling DEEP at 860-424-3020.

**Note:** Facilities that hold DEEP General Permits are generally small-quantity generators and are not regulated by the DEEP, but are regulated by the local Aquifer Protection Agency.

## 5.3.2 Municipal Registrations

The municipal Aquifer Protection Agency will regulate all regulated activities not regulated by the state. Facilities conducting regulated activities within the authority of the Aquifer Protection Agency must submit a registration to the Agency for the activity. The Agency will process registrations for those regulated activities.

## 5.4 | New Registrations

Any person engaged in a regulated activity that was active on, or has been active within the past five (5) years, or has obtained a building permit before the date of the delineation of the Aquifer Protection Area boundary on the town's zoning map or inland wetland map is eligible to register. [RCSA Sec. 22a-354i-7(b) or Section 8(a) of the Model Regulations]

A registration must be submitted within one hundred eighty (180) days of adoption of the local Aquifer Protection Area regulations or designation of the Aquifer Protection Area, whichever occurs later.

A model Aquifer Protection Area Registration Form and instructions can be found in the Forms and Applications section.

### 5.4.1 Notice to Facility Owner(s) and Property Owner(s)

The Aquifer Protection Agency may choose to send a notice to owners of facilities, or the owners of the property, that potentially may be regulated and may be required to register under the program. Since a facility owner may be different from a property owner, DEEP suggests that notices be sent to both the facility owner and the property owner to avoid any potential claim by the property owner that they were not aware of the program and its requirements. This notice will give the owner of the property (which also may be vacant or inactive at the time the registration is due) the ability to register, thereby keeping the ability to lease to certain tenants and maintaining the value of their property. The Agency can obtain the property owner information from the property tax documents filed at the Town.

A sample Notice to Facility/Property Owner(s) letter can be found in the Form Letters Section of this manual.

### 5.4.2 What Can Be Registered?

The Aquifer Protection Area Regulations (See Model Regulations, Section 8 – Registration Requirements) require any person engaged in a regulated activity to be registered if they meet one of the following conditions: The business and regulated activity (1) was active on; or (2) has been active within the past five years of; or (3) held a municipal building permit before the date an applicable Aquifer Protection Area is designated and regulations are in place.

**Important note:** Any business conducting a regulated activity that fits one of the three criteria listed above is required to register to continue to operate at that site. New regulated activities are prohibited at unregistered sites in Aquifer Protection Areas.

### 5.4.3 Who Can Register?

Sites may have property owned by a person/company, but the facility or business may be owned, leased or operated by one or several other persons/companies. The regulations state that any person engaged in a regulated activity shall register. This means the operator of the business/facility will usually be the registrant, since it is the operator who is engaged in the activity and can certify that the activity is in compliance with all the best management practices. The registrant is the responsible/liable party for the activity.

Where the property owner is different from the owner/operator of the business engaged in the regulated activity, the registration must be filed by the owner/operator of the business, and the property owner must be listed on the registration form. It is certainly in the property owner's best interest to encourage and ensure that the owner/operator of the regulated activity registers.

**Important note:** Part III of the registration form should clearly list the registrant's interest in the facility or property. The property owner and the facility operator should review the registration form to ensure that the facility boundary and the interest and responsibilities for the facility are indicated, so the Agency can make a proper determination.

# 5 | Registration Processing

## 5.4.4 What is the Extent of a Registered Site?

The registered facility boundary is an important piece of the registration. The intent of the definition of “facility” (see key definitions below) is to allow the registration of the existing site where the regulated activities are conducted, and to allow for continued operation and reasonable expansion of the business. Here are some case examples of registered sites:

- In the case of a stand-alone business that is on property owned by the business, the facility boundary is straightforward. The business owner submits the registration, and the facility boundary is the full extent of the property boundary of the site.
- For commercial malls or industrial sites with leased spaces, the business owner/operator submits the registration, and the facility boundary is the area leased by the regulated business. In this case, the registered facility boundary does not include the entire mall or industrial complex.
- For industrial condominium-type situations, the facility boundary may be a little more complicated. The business owner/operator submits the registration, and the facility boundary is the area owned by the regulated business. If the property is in common ownership, the business owner may be able to include the entire condominium complex.
- If, in addition to the property on which the regulated activity is conducted, the business owner owns, leases, or has an option to purchase adjacent, contiguous property, that adjacent property may also be included in the facility boundary. The intent of this is to allow inclusion of the adjacent property or expansion of an existing business where those pre-existing adjacent property conditions exist.

**Important note:** The regulations give the Agency/Agent the authority to request the information necessary for a clear and fair determination of the facility boundary. The Agency/Agent may therefore request documentation of property ownership, lease or purchase options, as well as a detailed map or site plan of such areas.

## 5.4.5 Inactive Sites

If a regulated facility is currently out of business, unoccupied, or in some other way currently inactive at the time the registration is due, the regulated facility may be registered if it has been active within the past five years of the date on which an applicable

Aquifer Protection Area was designated and if regulations are in place. In this case, the facility owner or property owner should file an Aquifer Protection Area registration to preserve its right to conduct a regulated activity in the future. The facility seeking to register an inactive site should register the regulated activities that were previously conducted on the site within the past five-year timeframe. If the facility is registered as an inactive site and then becomes active, the facility should modify and update its registration to an active status. If the facility becomes active but will be adding or changing the regulated activity conducted on site, then it should submit an Aquifer Protection Area permit to the Agency for review and approval.

## 5.4.6 Key Definitions

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

**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;

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

**Registrant** is defined as a person who, or which, has submitted a registration for an existing regulated activity.

## 5.5 | Municipal Agency Action

### 5.5.1 Timeframes for Action

The Agency must review and take action on registrations within one hundred eighty (180) days of the date of receipt of a registration. The action involves the Agency making a determination of completeness of the registration.

At any time during the review period, the Agency may require the registrant to provide additional information about the regulated activity. Requests for additional information must not stay the time limitations for registrations as set forth in Section 8 of the Model Municipal Aquifer Protection Area Regulations.

See the Aquifer Protection Registration Processing Flow Chart at the end of this section.

# 5 | Registration Processing

## 5.5.2 Date of Receipt

The day of receipt of a registration will be the day of the next regularly scheduled meeting of the Agency, immediately following the day of submission of the application to the Agency or thirty-five (35) days after the submission, whichever is sooner. [CGS § 22a-354p(c) or Section 7(b) of the Model Regulations]

## 5.5.3 Late Registrations

If a regulated activity that is eligible for registration fails to register or to apply for renewal before expiration, the Agency may accept a late registration at their discretion. The registration renewal is subject to the limitations of the five (5) year allowance of date of expiration.

## 5.5.4 Completeness

The Agency has one hundred eighty (180) days to determine completeness. A complete registration must contain the following information:

1. The name, business telephone number, street address and mailing address of the registrant
2. The owner of the facility, if different from the registrant
3. The manager or operator overseeing the operations of the facility
4. The location of the facility, using street address or other appropriate method of location, and a map showing the property boundaries of the facility

**Note:** The facility map is particularly important since it defines the area upon which regulated activities can be conducted. Regulated activities cannot be expanded beyond or added to areas outside the facility boundary.

5. An identification of the regulated activity or activities conducted at the facility
6. A certification by the registrant that the subject regulated activity is in compliance with best management practices
7. A confirmation and commitment that all regulated activities at the facility shall (A) be and remain in compliance with best management practices; (B) not increase the number of underground storage tanks; and (C) be in and remain in compliance with all local, state, and federal environmental laws.

**Note:** Best Management Practices (BMPs) for specific activities (like golf courses) are available in the Appendices.

If the municipal Aquifer Protection Agency determines that a registration is incomplete, the Agency must reject the registration and notify the registrant of what additional information is needed and the date by which it must be submitted.

A sample Notice of Incompleteness letter can be found in the Letters, Registration Certificate and Permit section of this manual.

If the registration submitted is determined to be complete and the regulated activity is eligible for registration, the Agency must send written notification of such registration to the registrant.

If the Agency does not take any action on a registration within 180 days of receipt, the registration is considered complete and accepted.

The Agency relies on information provided by the applicant. If the information subsequently proves to be false, deceptive, incomplete or inaccurate, the registration may be modified, suspended or revoked.

## 5.6 | Additional Registration Requirements

The Agency may require registrants to submit additional documentation for the registration. The Agency may, by written notice, require any registrant to submit for review and written approval a materials management plan and/or a stormwater management plan. [RCSA Section 22a-354i-7(d) or Section 8(c) of the Model Regulations]

A Model Materials Management Plan and a Model Stormwater Management Plan can be found in the Model Documents section of the manual.

### 5.6.1 Considerations for Requiring Materials Management Plans

When deemed necessary to protect the Aquifer Protection Area well, the Agency may require, by written notice, any registrant to submit for review and approval a Materials Management Plan (MMP). The MMP should be prepared in accordance with the Best Management Practices (BMPs) section of the Model Aquifer Protection Area (APA) Regulations. The Materials Management Plan shall consider measures to prevent or mitigate water quality impacts to the groundwater aquifer through the proper use, storage and handling of hazardous materials.

The following should be considered when deciding if submission of a plan is necessary:

1. The proximity of the proposed activity to public water supply wells;
2. The size and intensity of the regulated activities conducted on-site;
3. The nature, toxicity, and quantities of hazardous materials;
4. The frequency, manner of use and transfer of hazardous materials;
5. The environmental compliance record of the property, general site maintenance and housekeeping conditions;

# 5 | Registration Processing

6. The arrangement, operation, design, and estimated effectiveness of any protection measures or structures meant to contain hazardous materials;
7. The nature of the property including its area, topography, and soil conditions, which could affect the infiltration of spilled materials;
8. Whether access to the property by public or private streets or driveways enables a prompt response to a spill or other emergency that could impact the groundwater quality; and
9. The amount and nature of wastewaters generated and whether public sewer disposal is provided.
8. The presence of subsurface stormwater infiltration structures such as dry wells, galleries, or leaching trenches in paved areas. These structures may not adequately allow for attenuation of chemicals, fuels, salts or other soluble compounds in groundwater that may be contained in runoff.
9. Use of hazardous deicing chemicals.
10. Site maintenance and oversight of stormwater structures.

Stormwater principals for Aquifer Protection Areas (and other groundwater drinking supply areas) are to:

- prevent inadvertent pollution discharges/releases to stormwater
- provide necessary impervious pavement in high potential pollutant release areas
- direct paved surface runoff to above-ground type land treatment structures – sheet flow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins, and
- to the extent possible, recharge stormwater where it does not endanger groundwater quality.

The DEEP 2004 Connecticut Stormwater Quality Manual provides comprehensive stormwater guidance and is available on the DEEP website at [www.ct.gov/DEEP/stormwater](http://www.ct.gov/DEEP/stormwater).

## 5.7 | Issuing the Registration

Once the Agency has determined the application for registration to be complete, the Agency shall issue the registration. To issue the registration, the Agency sends a registration cover letter and the registration certificate to the registrant.

A sample Registration Cover Letter and Registration Certificate can be found in the Letters, Registration Certificate and Permit section of this manual.

All registrations issued by the Agency are subject to and do not derogate any present or future rights or powers of the Commissioner, Agency, or municipality, and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the subject land or activity.

A complete registration expires five (5) years from the date of receipt of the registration by the Agency.

### 5.6.2 Considerations for Requiring Stormwater Management Plans

When deemed necessary to protect the Aquifer Protection Area well, the Agency may require, by written notice, any registrant to submit a Stormwater Management Plan (SWMP) prepared in accordance with the Best Management Practices (BMPs) section of the Model Aquifer Protection Area (APA) Regulations. The SWMP shall consider measures to prevent or mitigate water quality impacts to the groundwater aquifer and shall meet the requirements of the Connecticut Department of Energy and Environmental Protection's (DEEP) Commercial Stormwater General Permit. Measures include facility information, stormwater discharge type and conveyance, stormwater pollution prevention, pavement sweeping, outdoor storage and washing restriction, spill control/response, and maintenance and inspection of stormwater structures.

The following should be considered when deciding if a plan is necessary:

1. A stormwater management plan already exists for the site.
2. A Material Management Plan has already minimized materials exposed to precipitation, contact with stormwater, or releases to groundwater.
3. Site proximity to the well field.
4. Size and intensity of the site.
5. Potential for illicit discharges to stormwater (wastewater, fuel, chemicals).
6. The presence of "stormwater hot spots" such as: intense outdoor storage and loading areas, fueling areas, uncovered dumpster materials, exposed raw materials, products or machinery, or large intensive parking areas and roadways.
7. Lack of necessary impervious pavement in high potential pollutant release areas.

# 5 | Registration Processing

## 5.8 | Fees

The Agency may require a filing fee to be deposited with the Agency. The amount of the fee shall be sufficient to cover the reasonable cost of reviewing and acting on applications and petitions, including, but not limited to, the costs of certified mailings, publications of notices and decisions, and monitoring compliance with permit conditions.

## 5.9 | Renewal of Registrations

A registration expires five (5) years from the date of receipt of the registration by the municipal Aquifer Protection Agency. Registered facilities must apply to the Agency to renew the registration on a form prescribed by the Commissioner for a facility before expiration of the registration.

If a registered regulated activity is out of business or inactive when the registration renewal is required, a five (5) year allowance is in effect from the date the registration expires.

If the registrant has not applied to renew the registration within five (5) years of the date the registration expires, the facility is no longer eligible for registration. [RCSA Sec. 22a-354i-7 or Section 8(f)(5) of the Model Municipal Regulations for Aquifer Protection Areas]

## 5.10 | Transfer of Registrations

The registrant may apply to transfer the registration for a facility. The application for transfer must be submitted to the DEEP or municipal Aquifer Protection Agency, as appropriate.

A DEEP registration for regulated activities, specified in CGS § 22a-354p(g), must be transferred by the Commissioner.

A local registration for regulated activities, not specified in CGS § 22a-354p(g), must be transferred by the municipal Aquifer Protection Agency. Such transfer shall be executed using a form prescribed by and submitted to the municipal Aquifer Protection Agency.

A model Aquifer Protection Area Registration Transfer Form is found in the Forms Section of this manual.

## 5.11 | Exemptions

The Commissioner of DEEP has the sole authority to grant an exemption to a regulated facility from the state Aquifer Protection program and regulations if he determines that the activity does not and will not pose a threat to the public supply well. An exemption may be granted if the owner of the regulated activity clearly and convincingly demonstrates, and the Commissioner finds that, if any hazardous material is released into the ground

from the subject regulated activity, treatment would not be required to render the groundwater suitable for drinking. Any exemption granted by the Commissioner will be in writing, explicitly stating the findings upon which the exemption is granted, and will provide the terms of the exemption.

The owner or operator of a regulated activity seeking an exemption from the Commissioner must also submit a copy of the application for an exemption to the Agency, any affected water company and the Commissioner of the Department of Public Health.

The Agency may submit written comments to the Commissioner on any exemption not later than sixty (60) days after receiving a copy of an application for exemption. [RCSA Sec. 22a-354i-6(c) or Section 8(f)(5) of the Model Municipal Regulations for Aquifer Protection Areas]

The Commissioner will send a notice by certified mail to the applicant of his approval or denial of an exemption application and a copy of the notice to the Commissioner of the Department of Public Health, the affected water company and the municipal Aquifer Protection Agency.

If the Commissioner denies an application for an exemption for a regulated activity, then the regulated activity is prohibited unless the activity can be registered. This registration must be submitted not later than thirty (30) days after receipt of the Commissioner's written disapproval of the exemption.

## 5.12 | Expansion of a Regulated Activity

Once a facility has registered and the facility boundary is defined, they may expand the regulated activity within the facility boundary under the registration. Adding a new regulated activity to the facility or changing from one regulated activity to another requires an APA permit. (See Permit Processing Section.)

**Note:** Unregulated activities conducted at a registered facility do not come under review of the Aquifer Protection Agency. For example, adding a convenience store to a registered gas station does not require review or action by the Aquifer Protection Agency.

# 5 | Registration Processing

## 5.13 | Determining Regulated Uses Decision Tree

### Determining Regulated Uses Decision Tree

**1. Is the use listed as a regulated activity?**

(See RCSA Section 22a-354i-1(34) or Section 2(a)(35) of the Model Municipal Aquifer Protection Area Regulations.)

NO → not regulated

YES



**2. Is it listed as a non-regulated exception?**

(For example: residential, minor hazardous material [2.5/55 gallons maximum], or agricultural.)

YES → not regulated

NO



**3. Is it listed as a non-regulated conditional use?**

For example:

- a. a minor activity (municipal sewer, 10% floor area, 110 gallon maximum, no UST)
- b. lubricant oil only (no UST, 110 gallon maximum)
- c. minor fuel dispensing (no UST, 2,000 gallons maximum and secondary containment)

YES → not regulated

NO



Regulated activity

# 5 | Registration Processing

## 5.14 | Registration Decision Tree

### Registration Decision Tree

1. Is the regulated activity currently active, has been active in the last 5 years, or has a building permit been issued?

NO → cannot register

YES



Must register within 180 days

2. Is registration complete?

(Agency must determine within 180 days of receipt or registration automatically approved.)

NO → reject registration and notify registrant to provide additional information and the date by which the information must be submitted



YES

3. Is a Material Management Plan (MMP) or Stormwater Management Plan (SWMP) deemed necessary?

NO → registered for 5 years; send written notification of registration



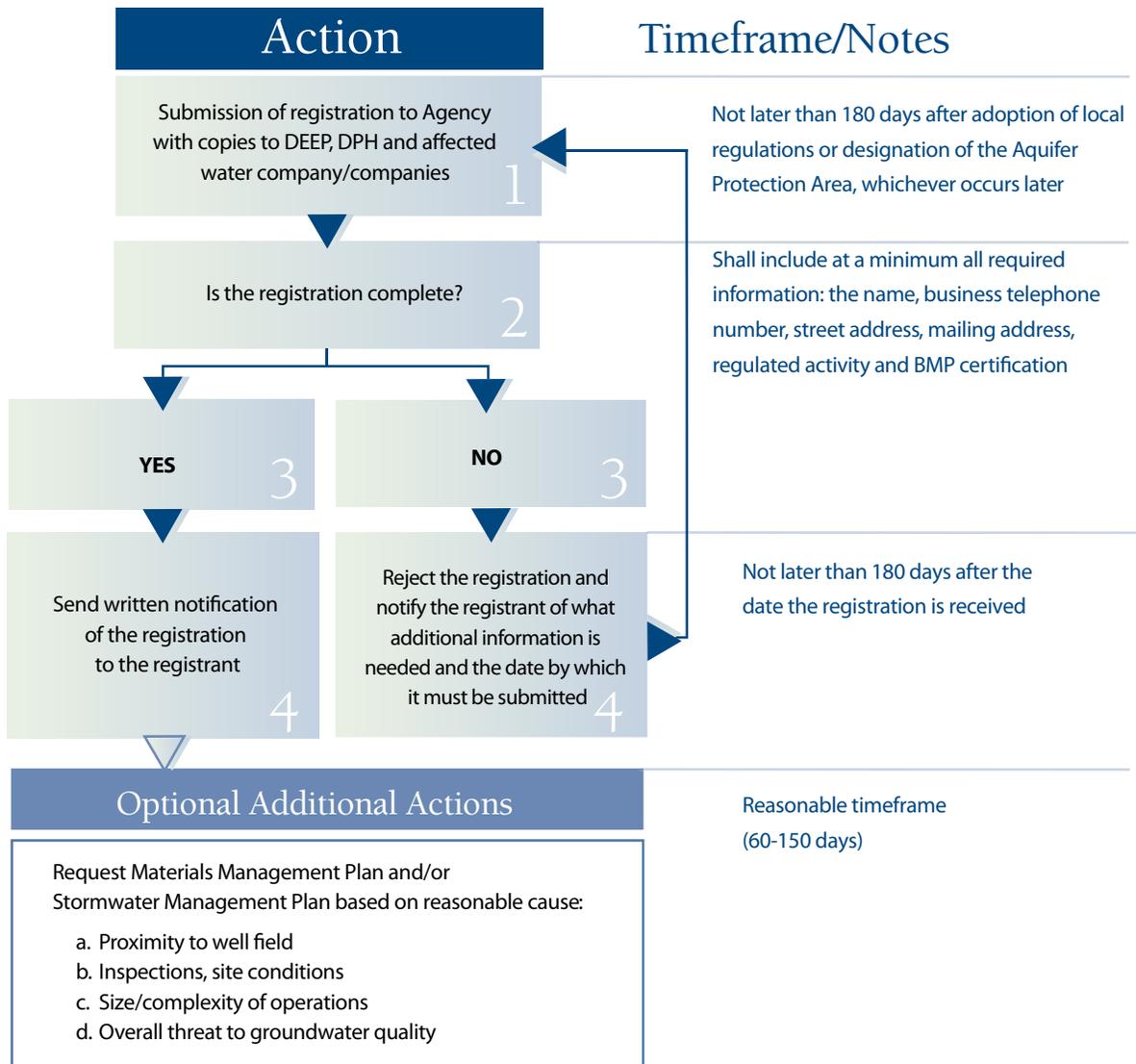
YES

Request Plan from facility and provide Timeframe for submission. Review and approve MMP or SWMP.

# 5 | Registration Processing

## 5.15 | Registration Processing Flow Chart

[CGS § 22a-354p(g)(2) and RCSA Sec.22a-354i-7]





# Permit Application Processing

# 6 | Permit Application Processing

## 6.1 | New Permits

Businesses that currently hold an Aquifer Protection Area Registration, and are seeking to change or add a regulated activity, may apply for an Aquifer Protection Area Permit. A permit can only be obtained for a registered facility. If a facility is not registered, it is not eligible for a permit. New regulated activities are prohibited from locating in APAs.

For example, if a business, such as a gas station, has an Aquifer Protection Area Registration and is registered as a regulated activity (B) oil or petroleum dispensing for the purpose of retail, wholesale or fleet use and wants to add an automotive repair garage, a regulated activity (D) repair or maintenance of vehicles, (a new regulated activity), then the business must obtain an Aquifer Protection Area Permit. This would also apply if a business owner purchased an industrial building originally registered as, for example, (L) production of electronic boards, electronic components, or other electrical equipment, but the new owner wanted to conduct regulated activity (T) production or fabrication of metal products instead. Changing from the originally registered activity to a different activity could be accomplished through obtaining an APA Permit.

A permit must be obtained from the Agency before a business begins any new regulated activity. A sample Aquifer Protection Area Permit Application form is in the Forms and Applications section of this manual and is available online at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection).

**Note:** A facility that holds an APA Registration with the State must apply to the State for a permit to add a regulated activity as specified in CGS § 22a-354p(g). (See Section 2a of the Registration Processing Section of this manual for more information on the facilities to which this applies.)

## 6.2 | Fees

The Agency may require a filing fee to be deposited with the Agency. The amount of the fee should be sufficient to cover the reasonable cost of reviewing and acting on applications and petitions, including, but not limited to, the costs of certified mailings, publications of notices and decisions, and monitoring compliance with permit conditions. Fee schedules are discussed further in the Registration Processing Section of this Manual.

## 6.3 | Municipal Agency Action

### 6.3.1 Timeframes for Action

The Agency must review and take action (vote on and make a decision) on permit applications within sixty-five (65) days after completion of a public hearing (if one is held) or sixty-five (65) days from the date of receipt of an application in the absence of a public hearing. The Agency must notify the applicant of the decision by certified mail, return receipt requested, within fifteen (15) days of the decision.

At any time during the review period, the Agency may require the applicant to provide additional information about the proposed permitted activity. Requests for additional information must not exceed the time limitations for permits as set forth in Section 9 of the Aquifer Protection Area Regulations.

An Aquifer Protection Permit Processing Flow Chart is provided at the end of this section, which outlines the critical steps and timeframes in the process.

### 6.3.2 Date of Receipt

The date of receipt of a permit application will be the day of the next regularly scheduled meeting of the Agency, immediately following the day of submission of the application to the Agency or thirty-five (35) days after the submission, whichever is sooner. [CGS § 22a-354p(c) or Section 7(b) of the Model Municipal Regulations for Aquifer Protection Areas]

## 6.4 | Notification and Referral Requirements

When an applicant files a permit application with the Agency, they must also send a copy of the permit application to the Commissioner of DEEP, the Commissioner of Public Health and the affected water company. These entities have sixty (60) days to submit written comments on the application to the Agency.

### IMPORTANT NOTES:

**A permit can only be obtained for a registered facility.**

**If a facility is not registered, it is not eligible for a permit to add a regulated activity.**

**New regulated activities are prohibited from locating in APAs.**

## 6 | Permit Application Processing

The Agency must give due consideration to any comments received in making a permit decision. A copy of the decision must be provided to the Commissioner, the affected water company and the Commissioner of Public Health. Any pertinent comments should be addressed in the decision.

As a courtesy and as required by the regulations, the Agency must notify the town clerk of any adjoining municipality if a permit is received for a site in which:

1. any portion of the property affected by a decision of such Agency is within five-hundred feet of the boundary of the adjoining municipality;
2. a significant portion of the traffic to the completed project on the site will use streets within the adjoining municipality to enter or exit the site;
3. a significant portion of the sewer or water drainage from the project on the site will flow through and significantly impact the drainage or sewerage system within the adjoining municipality; or
4. water runoff from the improved site will impact streets or other municipal or private property within the adjoining municipality.

The notice must be made by certified mail, return receipt requested, and must be mailed within seven (7) days of the date of receipt of the application, petition, request or plan. The adjoining municipality may, through a representative, appear and be heard at any hearing on any such application.

The Agency must notify the applicant of the decision by certified mail, return receipt requested, within fifteen (15) days of the decision.

See the Aquifer Protection Permit Processing Flow Chart at the end of this section.

**A complete application is one in which all parts are filled in, all four attachments are included, and both certifications have been signed by the appropriate person.**



### 6.5 | Evaluating Permit Applications

In order to issue a permit, the Agency must ensure that the application is complete and the applicant has demonstrated to the Agency's satisfaction that the following standards and criteria are met.

A complete application is one in which all parts are filled in, all four attachments are included, and both certifications have been signed by the appropriate person.

The standards and criteria that must be met in order to issue a permit are as follows:

1. The Agency must verify the facility is registered, and the proposed regulated activity takes place within the facility boundary detailed in the registration. Once registered, a facility boundary cannot be expanded, even if adjacent land is later purchased.
2. The proposed regulated activity must not increase the number or storage capacity of underground storage tanks used for hazardous materials except for the allowed replacement of an existing underground storage tank. The replacement tank volume is detailed under the Best Management Practices (BMPs) section of the Model Regulations Section 12(a)(3) and it allows up to a 25% increase in volume and must meet specified standards (double-walled with coaxial piping and interstitial monitoring).
3. The Materials Management Plan and Stormwater Management Plan must be satisfactorily prepared. See the sample Materials Management and Stormwater Management Plans under the Model Document Section of this Manual. These plans are very site-specific, and the extent and detail depends upon activities at the site and how they are set up.
4. The applicant must submit a confirmation and commitment that all regulated activities are and will remain in compliance with all local, state and federal environmental laws.
5. The applicant's compliance record must not indicate: (A) that any noncompliance resulted from indifference to or disregard for the legal requirements, (B) an unwillingness or inability to devote the resources necessary to comply and remain in compliance, or (C) that instances of noncompliance have led to serious environmental harm, harm to human health or safety, or a substantial risk of such harm.

An Environmental Compliance Information Form for Aquifer Protection Areas is provided in the Forms and Applications Section of this Manual.

# 6 | Permit Application Processing

6. The proposed regulated activity must be conducted in accordance with applicable best management practices (BMPs). The Agency must verify that the applicant has checked off all the BMPs in the Part VI certification of the application.
7. The registered regulated activity is being conducted in accordance with applicable BMPs; and
8. The certification required on the application has been signed by the applicant and the individual responsible for preparing the application.

The permitting process is outlined in the regulations and does not leave much discretion for the Agency. If the applicant can demonstrate that it meets the standards, the Agency should issue the permit. There is some administrative flexibility for the Agency on the extent and detail necessary for the Materials Management and Stormwater Management Plans, and flexibility if the applicant has a poor compliance history.

## 6.6 | Public Hearings

The Agency may hold a public hearing on a permit application. The Agency's decision to hold a hearing should be based on the need for public input into the process and the magnitude of the application.

Some of the factors to consider are:

- The size and complexity of the proposed activity
- Proximity of the site to the well field
- Public interest

If a public hearing is held, the Agency must ensure that it is held within sixty-five (65) days of receipt and follows the notice requirements below:

1. Publish at least twice at intervals of not less than two (2) days, the first not more than fifteen (15) days and not fewer than ten (10) days, and the last not less than two (2) days before the date set for the hearing in a newspaper having a general circulation in each town where the affected aquifer, or any part thereof, is located, and
2. Send a copy of the notice, by certified mail, return receipt requested, to any affected water company/companies at least ten (10) days before the hearing.

Any affected water company/companies may, through a representative, appear and be heard at the hearing.

All applications, maps and documents relating to the permit hearing must be open for public inspection.

At the hearing, any person may appear and be heard.

The hearing must be completed within thirty-five (35) days of its commencement.

The applicant may consent to an extension of the timeframe listed above, provided the total extension of all periods totals sixty-five (65) days or less. (Section 9(c) of the Model Aquifer Protection Area Regulations)

In reaching its decision on any application after a public hearing, the Agency must base its decision on the record of that hearing. Documentary evidence or other material not in the hearing record must not be considered by the Agency in its decision.

The applicant or permittee must be notified of the Agency's decision within fifteen (15) days of the date of the decision by certified mail, return receipt requested. The Agency must also publish the decision in the local newspaper in accordance with Section 9(k) of the Model APA Regulations.

## 6.7 | Additional Conditions

The regulations allow the Agency to impose reasonable conditions or limitations on any permit issued to assure protection of the groundwater, including but not limited to the following:

- Best management practices in addition to those set forth in Section 12 of the Model Municipal Regulations; and
- Groundwater monitoring.

It is recommended that any such conditions be discussed with DEEP before issuance of conditions or limitations.

## 6.8 | Renewals

A permit expires ten (10) years from the date of issuance by the Agency. Any person proposing to continue a previously permitted regulated activity must apply for renewal of the existing permit before the expiration date of the existing permit. It is recommended that permit renewals be submitted 90 days before expiration of the permit to give the Agency adequate processing time.

DEEP encourages the municipality to send a renewal notice to permittees 180 days before permit expiration.

If a renewal application is not submitted before the expiration date of the existing permit, then the existing permit is deemed to have expired.

A renewal should be granted by the Agency upon request 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 should be submitted and reviewed.

## 6 | Permit Application Processing

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### 6.9 | Modification

A person may request a modification of a permit from the Agency. The request must be on a form obtained from the Agency and must include the facts and reasons supporting the request if the modification is substantial. The Agency may require the applicant to submit a new application for a permit or renewal in lieu of a modification request.

### 6.10 | Transfers

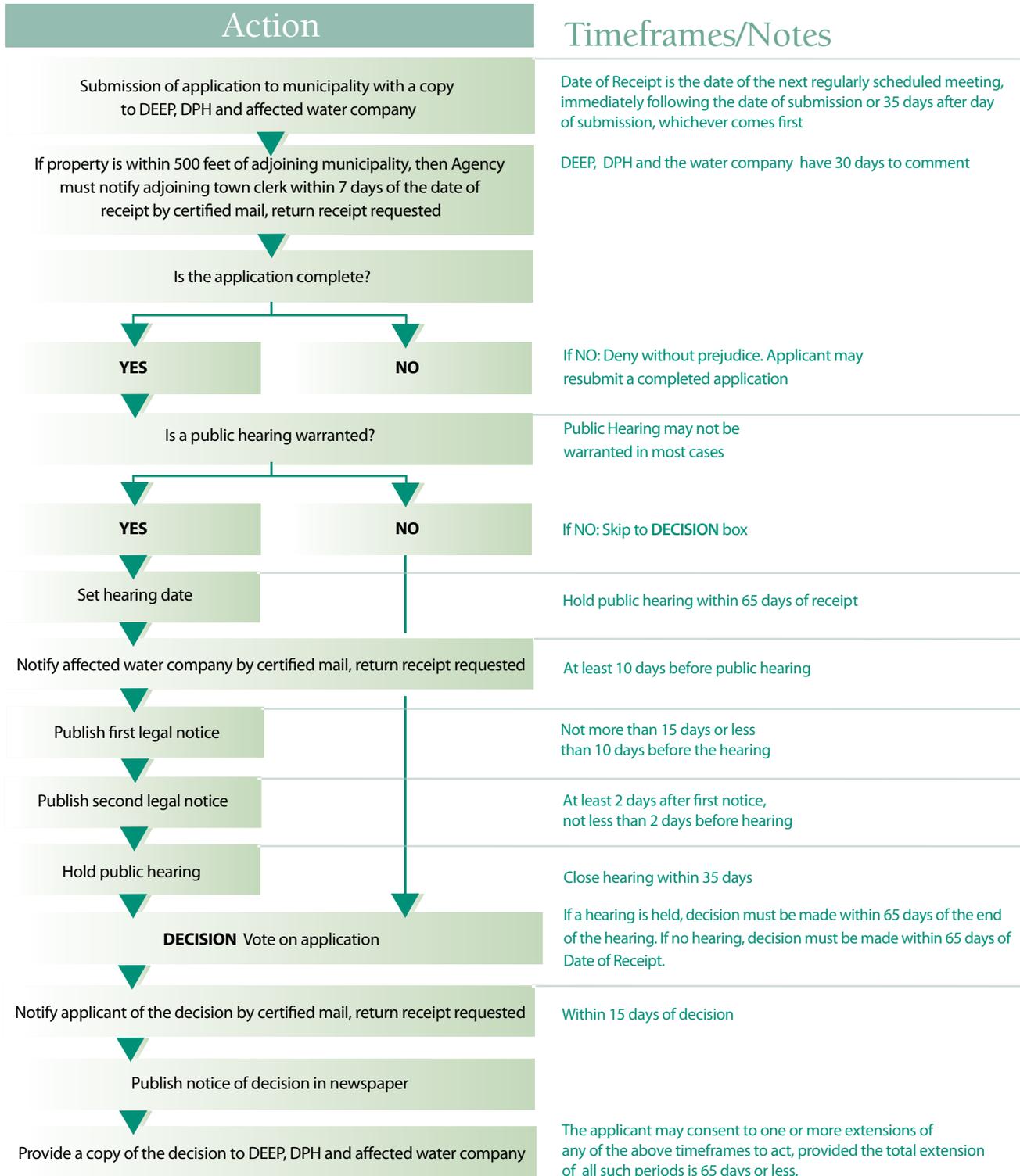
A person may apply to the Agency to transfer the permit for a facility to a new owner using a form prescribed by the Agency. No permit issued may be transferred except with written permission from the Agency.

A sample Transfer Form is provided in the Forms and Applications section of the Manual.

# 6 | Permit Application Processing

## 6.11 | Permit Processing Flow Chart

[CGS § 22a-354p and RCSA Sec. 22a-354i-8]



# 6 | Permit Application Processing

## 6.12 | Permit Decisions

### Permit Decisions

1. Will the proposed regulated activity occur on a registered site (within registered facility site boundary)?

NO → cannot be permitted

YES



Submit permit application

2. Is the permit application complete?

NO → notify registrant to provide additional information and the date by which the information must be submitted, or reject incomplete application without prejudice



YES

3. Are all the permit criteria met? (BMPs, MMP, SWMP, compliance record, no new USTs?)

NO → cannot be permitted, deny application and state the reasons for the decision

YES



Approved or approved with conditions/limits and state the reason for the decision (10 year permit)



# Forms and Applications

## 7 | Forms and Applications

Forms and applications provided in this manual are to help you with administration of the local aquifer protection area program. These sample forms and applications include:

7.1 Determining Regulatory Status in Aquifer Protection Areas	58
7.2 Registration Form and Instructions	62
7.3 Permit Application and Instructions	79
7.4 Transfer Form for Registrations and Permits	94
7.5 Environmental Compliance Information Form and Instructions	101
7.6 Aquifer Protection Inspection Report and Instructions	105

These documents are available for download at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection).

# 7 | Forms and Applications

## 7.1 | Determining Regulatory Status in Aquifer Protection Areas



[CITY/TOWN NAME]  
AQUIFER PROTECTION AGENCY  
[PHONE NUMBER]

### **Determining Regulatory Status in Aquifer Protection Areas**

[MONTH] [YEAR]

[Town/City Name Aquifer Protection Agency]

[Form Number]

# 7 | Forms and Applications

## 7.1 | Determining Regulatory Status in Aquifer Protection Areas (continued)

### Determining Regulatory Status in Aquifer Protection Areas

This form will help you determine your regulatory status under the Aquifer Protection Area Program.

Certain facilities that are located in Aquifer Protection Areas are required to register their regulated activities with either the local Aquifer Protection Agency or the Connecticut Department of Energy and Environmental Protection (DEEP).

Date: \_\_\_\_\_

#### Facility Information

Name of facility: \_\_\_\_\_

Street Address or Description of Location: \_\_\_\_\_

City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

#### Facility Owner/Operator Contact Information

Name (printed): \_\_\_\_\_

Name (signature): \_\_\_\_\_

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

#### Description of business or activity:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SIC: \_\_\_\_\_

Please submit this Determining Your Regulatory Status in Aquifer Protection Areas Form to:

[AQUIFER PROTECTION AGENCY]  
[TOWN HALL]  
[STREET NAME] [PO BOX]  
[CITY/TOWN NAME] [STATE] [ZIP CODE]

**Disclaimer:** This checklist is a tool to help you determine whether your facility will be a non-regulated facility. It is not a complete list of all regulations that may apply to your business. You are responsible for knowing and complying with all applicable state, federal, local and tribal requirements.

#### AGENCY USE ONLY

Application No.: \_\_\_\_\_

APA Name: \_\_\_\_\_

Date of Receipt: \_\_\_\_\_

Date of Review: \_\_\_\_\_

\_\_\_\_ Facility is regulated

\_\_\_\_ Facility is not regulated

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

1 of 3

[DATE]

# 7 | Forms and Applications

## 7.1 | Determining Regulatory Status in Aquifer Protection Areas (continued)

### Regulated Activity List

From the following list, check **all** regulated activities being conducted at the facility or activities proposed for the facility.

**Regulated Activity:** There are exceptions within each regulated activity. For a full description of each regulated activity see Section [NUMBER] of the Aquifer Protection Area Regulations of the [TOWN/CITY NAME].

- (A) Underground storage or transmission of oil or petroleum
- (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
- (E) Salvage operations of metal or vehicle parts
- (F) Wastewater discharges to ground water other than domestic sewage and stormwater
- (G) Car or truck washing (unsewered)
- (H) Production or refining of chemicals
- (I) Clothes or cloth cleaning service (dry cleaner)
- (J) Industrial laundry service (unsewered)
- (K) Generation of electrical power by means of fossil fuels (power plants)
- (L) Production of electronic boards, electrical components, or other electrical equipment
- (M) Embalming or crematory services (unsewered)
- (N) Furniture stripping operations
- (O) Furniture finishing operations
- (P) Storage, treatment or disposal of hazardous waste under a RCRA permit
- (Q) Biological or chemical testing, analysis or research (unsewered)
- (R) Pest control services
- (S) Photographic finishing (unsewered)
- (T) Production or fabrication of metal products
- (U) Printing, plate making, lithography, photoengraving, or gravure
- (V) Accumulation or storage of waste oil, anti-freeze or spent lead-acid batteries (recycling facility under a state DEEP General Permit)
- (W) Production of rubber, resin cements, elastomers or plastic
- (X) Storage of de-icing chemicals
- (Y) Accumulation, storage, handling, recycling, disposal, reduction, processing, burning, transfer or composting of solid waste (under a state DEEP permit; a solid waste facility, landfill, transfer station, composting facility, processing center)
- (Z) Dying, coating or printing of textiles, or tanning or finishing of leather
- (AA) Production of wood veneer, plywood, reconstituted wood or pressure-treated wood
- (BB) Pulp production processes

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

2 of 3

[DATE]

# 7 | Forms and Applications

## 7.1 | Determining Regulatory Status in Aquifer Protection Areas (continued)

**If you checked a listed activity above, indicate if you meet one of the following exclusions.**

**1. The following are not regulated activities:**

Any activity conducted at a residence without compensation

any activity involving the use or storage of no more than two and one-half (2.5) gallons of each type of hazardous material on-site at any one time, provided the total of all hazardous materials on-site does not exceed fifty-five (55) gallons at any one time

any agricultural activity regulated pursuant to section 22a-354m(d) of the Connecticut General Statutes

any activity provided all the following conditions are satisfied:

1. such activity takes place solely within an enclosed building in an area with an impermeable floor,
2. such activity involves no more than 10% of the floor area in the building where the activity takes place,
3. any hazardous material used in connection with such activity is stored in such building at all times,
4. all waste waters generated by such activity are lawfully disposed through a connection to a publicly owned treatment works, and
5. such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above ground storage of more than one hundred and ten (110) gallons of hazardous materials

any activity solely involving the use of lubricating oil provided all the following conditions are satisfied:

1. such activity does not involve cleaning of metals with chlorinated solvents at the facility,
2. such activity takes place solely within an enclosed building in an area with an impermeable floor,
3. any hazardous material used in connection with such activity is stored in such building at all times, and
4. such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above ground storage of more than 110 gallons of such lubricating oil and associated hazardous waste

any activity involving the dispensing of oil or petroleum from an above-ground storage tank or tanks with an aggregate volume of 2000 gallons or less provided all the following conditions are satisfied:

1. such dispensing activity takes place solely on a paved surface which is covered by a roof,
2. the above-ground storage tank (or tanks) is a double-walled tank with overfill alarms, and
3. all associated piping is either above ground, or has secondary containment

**2. Provide further explanation why activity is or is not regulated.**

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[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

3 of [3]

[DATE]

# 7 | Forms and Applications

## 7.2 | Municipal Registration Form for Regulated Activities in Aquifer Protection Areas



[CITY/TOWN NAME]  
AQUIFER PROTECTION AGENCY  
[PHONE NUMBER]

### **Registration Form for Regulated Activities in Aquifer Protection Areas**

[MONTH] [YEAR]

[Town/City Name Aquifer Protection Agency]

[Form Number]

# 7 | Forms and Applications

## 7.2 | Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (cont'd.)

### Municipal Registration Form for Regulated Activities in Aquifer Protection Areas

Please complete this form in accordance with the instructions [FORM NUMBER] to ensure the proper handling of your registration. Print or type unless otherwise noted. You must submit the registration fee along with this form.

This registration form is for registering regulated activities in Aquifer Protection Areas in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations in the [TOWN/CITY NAME].

AGENCY USE ONLY	
Application No.	_____
Registration No.	_____
Permit No.	_____
APA Name	_____
Date of Receipt	_____

#### Part I: Registration Type

Check the appropriate box identifying the registration type.

<p>This registration is for (check one):</p> <p><input type="checkbox"/> A <i>new</i> registration</p> <p><input type="checkbox"/> A <i>renewal</i> of an existing registration</p> <p><input type="checkbox"/> A <i>modification</i> of an existing registration*</p> <p><input type="checkbox"/> A registration for a <i>vacant site/inactive activity</i>**</p>	<p>Please identify any previous or existing aquifer protection registration/ permit number in the space provided:</p>
--	---

\*Note that if you are seeking a *modification*, you should consult the [TOWN/CITY NAME] Aquifer Protection Agency at [PHONE NUMBER] prior to submitting a registration to determine whether a registration form is necessary. \*\*Note that if you are registering a *vacant site* where currently no regulated activity is taking place, you must certify that applicable best management practices are being met at the site.

#### Part II: Fee Information

A registration fee of \$[FEE AMOUNT] shall be submitted with the registration form. A registration shall not be deemed complete and no activity will be authorized by this registration unless the registration fee has been paid in full. The registration will not be processed without the fee. The fee shall be non-refundable and shall be paid by check or money order to the [TOWN/CITY NAME].
---

#### Part III: Registrant Information

1. Fill in the name of the registrant(s).			
Name of Registrant:		Name of Company:	
Mailing Address:			
City/Town:		State:	Zip Code:
Business Phone:		ext.	Fax:
E-mail address:			
Registrant's interest in property or facility at which the proposed activity is to be located: (check all that apply)			
<input type="checkbox"/> site owner	<input type="checkbox"/> option holder	<input type="checkbox"/> lessee	<input type="checkbox"/> facility owner
<input type="checkbox"/> easement holder	<input type="checkbox"/> operator	<input type="checkbox"/> other (specify):	
<input type="checkbox"/> Check here if there are co-registrants. If so, label and attach additional sheet(s) to this sheet with the required information.			

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

1 of [6]

[DATE]

# 7 | Forms and Applications

## 7.2 | Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (cont'd.)

### Part III: Registrant Information (continued)

2. List primary contact for departmental correspondence and inquiries. (Please complete all fields.)

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Fax:

Contact Person:

Title:

E-mail address:

3. List attorney or other representative, if applicable:

Firm Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Fax:

Attorney:

4. Facility Operator:

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Fax:

Contact Person:

Title:

5. Facility Owner:

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Fax:

Contact Person:

Title:

6. List any engineer(s) or other consultant(s) employed or retained to assist in preparing the registration or in designing or constructing the activity.

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Fax:

Contact Person:

Title:

Service Provided:

Check here if additional sheets are necessary, and label and attach them to this sheet.

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

2 of [6]

[DATE]

# 7 | Forms and Applications

## 7.2 | Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (cont'd.)

### Part IV: Facility Information

1. Name of facility:

Street Address or Description of Location:

City/Town:

State:

Zip Code:

2. From the following list, check *all* regulated activities being conducted at the facility.

**Regulated Activity:** For a full description of each regulated activity see Section [NUMBER] of the Aquifer Protection Area Regulations of the [TOWN/CITY NAME] or Appendix A of the instructions [FORM NUMBER].

- (A) Underground storage or transmission of oil or petroleum
- (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
- (E) Salvage operations of metal or vehicle parts
- (F) Wastewater discharges to ground water other than domestic sewage and stormwater
- (G) Car or truck washing (unsewered)
- (H) Production or refining of chemicals
- (I) Clothes or cloth cleaning service (dry cleaner)
- (J) Industrial laundry service (unsewered)
- (K) Generation of electrical power by means of fossil fuels (power plants)
- (L) Production of electronic boards, electrical components, or other electrical equipment
- (M) Embalming or crematory services (unsewered)
- (N) Furniture stripping operations
- (O) Furniture finishing operations
- (P) Storage, treatment or disposal of hazardous waste under a RCRA permit (hazardous waste facility)
- (Q) Biological or chemical testing, analysis or research (unsewered)
- (R) Pest control services
- (S) Photographic finishing (unsewered)
- (T) Production or fabrication of metal products
- (U) Printing, plate making, lithography, photoengraving, or gravure
- (V) Accumulation or storage of waste oil, anti-freeze or spent lead-acid batteries (recycling facility under a state DEEP General Permit)
- (W) Production of rubber, resin cements, elastomers or plastic
- (X) Storage of de-icing chemicals (salt storage facility, fleet, state or municipal garage)
- (Y) Accumulation, storage, handling, recycling, disposal, reduction, processing, burning, transfer or composting of solid waste (under a state DEEP permit; a solid waste facility, landfill, transfer station, composting facility, processing center)
- (Z) Dying, coating or printing of textiles, or tanning or finishing of leather
- (AA) Production of wood veneer, plywood, reconstituted wood or pressure-treated wood
- (BB) Pulp production processes

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

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[DATE]

# 7 | Forms and Applications

## 7.2 | Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (cont'd.)

### Part V: Best Management Practices

The registrant and operator, if different from the registrant, must certify that the facility is in compliance with all the best management practices set forth in Section [NUMBER] of the Aquifer Protection Area Regulations. The registrant and the operator, if different from the registrant, must sign this part. A registration will be considered incomplete unless the required signatures are provided.

For a full description of Best Management Practices (BMPs) for regulated activities, see Section [NUMBER] of the Aquifer Protection Area Regulations or Appendix B of the instructions [FORM NUMBER].

"I certify that the subject facility is in compliance with all the best management practices set forth in Section [NUMBER] of the Aquifer Protection Area Regulations. I have checked the box by each of the following statements as verification that the subject facility is in compliance with all applicable best management practices."

- Storage of hazardous materials above ground is in compliance with all provisions of Section [NUMBER] of the Aquifer Protection Area Regulations.
- The number of underground storage tanks used to store hazardous materials shall not increase in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations.
- Replacement of any underground storage tanks used to store hazardous materials shall take place in accordance with all provisions of Section [NUMBER] of the Aquifer Protection Area Regulations.
- Devices for release of wastewaters to the ground shall not be used except in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations.
- A Materials Management Plan has been developed in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations and will be implemented upon issuance of a registration.

\_\_\_\_\_  
Signature of Registrant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Registrant (print or type)

\_\_\_\_\_  
Title (if applicable)

\_\_\_\_\_  
Signature of Operator (if different than above)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Operator (print or type)

\_\_\_\_\_  
Title (if applicable)

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

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[DATE]

### Part VI: Supporting Documents

Please check the box by the attachments being submitted as verification that *all* applicable attachments have been submitted with this registration form. When submitting any supporting documents, please label the documents as indicated in this part (e.g., Attachment A, etc.) and be sure to include the registrant's name.

- Attachment A: A Facility Boundary Map *(Required for all Registrations)*  
An 8" X 11" copy of the relevant portion of a USGS Topographic Quadrangle Map with the exact location of the facility\* (property) boundaries shown. A larger scale [local property or assessor's] map with the facility boundaries shown, may also be submitted to clarify boundary locations. For sample maps see Figures A and B of the instructions [FORM NUMBER].  
  
\*Note: In accordance with Section [NUMBER] of the Aquifer Protection Area Regulations, "facility" is defined as property where a regulated activity is being 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.
- Attachment B: Materials Management Plan, *if requested by the Agency.*
- Attachment C: Stormwater Management Plan, *if requested by the Agency.*

*(continued on the following page)*

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

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[DATE]

# 7 | Forms and Applications

## 7.2 | Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (cont'd.)

### Part VII: Registrant Certification

The registrant *and* the individual(s) responsible for actually preparing the registration must sign this part. A registration will be considered incomplete unless all required signatures are provided.

"I have personally examined and am familiar with the information submitted in this document and all attachments, and I certify, based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

I understand that any false statement made in the submitted information is punishable as a criminal offense, under Section 53a-157b of the General Statutes and any other applicable law.

I understand that the agency or its duly authorized agent may make regular inspections of the facility and associated property, except a private residence, at reasonable hours.

I certify that this application is on complete and accurate forms as prescribed by the Agency without alteration of the text."

Signature of Registrant	Date
Name of Registrant (print or type)	Title (if applicable)
Signature of Preparer (if different than above)	Date
Name of Preparer (print or type)	Title (if applicable)
<input type="checkbox"/> Check here if additional signatures are required. If so, please reproduce this sheet and attach signed copies to this sheet.	

Please submit the Registration Form, Fee, and all Supporting Documents to:

[AQUIFER PROTECTION AGENCY]  
[TOWN HALL]  
[STREET NAME] [PO BOX]  
[CITY/TOWN NAME] [STATE] [ZIP CODE]

The registrant shall also mail a copy of this completed form to the following:

- Commissioner of the Department of Energy and Environmental Protection,
- Commissioner of Public Health, and
- The affected water company.

See Appendix C of the instructions for contacts and mailing addresses.

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

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[DATE]

# 7 | Forms and Applications

## 7.2 | Instructions for Completing the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas

Use these instructions to complete the registration form for regulated activities in Aquifer Protection Areas [FORM NUMBER]. These instructions are not a substitute for the requirements of any relevant statutes or regulations. You should review all applicable laws prior to completing the registration form. Remember, it is your responsibility to comply with all applicable laws.

A completed registration form must be submitted for each separate facility (or non-contiguous property).

### Introduction

The Aquifer Protection Area Program was established to protect large public water supply wells from contamination through land use controls. In accordance with the [TOWN/CITY] Aquifer Protection Area Regulations, Section [NUMBER], new activities using significant quantities of hazardous materials are prohibited from locating within Aquifer Protection Areas, while existing facilities are required to register their use. Registration allows the facility to continue to operate at that site, including changing or expanding operations on the site. Basic best management practices for handling and storage of hazardous materials are required. The facility must develop and implement a materials management plan, which is maintained at the facility and submitted to the Aquifer Protection Agency, upon request. Guidance for developing such plans is available from the [TOWN/CITY] Aquifer Protection Agency and the Department of Energy and Environmental Protection (DEEP).

Any questions that you may have regarding the Aquifer Protection Area Program should be directed to [NAME AND PHONE NUMBER OF Agency CONTACT].

### Who May Register a Regulated Activity in an Aquifer Protection Area?

Any person engaged in a regulated activity, as defined in Section [NUMBER] of the Aquifer Protection Area Regulations (see Appendix A of these instructions), which

1. was active on, or
2. has been active within the past five (5) years of, or
3. held a municipal building permit before,

the date an applicable Aquifer Protection Area was designated shall register the regulated activity.

### Do I Register with the DEEP or the Municipal Aquifer Protection Agency?

You must register with the DEEP if the regulated activity is to be conducted at a facility that:

1. holds one or more of the following permits: National Pollutant Discharge Elimination System (NPDES), State Pollutant Discharge Elimination System (SPDES) or Federal Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal Facility (TSDF);

2. is a public service company;
3. is a large-quantity hazardous waste generator; or
4. is a state Agency, as specified in Section 22a-354p(g) of the Connecticut General Statutes [CGS].

To register with the DEEP, complete and submit to DEEP the Registration Form for Regulated Activities in Aquifer Protection Areas (DEEP-APA-REG-100). This form is available on the web at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection) or by calling DEEP at 860-424-3020.

All other regulated activities shall register with the municipal Aquifer Protection Agency in the town in which the facility is located by completing and submitting the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (FORM NUMBER). If a facility is located in more than one municipality, the facility must register with each municipality.

The Commissioner of the Department of Energy and Environmental Protection may exempt a regulated activity from registering if it is determined that such activity does not and will not pose a threat to any public supply well due to the nature of the hazardous materials used. Any questions that you may have regarding exemptions should be directed to DEEP at 860-424-3020.

### Timeframe for Registration

If the regulated activity is specified in Section [NUMBER] of the Aquifer Protection Area Regulations, the person engaged in such activity shall submit a registration to the Aquifer Protection Agency not later than one hundred eighty (180) days after municipal adoption of regulations pursuant to CGS § 22a-354p, or the designation of the Aquifer Protection Area pursuant to RCSA Sec. 22a-354i-2, whichever occurs later, unless otherwise authorized in writing by the commissioner.

### A complete registration will expire five (5) years from the date of receipt of a registration.

Any person proposing to continue a previously registered regulated activity must apply for renewal of the existing registration by submitting a sufficient registration at least one hundred eighty (180) days prior to the expiration date of the existing registration.

If a registration renewal is not submitted prior to the expiration date of the existing registration, then the existing registration is deemed to have expired.

If you are applying for a modification of an active, valid registration, you may be required to submit certain parts of a registration or the entire registration. For further information concerning modifications, please contact the [TOWN/CITY] Aquifer Protection Area Agency at [PHONE NUMBER].

# 7 | Forms and Applications

## 7.2 | Instructions for Completing the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (continued)

### How to Apply

Your registration must include the following:

- A Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (FORM NUMBER) and all supporting documents,
- The applicable registration fee, paid by check or money order, made payable to the “[TOWN/CITY NAME].”

You must submit the above materials together as a package to:

[AQUIFER PROTECTION AGENCY]  
[TOWN HALL]  
[STREET NAME] [PO BOX]  
[TOWN/CITY NAME] [STATE] [ZIP CODE]

The registrant shall mail a copy of the completed registration form to the following:

1. Commissioner of the DEEP,
2. the Commissioner of Public Health, and
3. the affected water company.

See Appendix C of these instructions for specific DEEP, Department of Public Health and water company contacts.

When submitting your registration, label your supporting documents as directed on your registration form and always include, on each document, the applicant’s name. When additional space is necessary to answer a question stated in the registration, please insert additional sheets by the appropriate question. Label each sheet with the applicant’s name, along with the corresponding part number and question number indicated on the registration form. You should retain a copy of all documents for your files.

### Part I: Registration Type

Check the appropriate box to specify if the registration is for a new registration, a renewal of an existing registration, or a modification of an existing registration. If you are applying for a renewal or modification of an existing registration, or if a permit has been obtained for a new regulated activity at the facility, please identify the previous or existing registration or permit number in the space provided. Please note that if you are seeking a modification, you should consult the [TOWN/CITY] Aquifer Protection Agency prior to submitting a registration to determine whether completing a registration form is necessary.

### Part II: Fee Information

A fee of \$[FEE AMOUNT] must be submitted for each registration you are seeking. Each separate facility (or non-contiguous property) requires a separate registration and fee. The registration will not be processed without the fee. The payment should be in the form of a check or money order made payable to “[TOWN/CITY].”

### Part III: Registrant Information

When completing this part, please use the following standards:

- Name – Provide the full, legal company/firm name. If identifying an entity registered with the Secretary of the State, fill in the name exactly as it is shown on such registration. If identifying an individual, provide the full legal name (include title and suffix) in the following format: Title (Ms, Dr, etc.); First Name; Middle Initial; Last Name; Suffix (Jr, PE, PhD, etc.)
- Phone – Unless otherwise indicated, the phone number provided should be the number where the individual can be contacted during the daytime business hours.
- Contact Person – Provide the name of the specific individual within the company whom Municipal Aquifer Protection Agency may contact.
  1. Registrant – Fill in the registrant’s name, mailing address and phone number. Check the boxes describing the registrant’s interest in the property or facility. Provide the company name. Indicate if there are co-registrants, and if so, provide the required information for each registrant.
  2. Primary Contact – If you have authorized a consultant, engineer, attorney or other individual to act for you during the processing of this registration, complete this section. The municipality will direct copies of all correspondence and inquiries to this primary contact.
  3. Attorney – It is not required that an applicant be represented by an attorney or any other agent. If you do have an attorney representing you for this process, complete this section.
  4. Facility Operator – If the registrant is not the operator of the affected facility, complete this section.
  5. Facility Owner – If the registrant is not the owner of the affected facility complete this section.

# 7 | Forms and Applications

## 7.2 | Instructions for Completing the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (continued)

6. Engineers or Consultants – List any engineers or other consultants employed or retained to assist in preparing the registration or to design, construct or operate the proposed activity. Be sure to identify the service that is being provided by each.

### Part IV: Facility Information

1. The facility name should be the name by which the facility is commonly known and/or uniquely identified.

The “facility” (as defined in Section [NUMBER] of the Aquifer Protection Area Regulations) 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 including contiguous land owned, leased, or for which there is an option to purchase by that person.

The information provided as the location address should be the address of the property at which the regulated activity takes place. Include the street address and municipality. If the property does not have a street number, describe the location in terms of the distance and direction from an obvious landmark such as an intersection with another roadway, a bridge, or a river. For example, “... on River Street, approximately 1,000 feet north of its intersection with Bear Swamp Road.”

2. Check off all regulated activities conducted at the facility. Note that the descriptions of regulated activities listed in the registration form are simplified. The full descriptions, which include some exceptions, are provided in Section [NUMBER] of the Aquifer Protection Area Regulations, reproduced in this document as Appendix A. These regulated activities are further modified by exceptions listed in Section [NUMBER] of the Aquifer Protection Area Regulations, also included in Appendix A of these instructions, which exempts residential activities, volumes of hazardous materials below given thresholds, agricultural activities, as well as several other minor categories.

### Part V: Best Management Practices

Registrants must certify that the regulated activities at the facility are in compliance with the best management practices (BMPs) specified in Section [NUMBER] of the Aquifer Protection Area Regulations, in order to complete the registration form. Such BMPs are attached as Appendix B of these instructions. Most facilities will already be in compliance with the very basic BMPs in Section [NUMBER] of the Aquifer Protection Area Regulations.

Please note, however, that development and implementation of a materials management plan is also required by Section [NUMBER] of the Aquifer Protection Area Regulations. A brief guidance document and sample plan is available from the [TOWN/CITY] Aquifer Protection Agency or on the DEEP website at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection). A materials management plan must be maintained at the facility and made available for inspection if requested by a representative of DEEP or the Municipal Aquifer Protection Agency.

The registrant must check the box by each of the five BMPs as verification that the facility is in compliance with all of the BMPs. The registrant and the operator, if different from the registrant, must sign the certification.

### Part VI: Supporting Documents

Check the appropriate box by each attachment as verification that all applicable attachments have been submitted.

Please label all attachments as referenced in the registration form and these instructions and be sure to include the name of the registrant.

The following attachment is required for all registrations:

#### Attachment A: A Facility Boundary Map

Submit, as Attachment A, an 8½" x 11" copy of the relevant portion of a United States Geological Survey (USGS) Quadrangle Map, at a scale of 1:24,000, indicating the exact location of the facility (property) boundaries, in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations. See Figure A, at the end of these instructions, for an example of how a USGS Map must be labeled when submitted. If the site boundary is too small to show on a map with a scale of 1:24,000, then submit a local property or assessor’s map at a scale that clearly shows the facility boundaries. See Figure B, at the end of these instructions, as an example.

It is important that you accurately locate the facility on this map. An inaccurate description of the facility location may delay the processing of your registration. Refer to the definition of “facility” in Part IV, item 1 of these instructions.

**Please note:** This map is a critical piece of the registration. Facilities that have registrations for existing regulated activities are allowed to continue to operate, expand and change with minimal restrictions, as well as apply for permits to add new regulated activities within this boundary. New regulated activities are prohibited at unregistered facilities in Aquifer Protection Areas.

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## 7.2 | Instructions for Completing the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (continued)

### Attachment B: Materials Management Plan

Submit a Materials Management Plan, as Attachment B, only if requested by the Municipal Aquifer Protection Agency. Otherwise, a copy of the Materials Management Plan must be maintained on-site. A Materials Management Plan shall be developed and implemented in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations.

### Attachment C: Stormwater Management Plan

Submit a Stormwater Management Plan, as Attachment C, only if requested by the Municipal Aquifer Protection Agency. If requested, a Stormwater Management Plan shall be implemented in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations to assure that stormwater runoff generated by the subject regulated activity is managed to prevent pollution of groundwater.

### Part VII: Registrant Certification

After the registration has been completed it must be reviewed and signed by both the registrant and the individual(s) who actually prepared the registration. By their signature, they certify that, to the best of their knowledge and belief, the information contained in the application, including all attachments, is true, accurate and complete.

The certification of the registration package shall be signed as follows:

1. For an individual(s) or sole proprietorship: by the individual(s) or proprietor, respectively;
2. For a corporation: by a principal executive officer of at least the level of vice president;
3. For a limited liability company (LLC): a manager, if management of the LLC is vested in a manager in accordance with the company's "Articles of Organization," or a member of the LLC if no authority is vested in a manager;
4. For a partnership: by a general partner;
5. For a municipal, state, or federal Agency or Department: by either a principal executive officer, a ranking elected official, or by other representatives of such applicant authorized by law.

A registration will be considered incomplete unless all required signatures are provided.

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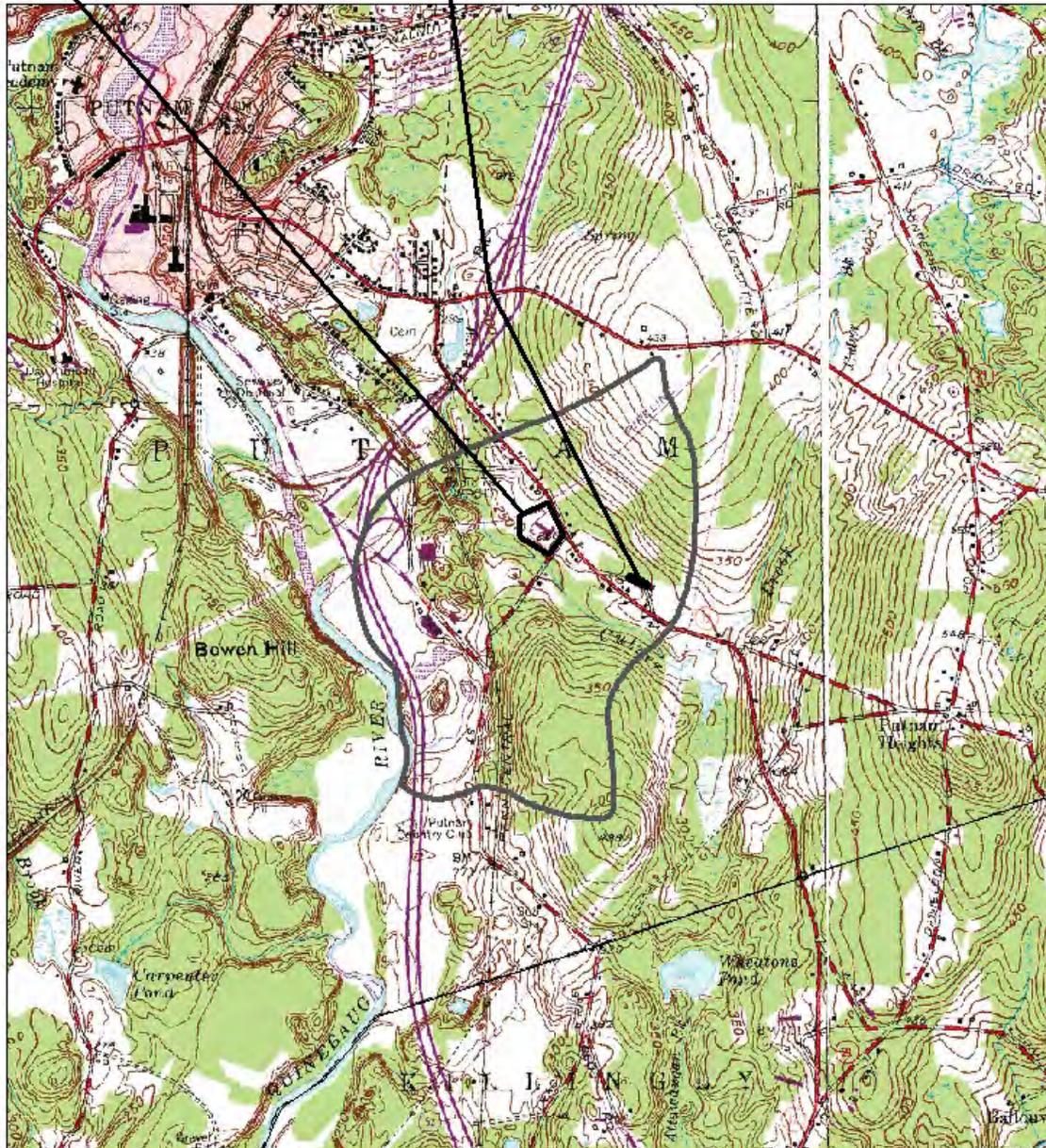
## 7.2 | Instructions for Completing the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (continued)

**Figure A: Aquifer Protection Area Facility Boundary Map**

**USGS Quadrangle Map: Putnam**  
**Map Scale: 1:24,000 (1"=2,000')**  
— APA Boundary    — Facility Boundary

1. Facility Boundary clearly shows at scale 1:24,000.

2. Facility Boundary where site boundary is too small to show on map at scale 1: 24,000. Please attach a detailed map at a scale which clearly shows facility boundary. See Figure B for example.



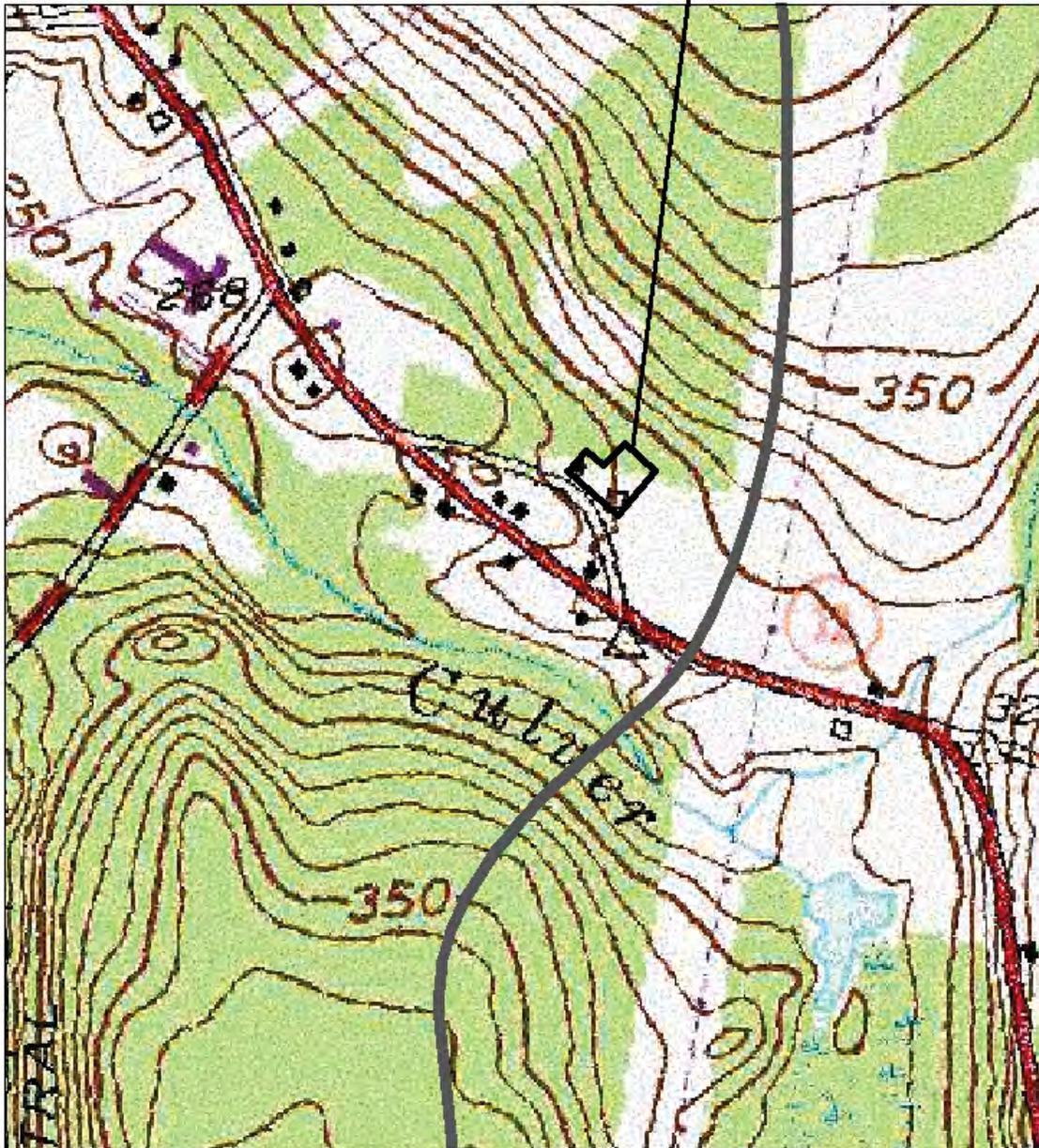
# 7 | Forms and Applications

## 7.2 | Instructions for Completing the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (continued)

**Figure B: Aquifer Protection Area Detailed Facility Boundary Map**

USGS Quadrangle Map: Putnam  
Map Scale: 1:6,000 (1"=500')  
— APA Boundary    — Facility Boundary

Example of a detailed map at a scale which clearly shows facility boundary where site boundary is too small to show on map at scale 1: 24,000. In this example the scale chosen to clearly show detail is 1: 6,000.



# 7 | Forms and Applications

## 7.2 | Instructions for Completing the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (continued)

### Appendix A: Regulations of [TOWN/CITY NAME] Section [NUMBER]

#### Definition of a regulated activity

(34) "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 Sec. 22a-354i-5(c) and 22a-354i-6 of the Regulations of Connecticut State Agencies:

- (A) underground storage or transmission of oil or petroleum, to the extent such activity is not preempted 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 § 22a-354c or § 22a-354z of the Connecticut General Statutes, 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 issued by the Commissioner pursuant to § 22a-430 of the Connecticut General Statutes: (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, or (v) swimming pools,
- (G) car or truck washing, unless all waste waters 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 service which involves the cleaning of clothes or cloth contaminated by hazardous material, unless all waste waters from such activity are lawfully 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 § 22a-174-22(a) (3) of the Regulations of Connecticut State Agencies, 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 waste waters 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 waste waters 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 Sec. 22a-449(c)-100 to 22a-449(c)-110, inclusive, of the Regulations of Connecticut State Agencies,
- (Q) biological or chemical testing, analysis or research which involves the use, storage or disposal of hazardous material, unless all waste waters 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 waste waters from such activity are lawfully disposed of through a connection to a publicly owned treatment works,

# 7 | Forms and Applications

## 7.2 | Instructions for Completing the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (continued)

### Appendix A: Regulations of [TOWN/CITY NAME] Section [NUMBER] (continued)

- (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 under § 22a-208(i) and 22a-454(e)(1) of the Connecticut General Statutes,
- (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 §§ 22a-207b, 22a-208a, and 22a-208c of the Connecticut General Statutes, except for a potable water treatment sludge disposal area,
- (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, production of rubber, resin cements, elastomers or plastic, which involves the use, storage or disposal of hazardous materials,
- (BB) pulp production processes that involve bleaching.
- (3) any agricultural activity regulated pursuant to § 22a-354m(d) of the Connecticut General Statutes;
- (4) any activity provided all the following conditions are satisfied:
  - (A) such activity takes place solely within an enclosed building in an area with an impermeable floor,
  - (B) such activity involves no more than 10% of the floor area in the building where the activity takes place,
  - (C) any hazardous material used in connection with such activity is stored in such building at all times,
  - (D) all wastewaters generated by such activity are lawfully disposed through a connection to a publicly owned treatment works, and
  - (E) such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above-ground storage of more than one hundred and ten (110) gallons of hazardous materials;
- (5) any activity solely involving the use of lubricating oil provided all the following conditions are satisfied:
  - (A) such activity does not involve cleaning of metals with chlorinated solvents at the facility,
  - (B) such activity takes place solely within an enclosed building in an area with an impermeable floor,
  - (C) any hazardous material used in connection with such activity is stored in such building at all times, and
  - (D) such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above ground storage of more than 110 gallons of such lubricating oil and associated hazardous waste; and
- (6) any activity involving the dispensing of oil or petroleum from an above-ground storage tank or tanks with an aggregate volume of 2,000 gallons or less, provided all the following conditions are satisfied:
  - (A) such dispensing activity takes place solely on a paved surface which is covered by a roof,
  - (B) the above ground storage tank (or tanks) is a double-walled tank with overfill alarms, and
  - (C) all associated piping is either above ground, or has secondary containment.

#### The following are not regulated activities:

- (1) Any activity conducted at a residence without compensation;
- (2) any activity involving the use or storage of no more than two and one-half (2.5) gallons of each type of hazardous material on-site at any one time, provided the total of all hazardous materials on-site does not exceed fifty-five (55) gallons at any one time;

# 7 | Forms and Applications

## 7.2 | Instructions for Completing the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (continued)

### Appendix B: Regulations of [TOWN/CITY NAME] Section [NUMBER]

#### Best Management Practices (BMPs) for Regulated Activities

[Insert Additional BMPs As Required By Each Municipality; The Following Are The State BMPs; Regulations Of Connecticut State Agencies Sec. 22a-354i-9(A)]

#### Every regulated activity shall be conducted in accordance with the following:

- (1) Hazardous materials may be stored above ground within an Aquifer Protection Area only in accordance with the following conditions:
  - (A) hazardous material shall be stored in a building or under a roof that minimizes stormwater entry to the hazardous material storage area, except that a roof is not required for a bulk storage facility as defined in Sec. 22a-354i-1(6) of the Regulations of Connecticut State Agencies,
  - (B) floors within a building or under a roof where hazardous material may be stored shall be constructed or treated to protect the surface of the floor from deterioration due to spillage of any such material,
  - (C) a structure which may be used for storage or transfer of hazardous material shall be protected from storm water run-on, and groundwater intrusion,
  - (D) hazardous material shall be stored within an impermeable containment area which is capable of containing at least the volume of the largest container of such hazardous material present in such area, or 10% of the total volume of all such containers in such area, whichever is larger, without overflow of released hazardous material from the containment area,
  - (E) hazardous material shall not be stored with other hazardous materials that are incompatible and may create a hazard of fire, explosion or generation of toxic substances,
  - (F) hazardous material shall be stored only in a container that has been certified by a state or federal Agency or the American Society of Testing Materials as suitable for the transport or storage of such material,
  - (G) hazardous material shall be stored only in an area that is secured against unauthorized entry by the public, and
  - (H) the requirements of this subdivision are intended to supplement, and not to supersede, any other applicable requirements of federal, state, or local law, including applicable requirements of the Resource Conservation and Recovery Act of 1976, as amended;
- (2) no person shall increase the number of underground storage tanks used to store hazardous materials;
- (3) an underground storage tank used to store hazardous materials shall not be replaced with a larger tank unless
  - (A) there is no more than a 25% increase in volume of the larger replacement tank, and
  - (B) the larger replacement tank is a double-walled tank with coaxial piping, both meeting new installation component standards pursuant to 22a-449(d)-1(e) and 22a-449(d)-102 of the Regulations of Connecticut State Agencies, and with interstitial monitoring;
- (4) no person shall use, maintain or install floor drains, dry wells or other infiltration devices or appurtenances which allow the release of waste waters to the ground, unless such release is permitted by the Commissioner in accordance with § 22a-430 or 22a-430b of the Connecticut General Statutes; and
- (5) a materials management plan shall be developed and implemented in accordance with the following:
  - (A) A materials management plan shall contain, at a minimum, the following information with respect to the subject regulated activity:
    - (i) A pollution prevention assessment consisting of a detailed evaluation of alternatives to the use of hazardous materials or processes and practices that would reduce or eliminate the use of hazardous materials, and implementation of such alternatives where possible and feasible,
    - (ii) a description of any operations or practices which may pose a threat of pollution to the aquifer, which shall include the following:
      - (a) a process flow diagram identifying where hazardous materials are stored, disposed and used, and where hazardous wastes are generated and subsequently stored and disposed,
      - (b) an inventory of all hazardous materials which are likely to be or will be manufactured, produced, stored, utilized or otherwise handled, and

# 7 | Forms and Applications

## 7.2 | Instructions for Completing the Municipal Registration Form for Regulated Activities in Aquifer Protection Areas (continued)

### Appendix B: Regulations of [TOWN/CITY NAME] Section [NUMBER] (continued)

- (c) a description of waste, including waste waters generated, and a description of how such wastes are handled, stored and disposed,
  - (iii) the name, street address, mailing address, title and telephone number of the individual(s) responsible for implementing the materials management plan and the individual(s) who should be contacted in an emergency,
  - (iv) a recordkeeping system to account for the types, quantities, and disposition of hazardous materials which are manufactured, produced, utilized, stored, or otherwise handled or which are discharged or emitted; such recordkeeping system shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal Aquifer Protection Agency, and
  - (v) an emergency response plan for responding to a release of hazardous materials. Such plan shall describe how each such release could result in pollution to the underlying aquifer and shall set forth the methods used or to be used to prevent and abate any such release;
- (B) when a materials management plan is required under either Sec. 22a-354i-7(d) or 22a-354i-8(c),
- such materials management plan shall be completed and certified by a professional engineer or a certified hazardous materials manager, or, if the facility where the regulated activity is conducted has received and maintained an ISO 14001 environmental management system certification, then the registrant may complete and certify the materials management plan; and
- (C) the materials management plan shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal aquifer protection Agency.
- (i) The development and implementation of a stormwater management plan required for regulated activities in accordance with sections 8(c) and 9(d) of the APA Regulations, shall be as follows: A stormwater management plan shall assure that stormwater runoff generated by the subject regulated activity is (i) managed in a manner so as to prevent pollution of ground water, and (ii) shall comply with all of the requirements for the General Permit of the Discharge of Stormwater Associated with a Commercial Activity issued pursuant to § 22a-430b of the Connecticut General Statutes.

### Appendix C: Contacts

#### Department of Energy and Environmental Protection

Copies of forms being submitted to the Department of Environmental Protection shall be directed to:

AQUIFER PROTECTION PROGRAM  
DEPARTMENT OF ENERGY AND  
ENVIRONMENTAL PROTECTION  
79 ELM STREET  
HARTFORD, CT 06106-5127

#### Department of Public Health

Copies of forms being submitted to the Department of Public Health shall be directed to:

DRINKING WATER DIVISION  
CONNECTICUT DEPARTMENT OF PUBLIC HEALTH  
410 CAPITOL AVENUE, MS #51 WAT  
HARTFORD, CT 06134-0308

#### Water Company

Copies of forms shall be sent to the affected water company. A listing of water company contacts is available by calling [TOWN/CITY NAME] Aquifer Protection Agency at [PHONE NUMBER].

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area



[CITY/TOWN NAME]  
AQUIFER PROTECTION AGENCY  
[PHONE NUMBER]

### **Permit Application to Add a Regulated Activity to a Aquifer Protection Area**

[MONTH] [YEAR]

[Town/City Name Aquifer Protection Agency]

[Form Number]

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

### Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area

Please complete this form in accordance with the instructions [FORM NUMBER] to ensure the proper handling of your permit application. Print or type unless otherwise noted. You must submit the application fee along with this form.

This permit application form is for adding a regulated activity to a facility where a registered regulated activity occurs in an Aquifer Protection Area in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations in the [TOWN/CITY NAME].

AGENCY USE ONLY	
Application No.	_____
Registration No.	_____
Permit No.	_____
APA Name	_____
Date of Receipt	_____

#### Part I: Application Type

Check the appropriate box identifying the application type.

<p>This application is for (check one):</p> <p><input type="checkbox"/> A new permit</p> <p><input type="checkbox"/> A renewal of an existing permit</p> <p><input type="checkbox"/> A modification of an existing permit*</p>	<p>Please identify the existing aquifer protection registration number:</p> <p>Please identify any existing aquifer protection permit number(s):</p>
--	--

\* Note that if you are seeking a *modification*, you should consult the [TOWN/CITY NAME] Aquifer Protection Agency at [PHONE NUMBER] prior to submitting an application to determine whether an application form is necessary.

#### Part II: Fee Information

An application fee of \$[FEE AMOUNT] shall be submitted with the application form. An application shall not be deemed complete and no activity will be authorized by this application unless the application fee has been paid in full. The application will not be processed without the fee. The fee shall be non-refundable and shall be paid by check or money order to the [TOWN/CITY NAME].
---

#### Part III: Applicant Information

1. Fill in the name of the applicant(s). This shall be the same as the registrant(s) for the facility.			
Name of Applicant:			
Mailing Address:			
City/Town:	State:	Zip Code:	
Business Phone:	ext.	Fax:	
E-mail address:			
Applicant's interest in property or facility at which the proposed activity is to be located: (check all that apply)			
<input type="checkbox"/> site owner	<input type="checkbox"/> option holder	<input type="checkbox"/> lessee	<input type="checkbox"/> facility owner
<input type="checkbox"/> easement holder	<input type="checkbox"/> operator	<input type="checkbox"/> other (specify):	
Name of Company:			
<input type="checkbox"/> Check here if there are co-applicants. If so, label and attach additional sheet(s) to this sheet with the required information.			

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

1 of [6]

[DATE]

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

### Part III: Applicant Information (continued)

2. List primary contact for departmental correspondence and inquiries, if different than the applicant.

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Fax:

Contact Person:

Title:

E-mail address:

3. List attorney or other representative, if applicable:

Firm Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Fax:

Attorney:

4. Facility Operator, if different than the applicant:

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Fax:

Contact Person:

Title:

5. Facility Owner, if different than the applicant:

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Fax:

Contact Person:

Title:

6. List any engineer(s) or other consultant(s) employed or retained to assist in preparing the application or in designing or constructing the activity.

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

Fax:

Contact Person:

Title:

Service Provided:

Check here if additional sheets are necessary, and label and attach them to this sheet.

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

2 of [6]

[DATE]



# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

Regulated Activity	registered √	registered and will continue to be conducted √	not registered but proposed to be conducted √
(D) Repair or maintenance of vehicles or internal combustion engines of vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(E) Salvage operations of metal or vehicle parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(F) Wastewater discharges to ground water other than domestic sewage and stormwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(G) Car or truck washing (unsewered)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(H) Production or refining of chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(I) Clothes or cloth cleaning service (dry cleaner)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(J) Industrial laundry service (unsewered)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(K) Generation of electrical power by means of fossil fuels (power plant)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(L) Production of electronic boards, electrical components, or other electrical equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(M) Embalming or crematory services (unsewered)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(N) Furniture stripping operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(O) Furniture finishing operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(P) Storage, treatment or disposal of hazardous waste under a RCRA permit (hazardous waste facility)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Q) Biological or chemical testing, analysis or research (unsewered)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(R) Pest control services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(S) Photographic finishing (unsewered)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(T) Production or fabrication of metal products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(U) Printing, plate making, lithography, photoengraving, or gravure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(V) Accumulation or storage of waste oil, anti-freeze or spent lead-acid batteries (recycling facility under a DEEP Permit)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(W) Production of rubber, resin cements, elastomers or plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(X) Storage of de-icing chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Y) Accumulation, storage, handling, recycling, disposal, reduction, processing, burning, transfer or composting of solid waste (under a state DEEP permit; a solid waste facility, landfill, transfer station, composting facility, processing center)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Z) Dying, coating or printing of textiles, or tanning or finishing of leather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

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[DATE]

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

### Part V: Facility Information (continued)

Regulated Activity	registered √	registered and will continue to be conducted √	not registered but proposed to be conducted √
(AA) Production of wood veneer, plywood, reconstituted wood or pressure-treated wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(BB) Pulp production processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Part VI: Best Management Practices

The applicant and operator, if different from the applicant, must certify that the facility is in compliance with all the best management practices set forth in Section [NUMBER] of the Aquifer Protection Area Regulations. The applicant and the operator, if different from the applicant, must sign this part. An application will be considered incomplete unless the required signatures are provided.

For a full description of Best Management Practices (BMP's) for regulated activities, see Section [NUMBER] of the Aquifer Protection Area Regulations or Appendix B of the instructions [FORM NUMBER].

"I certify that the subject facility is in compliance with all the best management practices set forth in Section [NUMBER] of the Aquifer Protection Area Regulations. I have checked the box by each of the following statements as verification that the subject facility is in compliance with all applicable best management practices. "

- Storage of hazardous materials above ground is in compliance with all provisions of Section [NUMBER] of the Aquifer Protection Area Regulations.
- The number of underground storage tanks used to store hazardous materials shall not increase in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations.
- Replacement of any underground storage tanks used to store hazardous materials shall take place in accordance with all provisions of Section [NUMBER] of the Aquifer Protection Area Regulations.
- Devices for release of wastewaters to the ground shall not be used except in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations.
- A Materials Management Plan has been developed in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations and will be implemented upon issuance of a permit.
- A Stormwater Management Plan has been developed in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations and will be implemented upon issuance of a permit.

Signature of Applicant \_\_\_\_\_

Date \_\_\_\_\_

Name of Applicant (print or type) \_\_\_\_\_

Title (if applicable) \_\_\_\_\_

Signature of Operator (if different than above) \_\_\_\_\_

Date \_\_\_\_\_

Name of Operator (print or type) \_\_\_\_\_

Title (if applicable) \_\_\_\_\_

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

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[DATE]

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

### Part VII: Supporting Documents

Please check the box by the attachments being submitted as verification that *all* applicable attachments have been submitted with this application form. When submitting any supporting documents, please label the documents as indicated in this part (e.g., Attachment A, etc.) and be sure to include the applicant's name.

<input type="checkbox"/>	Attachment A: A Facility Boundary Map
<input type="checkbox"/>	Attachment B: Materials Management Plan
<input type="checkbox"/>	Attachment C: Stormwater Management Plan
<input type="checkbox"/>	Attachment D: Environmental Compliance Information Form <b>[FORM NUMBER]</b>

### Part VIII: Applicant Certification

The applicant *and* the individual(s) responsible for actually preparing the application must sign this part. An application will be considered incomplete unless all required signatures are provided.

"I have personally examined and am familiar with the information submitted in this document and all attachments, and I certify, based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.	
I understand that any false statement made in the submitted information is punishable as a criminal offense, under Section 53a-157b of the General Statutes and any other applicable law.	
I understand that the agency or its duly authorized agent may make regular inspections of the facility and associated property, except a private residence, at reasonable hours.	
I certify that this application is on complete and accurate forms as prescribed by the Agency without alteration of the text."	
Signature of Applicant	Date
Name of Applicant (print or type)	Title (if applicable)
Signature of Preparer (if different than above)	Date
Name of Preparer (print or type)	Title (if applicable)
<input type="checkbox"/> Check here if additional signatures are required. If so, please reproduce this sheet and attach signed copies to this sheet.	

Note: Please submit the Permit Application Form, Fee, and all Supporting Documents to:  
[AQUIFER PROTECTION AGENCY]  
[TOWN HALL]  
[STREET NAME] [PO BOX]  
[CITY/TOWN NAME] [STATE] [ZIP CODE]

The applicant shall also mail a copy of this completed application form to the following:

- Commissioner of the Department of Energy and Environmental Protection,
- Commissioner of Public Health, and
- The affected water company. (See Appendix C of the instructions for contacts and mailing addresses.)

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

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[DATE]

# 7 | Forms and Applications

## 7.3 | Instructions for Completing the Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area

Use these instructions to complete the application form for regulated activities in Aquifer Protection Areas [FORM NUMBER]. These instructions are not a substitute for the requirements of any relevant statutes or regulations. You should review all applicable laws prior to completing the application form. Remember, it is your responsibility to comply with all applicable laws.

A completed application form must be submitted for each separate facility (or non-contiguous property).

### Introduction

The Aquifer Protection Area Program was established to protect large public water supply wells from contamination through land use controls. In accordance with the [TOWN/CITY] Aquifer Protection Area Regulations, Section [NUMBER], new activities using significant quantities of hazardous materials are prohibited from locating within Aquifer Protection Areas, while existing facilities are required to register their use. Registration allows the facility to continue to operate at that site. In addition, a registrant may apply for a permit to add (or change to) a new regulated activity. Basic best management practices for handling and storage of hazardous materials are required. The facility must develop and implement a materials management plan and a stormwater management plan, which are maintained at the facility and submitted to the Aquifer Protection Agency. Guidance for developing such plans is available from the [TOWN/CITY] Aquifer Protection Agency and the Department of Environmental Protection (DEEP).

Any questions that you may have regarding the Aquifer Protection Area should be directed to [NAME AND PHONE NUMBER OF Agency CONTACT].

### Who May Apply for a Permit to Add a Regulated Activity to a Registered Facility?

Any person may apply for a permit to add or change a regulated activity at a facility that currently holds a Registration for Regulated Activities in Aquifer Protection Areas.

### Do I Apply for a Permit with the DEEP or the Municipal Aquifer Protection Agency?

**You must apply to DEEP for a permit to add or change a regulated activity if the registered facility:**

- 1) holds one or more of the following state permits:
  - National Pollutant Discharge Elimination System (NPDES),
  - State Pollutant Discharge Elimination System (SPDES), or
  - Federal Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal Facility (TSDF);
- 2) is a public service company;

- 3) is a large-quantity hazardous waste generator; or
- 4) is a state Agency, as specified in § 22a-354p(g) of the Connecticut General Statutes [CGS].

To obtain a permit from DEEP, complete and submit to DEEP the **Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area** (DEEP-APA-APP-200). This form is available on the web at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection) or by calling DEEP at 860-424-3020.

All other registered facilities must apply for a permit to add a regulated activity with the municipal aquifer protection Agency in the town in which the facility is located by completing and submitting the Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area [FORM NUMBER]. If a facility is located in more than one municipality, the facility must apply with each municipality.

### Timeframe for Permits

A permit to add a regulated activity to a registered facility must be obtained prior to commencement of the new regulated activity. To allow sufficient time for processing, such permit application should be submitted to [TOWN/CITY] Aquifer Protection Agency at least 180 days prior to the anticipated commencement date of such regulated activity.

### A permit will expire ten (10) years from the date of issuance of the permit.

Any person proposing to continue a previously permitted regulated activity must apply for renewal of the existing permit by submitting a sufficient application at least one hundred eighty (180) days prior to the expiration date of the existing permit.

If a renewal application is not submitted prior to the expiration date of the existing permit, then the existing permit is deemed to have expired.

If you are applying for a modification of an active, valid permit, you may be required to submit certain parts of, or an entire, application. For further information concerning modifications, please contact the [TOWN/CITY] Aquifer Protection Agency.

### How To Apply

Your application must include the following:

- A Municipal Permit Application Form to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area [FORM NUMBER] and all supporting documents,
- The applicable application fee, paid by check or money order, made payable to the "[TOWN/CITY NAME]."

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

**You must submit the above materials together as a package to:**

AQUIFER PROTECTION AGENCY  
 [TOWN HALL]  
 [STREET NAME] [PO BOX]  
 [TOWN/CITY NAME] [STATE] [ZIP CODE]

The applicant shall mail a copy of the completed permit application form to the following:

- 1) Commissioner of the DEEP,
- 2) the Commissioner of Public Health, and
- 3) the affected water company.

See Appendix C of these instructions for specific DEEP, Department of Public Health and water company contacts.

When submitting your application, label your supporting documents as directed on your application form and always include the applicant's name on each document. When additional space is necessary to answer a question stated in the application, please insert additional sheets by the appropriate question. Label each sheet with the applicant's name, along with the corresponding part number and question number indicated on the application form. You should retain a copy of all documents for your files.

### Part I: Application Type

Check the appropriate box to specify if the application is for a new permit, a renewal of an existing permit, or a modification of an existing permit. Please provide the existing aquifer protection registration number in the space provided. If you are applying for a renewal or modification of an existing permit, or if a permit has been obtained for a new regulated activity at the facility, please provide the existing aquifer protection permit number in the space provided. Please note that if you are seeking a modification, you should consult the [TOWN/CITY] Aquifer Protection Agency prior to submitting an application to determine whether completing an application form is necessary.

### Part II: Fee Information

A fee of \$[FEE AMOUNT] must be submitted for each permit you are seeking. Each separate facility (or non-contiguous property) requires a separate application and fee. The application will not be processed without the fee. The payment should be in the form of a check or money order made payable to "[TOWN/CITY]."

### Part III: Applicant Information

**When completing this part, please use the following standards:**

- **Name** – Provide the full, legal company/firm name. If identifying an entity registered with the Secretary of the State, fill in the name exactly as it is shown on such application. If identifying an individual, provide the full legal

name (include title and suffix) in the following format: Title (Ms., Dr., etc.); First Name; Middle Initial; Last Name; Suffix (Jr., P.E., Ph.D., etc.)

- **Phone** – Unless otherwise indicated, the phone number provided should be the number where the individual can be contacted during the daytime business hours.
- **Contact Person** – Provide the name of the specific individual within the company whom the Municipal Aquifer Protection Agency may contact.
  1. **Applicant** – Fill in the applicant's name, mailing address and phone number. Check the boxes describing the applicant's interest in the property or facility. Provide the company name. Indicate if there are co-applicants and if so, provide the required information for each applicant.
  2. **Primary Contact** – If you have authorized a consultant, engineer, attorney or other individual to act for you during the processing of this application, complete this section. The municipality will direct copies of all this correspondence and inquiries to this primary contact.
  3. **Attorney** – It is not required that an applicant be represented by an attorney or any other agent. If you do have an attorney representing you for this application, complete this section.
  4. **Facility Operator** – If the applicant is not the operator of the affected facility, complete this section.
  5. **Facility Owner** – If the applicant is not the owner of the affected facility, complete this section.
  6. **Engineers or Consultants** – List any engineers or other consultants employed or retained to assist in preparing the application or to design, construct or operate the proposed activity. Be sure to identify the service that is being provided by each.

### Part IV: Registrant Information

**Registrant** – Complete the following if different than the applicant: Fill in the registrant's name, mailing address and phone number. Check the boxes describing the registrant's interest in the property or facility. Provide the company name. Indicate if there are co-registrants, and if so, provide the required information for each registrant.

### Part V: Facility Information

1. The facility name should be the name by which the facility is commonly known and/or uniquely identified.

The "facility" (as defined in Section [NUMBER] of the Aquifer Protection Area Regulations) means property where a regulated activity is conducted by any person, including, without limitation, any buildings located on the property

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

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.

The information provided as the location address should be the address of the property at which the regulated activity takes place. Include the street address and municipality. If the property does not have a street number, describe the location in terms of the distance and direction from an obvious landmark such as an intersection with another roadway, a bridge, or a river. For example, “.. on River Street, approximately 1,000 feet north of its intersection with Bear Swamp Road.”

2. In the appropriate column of the table, check all regulated activities that a) are registered at the facility, b) are registered and will continue to be conducted at the facility, c) are not registered, but are proposed to be conducted at the facility as a permitted activity.

Note that the descriptions listed in the application form are simplified. The full descriptions, which include some exceptions, are provided in Section [NUMBER] of the Aquifer Protection Area Regulations, reproduced in this document as Appendix A. These regulated activities are further modified by exceptions listed in Section [NUMBER] of the Aquifer Protection Area Regulations, also included in Appendix A of these instructions, which exempts residential activities, volumes of hazardous materials below given thresholds, agricultural activities, as well as several other minor categories.

### Part VI: Best Management Practices

Applicants must certify that the regulated activities at the facility are in compliance with the best management practices (BMPs) specified in Section [NUMBER] of the Aquifer Protection Area Regulations in order to complete the application form. A copy of the BMPs is attached as Appendix B of these instructions. Most registered facilities will already be in compliance with the basic BMPs in Section [NUMBER] of the Aquifer Protection Area Regulations. Please note, however, that development and approval of a materials management plan and a stormwater management plan are required by Section [NUMBER] of the Aquifer Protection Area Regulations. A brief guidance document and sample plans are available from the [TOWN/CITY] Aquifer Protection Agency or on the DEEP website at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection). The materials management plan and stormwater management plan must be submitted with the application. Refer to these instructions under Attachments C and D. In addition, the plans must be maintained at the facility and made available for inspection if requested by the Municipal Aquifer Protection Agency.

The applicant must check the box by each of the five BMPs as verification that the facility is in compliance with all of the BMPs. The applicant and the operator, if different from the applicant, must sign the certification.

### Part VII: Supporting Documents

Check the appropriate box by each attachment as verification that all applicable attachments have been submitted.

Please label all attachments as referenced in the application form and these instructions and be sure to include the name of the applicant.

#### Attachment A: A Facility Boundary Map

Submit a copy of the registered facility boundary map as it was submitted with the original registration. (If unavailable, contact the Agency at [PHONE] for a copy.)

Note: The permitted activities must take place within the registered facility boundary.

#### Attachment B: Materials Management Plan

Submit a Materials Management Plan, required by Section [NUMBER] of the Aquifer Protection Area Regulations, as Attachment B. A copy of the Materials Management Plan must be maintained on-site. A Materials Management Plan shall be developed and implemented in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations.

#### Attachment C: Stormwater Management Plan

Submit a Stormwater Management Plan, required by Section [NUMBER] of the Aquifer Protection Area Regulations, as Attachment C. A copy of the Stormwater Management Plan must be maintained on-site. A Stormwater Management Plan shall be implemented to assure that stormwater runoff generated by the subject regulated activity is managed in a manner so as to prevent pollution of groundwater and shall comply with all of the Stormwater Management Plan requirements of the DEEP's General Permit for the Discharge of Stormwater Associated with a Commercial Activity.

#### Attachment D: Environmental Compliance Information Form

Provide the applicant's record of compliance with the environmental laws of Connecticut, any other state and the federal government. The applicant's environmental compliance record may be considered by the Agency when reviewing a permit application. All permit applications must include a completed Environmental Compliance Information Form [FORM NUMBER] as Attachment D.

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

### Part VIII: Applicant Certification

After the application has been completed, it must be reviewed and signed by both the applicant and the individual(s) who actually prepared the application. By their signature, they certify that, to the best of their knowledge and belief, the information contained in the application, including all attachments, is true, accurate and complete.

The certification of the application package shall be signed as follows:

1. For an individual(s) or sole proprietorship: by the individual(s) or proprietor, respectively;
2. For a corporation: by a principal executive officer of at least the level of vice president;
3. For a limited liability company (LLC): a manager, if management of the LLC is vested in a manager in accordance with the company's "Articles of Organization" or a member of the LLC if no authority is vested in a manager;
4. For a partnership: by a general partner;
5. For a municipal, state, or federal Agency or Department: by either a principal executive officer, a ranking elected official, or by other representatives of such applicant authorized by law.

An application will be considered incomplete unless all required signatures are provided.

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

### Appendix A: Regulations of [TOWN/CITY NAME] Section [NUMBER]

#### Definition of a Regulated Activity

“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 Sec. 22a-354i-5(c) and 22a-354i-6 of the Regulations of Connecticut State Agencies:

- (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 section 22a-354c or section 22a-354z of the Connecticut General Statutes, 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 issued by the Commissioner pursuant to section 22a-430 of the Connecticut General Statutes: (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, or (v) swimming pools,
- (G) car or truck washing, unless all waste waters 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 service which involves the cleaning of clothes or cloth contaminated by hazardous material, unless all wastewaters from such activity are lawfully 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 section 22a-174-22(a)(3) of the Regulations of Connecticut State Agencies, 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 waste waters 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 waste waters 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 Sec. 22a-449(c)-100 to 22a-449(c)-110, inclusive, of the Regulations of Connecticut State Agencies,
- (Q) biological or chemical testing, analysis or research which involves the use, storage or disposal of hazardous material, unless all waste waters 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 waste waters 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,

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

### Appendix A: Regulations of [TOWN/CITY NAME] Section [NUMBER] (continued)

- (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 under § 22a-208(i) and 22a-454(e)(1) of the Connecticut General Statutes,
  - (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 § 22a-207b, 22a-208a, and 22a-208c of the Connecticut General Statutes, except for a potable water treatment sludge disposal area,
  - (Z) dying, 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, production of rubber, resin cements, elastomers or plastic, which involves the use, storage or disposal of hazardous materials,
  - (BB) pulp production processes that involve bleaching.
- (c) The following are not regulated activities:**
- (1) Any activity conducted at a residence without compensation;
  - (2) any activity involving the use or storage of no more than two and one-half (2.5) gallons of each type of hazardous material on-site at any one time, provided the total of all hazardous materials on-site does not exceed fifty-five (55) gallons at any one time;
  - (3) any agricultural activity regulated pursuant to § 22a-354m(d) of the Connecticut General Statutes;
  - (4) any activity provided all the following conditions are satisfied:
    - (A) such activity takes place solely within an enclosed building in an area with an impermeable floor,
    - (B) such activity involves no more than 10% of the floor area in the building where the activity takes place,
    - (C) any hazardous material used in connection with such activity is stored in such building at all times,
    - (D) all waste waters generated by such activity are lawfully disposed through a connection to a publicly owned treatment works, and
    - (E) such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above ground storage of more than one hundred and ten (110) gallons of hazardous materials;
  - (5) any activity solely involving the use of lubricating oil, provided all the following conditions are satisfied:
    - (A) such activity does not involve cleaning of metals with chlorinated solvents at the facility,
    - (B) such activity takes place solely within an enclosed building in an area with an impermeable floor,
    - (C) any hazardous material used in connection with such activity is stored in such building at all times, and
    - (D) such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above ground storage of more than 110 gallons of such lubricating oil and associated hazardous waste; and
  - (6) any activity involving the dispensing of oil or petroleum from an above ground storage tank or tanks with an aggregate volume of 2,000 gallons or less, provided all the following conditions are satisfied:
    - (A) such dispensing activity takes place solely on a paved surface which is covered by a roof,
    - (B) the above ground storage tank (or tanks) is a double-walled tank with overfill alarms, and
    - (C) all associated piping is either above ground, or has secondary containment.

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

### Appendix B: Regulations of [TOWN/CITY NAME] Section [NUMBER]

#### Best Management Practices (BMPs) for Regulated Activities

[Insert additional BMPs as required by each municipality. The following are the state BMPs; Regulations of Connecticut State Agencies Sec. 22a-354i-9(a)]

#### Every regulated activity shall be conducted in accordance with the following:

- (1) Hazardous materials may be stored above ground within an Aquifer Protection Area only in accordance with the following conditions:
  - (A) hazardous material shall be stored in a building or under a roof that minimizes stormwater entry to the hazardous material storage area, except that a roof is not required for a bulk storage facility as defined in Sec. 22a-354i-1(6) of the Regulations of Connecticut State Agencies,
  - (B) floors within a building or under a roof where hazardous material may be stored shall be constructed or treated to protect the surface of the floor from deterioration due to spillage of any such material,
  - (C) a structure which may be used for storage or transfer of hazardous material shall be protected from stormwater run-on, and groundwater intrusion,
  - (D) hazardous material shall be stored within an impermeable containment area which is capable of containing at least the volume of the largest container of such hazardous material present in such area, or 10% of the total volume of all such containers in such area, whichever is larger, without overflow of released hazardous material from the containment area,
  - (E) hazardous material shall not be stored with other hazardous materials that are incompatible and may create a hazard of fire, explosion or generation of toxic substances,
  - (F) hazardous material shall be stored only in a container that has been certified by a state or federal Agency or the American Society of Testing Materials as suitable for the transport or storage of such material,
  - (G) hazardous material shall be stored only in an area that is secured against unauthorized entry by the public, and
  - (H) the requirements of this subdivision are intended to supplement, and not to supersede, any other applicable requirements of federal, state, or local law, including applicable requirements of the Resource Conservation and Recovery Act of 1976, as amended;
- (2) no person shall increase the number of underground storage tanks used to store hazardous materials;
- (3) an underground storage tank used to store hazardous materials shall not be replaced with a larger tank unless (A) there is no more than a 25% increase in volume of the larger replacement tank, and (B) the larger replacement tank is a double-walled tank with coaxial piping, both meeting new installation component standards pursuant to Sec. 22a-449(d)-1(e) and 22a-449(d)-102 of the Regulations of Connecticut State Agencies, and with interstitial monitoring;
- (4) no person shall use, maintain or install floor drains, dry wells or other infiltration devices or appurtenances which allow the release of wastewaters to the ground, unless such release is permitted by the Commissioner in accordance with § 22a-430 or 22a-430b of the Connecticut General Statutes; and
- (5) a materials management plan shall be developed and implemented in accordance with the following:
  - (A) A materials management plan shall contain, at a minimum, the following information with respect to the subject regulated activity:
    - (i) A pollution prevention assessment consisting of a detailed evaluation of alternatives to the use of hazardous materials or processes and practices that would reduce or eliminate the use of hazardous materials, and implementation of such alternatives where possible and feasible,
    - (ii) a description of any operations or practices which may pose a threat of pollution to the aquifer, which shall include the following:
      - (a) a process flow diagram identifying where hazardous materials are stored, disposed and used, and where hazardous wastes are generated and subsequently stored and disposed,
      - (b) an inventory of all hazardous materials which are likely to be or will be manufactured, produced, stored, utilized or otherwise handled, and
      - (c) a description of waste, including wastewaters generated, and a description of how such wastes are handled, stored and disposed,

# 7 | Forms and Applications

## 7.3 | Municipal Permit Application to Add a Regulated Activity to a Registered Facility in an Aquifer Protection Area (continued)

### Appendix B: Regulations of [TOWN/CITY NAME] Section [NUMBER] (continued)

- (iii) the name, street address, mailing address, title and telephone number of the individual(s) responsible for implementing the materials management plan and the individual(s) who should be contacted in an emergency,
  - (iv) a recordkeeping system to account for the types, quantities, and disposition of hazardous materials which are manufactured, produced, utilized, stored, or otherwise handled or which are discharged or emitted; such recordkeeping system shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal Aquifer Protection Agency, and
  - (v) an emergency response plan for responding to a release of hazardous materials. Such plan shall describe how each such release could result in pollution to the underlying aquifer and shall set forth the methods used or to be used to prevent and abate any such release;
- (B) when a materials management plan is required under either Sec. 22a-354i-7(d) or 22a-354i-8(c), such materials management plan shall be completed and certified by a professional engineer or a certified hazardous materials manager, or, if the facility where the regulated activity is conducted has received and maintained an ISO 14001 environmental management system certification, then the registrant may complete and certify the materials management plan; and
- (C) the materials management plan shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal Aquifer Protection Agency.
- (D) The development and implementation of a stormwater management plan required for regulated activities in accordance with sections 8(c) and 9(d) of the APA Regulations, shall be as follows: A stormwater management plan shall assure that stormwater runoff generated by the subject regulated activity is (i) managed in a manner so as to prevent pollution of groundwater, and (ii) shall comply with all of the requirements for the General Permit of the Discharge of Stormwater Associated with a Commercial Activity issued pursuant to § 22a-430b of the Connecticut General Statutes.

### Appendix C: Contacts

#### Department of Energy and Environmental Protection

Copies of forms being submitted to the Department of Environmental Protection shall be directed to:

AQUIFER PROTECTION PROGRAM  
DEPARTMENT OF ENERGY AND  
ENVIRONMENTAL PROTECTION  
79 ELM STREET  
HARTFORD, CT 06106-5127

#### Department of Public Health

Copies of forms being submitted to the Department of Public Health shall be directed to:

DRINKING WATER DIVISION  
CONNECTICUT DEPARTMENT OF PUBLIC HEALTH  
410 CAPITOL AVENUE, MS #51 WAT  
HARTFORD, CT 06134-0308

#### Water Company

Copies of forms shall be sent to the affected water company. A listing of water company contacts is available by calling [TOWN/CITY NAME] Aquifer Protection Agency at [PHONE NUMBER].

# 7 | Forms and Applications

## 7.4 | Transfer Form for Registrations and Permits in Aquifer Protection Areas



[CITY/TOWN NAME]  
AQUIFER PROTECTION AGENCY  
[PHONE NUMBER]

### **Transfer Form for Regulated Activities in Aquifer Protection Areas**

[MONTH] [YEAR]

[Town/City Name Aquifer Protection Agency]

[Form Number]

# 7 | Forms and Applications

## 7.4 | Transfer Form for Registrations and Permits in Aquifer Protection Areas (continued)

### Transfer Form for Registrations and Permits in Aquifer Protection Areas

Please complete this form to ensure the proper handling of the transfer of your registration/permit. Print or type unless otherwise noted. You must submit the fee along with this form.

This transfer form is for transferring a registration or permit for regulated activities in Aquifer Protection Areas in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations in the [TOWN/CITY NAME].

AGENCY USE ONLY	
Application No.	_____
Registration No.	_____
Permit No.	_____
APA Name	_____
Date of Receipt	_____

#### Part I: Transfer Type

Check the appropriate box identifying the transfer type.

This transfer is for (check one):		
<input type="checkbox"/>	A registration	
<input type="checkbox"/>	A permit	
Please identify the aquifer protection registration or permit number you are proposing to transfer.		
<b>Registration or Permit Number</b>	<b>Expiration Date</b>	<b>Date of Proposed Transfer</b>

#### Part II: Fee Information

A transfer fee of \$[FEE AMOUNT] shall be submitted with the transfer form. A transfer of registration/permit shall not be deemed complete and no activity will be authorized by this transfer form unless the fee has been paid in full. The transfer will not be processed without the fee. The fee shall be non-refundable and shall be paid by check or money order to the [TOWN/CITY NAME].
--

#### Part III: General Information

1. Name of facility:		
Street Address:		
City/Town:	State:	Zip Code:
2. Fill in the name, address and phone number of the current licensee.		
Name:		
Mailing Address:		
City/Town:	State:	Zip Code:
Business Phone:	Ext.	Fax:
E-mail Address:		

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

1 of 6]

[DATE]

# 7 | Forms and Applications

## 7.4 | Transfer Form for Registrations and Permits in Aquifer Protection Areas (continued)

### Part III: General Information (continued)

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_  
Registration Number: \_\_\_\_\_  
Permit Number: \_\_\_\_\_

3. Fill in the name, address and phone number of the proposed transferee.

Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Business Phone: \_\_\_\_\_ Ext. \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_  
Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_  
Registration Number: \_\_\_\_\_  
Permit Number: \_\_\_\_\_

4. Name of facility (if it will change with the transfer):

Street Address: \_\_\_\_\_  
City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

5. Proposed transferee's interest in the property at which the regulated or permitted activity is located:

site owner       option holder       lessee       facility owner  
 easement holder       operator       other (specify): \_\_\_\_\_

Check here if there are co-applicants. If so, label and attach additional sheet(s) to this sheet with the required information as supplied above.

6. List new primary contact for correspondence and inquires if different than the proposed transferee.

Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Business Phone: \_\_\_\_\_ Ext. \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_  
Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

2 of [6]

[DATE]

# 7 | Forms and Applications

## 7.4 | Transfer Form for Registrations and Permits in Aquifer Protection Areas (continued)

### Part III: General Information (continued)

7. List new attorney or other representative(s), if applicable.

Firm Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

Ext.

Fax:

Attorney:

8. New Property, Facility and/or Site Owner, if different than the proposed transferee.

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

Ext.

Fax:

E-mail Address:

Contact Person:

Title:

Location address, if different than mailing address:

property owner     facility owner     site owner

9. New Facility Operator, if different than the owner:

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

Ext.

Fax:

Contact Person:

Title:

Type (check one):  individual     private company     municipality

10. List any engineer(s) or other consultant(s) employed or retained to assist in preparing the transfer or in designing or constructing the activity.

Name:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

Ext.

Fax:

Contact Person:

Title:

Service Provided:

Check here if additional sheets are necessary, and label and attach them to this sheet.

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

3 of [6]

[DATE]

# 7 | Forms and Applications

## 7.4 | Transfer Form for Registrations and Permits in Aquifer Protection Areas (continued)

### Part IV: Certification of Best Management Practices

The transferee and operator, if different from the transferee, must certify that the facility is in compliance with all the best management practices set forth in Section [NUMBER] of the Aquifer Protection Area Regulations. The transferee and the operator, if different from the transferee, must sign this part. A transfer form will be considered incomplete unless the required signatures are provided.

For a full description of Best Management Practices (BMP's) for regulated activities, see Section [NUMBER] of the Aquifer Protection Area Regulations.

"I certify that the subject facility is in compliance with all the best management practices set forth in Section [NUMBER] of the Aquifer Protection Area Regulations. I have checked the box by each of the following statements as verification that the subject facility is in compliance with all applicable best management practices. "

- Storage of hazardous materials above ground is in compliance with all provisions of Section [NUMBER] of the Aquifer Protection Area Regulations.
- The number of underground storage tanks used to store hazardous materials shall not increase in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations.
- Replacement of any underground storage tanks used to store hazardous materials shall take place in accordance with all provisions of Section [NUMBER] of the Aquifer Protection Area Regulations.
- Devices for release of wastewaters to the ground shall not be used except in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations.
- A Materials Management Plan has been developed in accordance with Section [NUMBER] of the Aquifer Protection Area Regulations and will be implemented upon issuance of a transfer.

\_\_\_\_\_  
Signature of Transferee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Transferee (print or type)

\_\_\_\_\_  
Title (if applicable)

\_\_\_\_\_  
Signature of Operator (if different than above)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Operator (print or type)

\_\_\_\_\_  
Title (if applicable)

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

4 of [6]

[DATE]

### Part V: Supporting Documents

Please check the box by the attachments as verification that *all* applicable attachments have been submitted with this transfer form. When submitting any supporting documents, please label the documents as indicated in this part (e.g., Attachment A, etc.) and be sure to include both the licensee and the proposed transferee's name.

- Attachment A: A copy of the licensee's Registration Form and Registration Certificate
- Attachment B: A copy of the Facility Boundary Map (*Required as an attachment for all Registrations*)  
An 8" X 11" copy of the relevant portion of a USGS Topographic Quadrangle Map with the exact location of the facility\* (property) boundaries shown. A larger scale [local property or assessor's] map with the facility boundaries shown, may also be submitted to clarify boundary locations.
- Attachment C: Materials Management Plan, *if applicable*.
- Attachment D: Stormwater Management Plan, *if applicable*.

(continued on the following page)

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

5 of [6]

[DATE]

# 7 | Forms and Applications

## 7.4 | Transfer Form for Registrations and Permits in Aquifer Protection Areas (continued)

The transferee *and* the individual(s) responsible for actually preparing the transfer form must sign this part. A transfer will be considered incomplete unless all required signatures are provided.

"I have personally examined and am familiar with the information submitted in this document and all attachments, and I certify, based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

I understand that any false statement made in the submitted information is punishable as a criminal offense, under Section 53a-157b of the General Statutes and any other applicable law.

I understand that this transfer shall become effective upon the Agency's written approval of this request. I understand that there are penalties for conducting any activity requiring a registration or a permit. I understand that this registration and permit transfer form is only to be used for changes in owners and operators of the licensed activity; if other changes are being proposed to the facility or site or facility operations, the proposed transferee must also obtain necessary permits or approvals.

I certify that this application is on complete and accurate forms as prescribed by the Agency without alteration of the text."

\_\_\_\_\_  
Signature of Transferee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Transferee (print or type)

\_\_\_\_\_  
Title (if applicable)

\_\_\_\_\_  
Signature of Preparer (if different than above)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Preparer (print or type)

\_\_\_\_\_  
Title (if applicable)

Check here if additional signatures are required. If so, please reproduce this sheet and attach signed copies to this sheet.

Please submit the Transfer Form, Fee, and all Supporting Documents to:

[AQUIFER PROTECTION AGENCY]  
[TOWN HALL]  
[STREET NAME] [PO BOX]  
[CITY/TOWN NAME] [STATE] [ZIP CODE]

The Transferee shall also mail a copy of this completed form to the following:

- Commissioner of the Department of Energy and Environmental Protection,
- Commissioner of Public Health, and
- the affected water company.

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

6 of [6]

[DATE]

# 7 | Forms and Applications

## 7.5 | Environmental Compliance Information Form



[CITY/TOWN NAME]  
AQUIFER PROTECTION AGENCY  
[PHONE NUMBER]

# Environmental Compliance Information Form

[MONTH] [YEAR]

[Town/City Name Aquifer Protection Agency]

[Form Number]

# 7 | Forms and Applications

## 7.5 | Environmental Compliance Information Form (continued)

### Environmental Compliance Information Form

AGENCY USE ONLY	
Permit No.	_____
Applicant Name	_____

Applicant Name: \_\_\_\_\_

If you answer yes to any of the questions below, you must complete the Table of Enforcement Actions on the reverse side of this sheet.

- A. During the five years immediately preceding submission of this application, has the applicant been convicted in any jurisdiction of a criminal violation of any environmental law?
- Yes       No
- B. During the five years immediately preceding submission of this application, has a civil penalty been imposed upon the applicant in any state, including Connecticut, or federal judicial proceeding for any violation of an environmental law?
- Yes       No
- C. During the five years immediately preceding submission of this application, has a civil penalty exceeding five thousand dollars been imposed on the applicant in any state, including Connecticut, or federal administrative proceeding for any violation of an environmental law?
- Yes       No
- D. During the five years immediately preceding submission of this application, has any state, including Connecticut, or federal court issued any order or entered any judgement to the applicant concerning a violation of any environmental law?
- Yes       No
- E. During the five years immediately preceding submission of this application, has any state, including Connecticut, or federal administrative agency issued any order to the applicant concerning a violation of any environmental law?
- Yes       No

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

1 of 2

[DATE]

# 7 | Forms and Applications

## 7.5 | Environmental Compliance Information Form (continued)

**Table of Enforcement Actions**

(1) Type of Action	(2a) Date Commenced	(2b) Date Terminated	(3) Jurisdiction	(4) Case/Docket/Order No.	(5) Description of Violation

Check the box if additional sheets are attached. Copies of this form may be duplicated for additional space.

[TOWN/CITY NAME] AQUIFER PROTECTION AGENCY  
[FORM NUMBER]

2 of 2

[DATE]

# 7 | Forms and Applications

## 7.5 | Instructions for Completing the Environmental Compliance Information Form (continued)

All applications for permits must include, on the form provided by the Agency, a completed **Environmental Compliance Information Form** [FORM NUMBER]. The form includes a series of questions that the applicant must answer. If you answer yes to any of the questions on this form, you must complete the **Table of Enforcement Actions** as follows:

1. Type of Enforcement Action: Identify each enforcement action as one of the following:
  - Administrative order (including consent orders)
  - Judgment, order, or decree
  - Criminal conviction
- 2a. Date Commenced: Provide the date each enforcement action listed was issued or commenced.
- 2b. Date Terminated: If the enforcement action listed has terminated, provide the date of termination.
3. Jurisdiction: For each listed enforcement action, indicate whether a state court, a federal court, a state Agency or a federal Agency was involved. Identify such court or Agency.
4. Case/Docket/Order Number: Provide the case, docket or order number of each enforcement action listed.
5. Description of Violation: Provide a brief description of the violation involved in the listed enforcement action and any requirement or penalty imposed as a result of such action.

Note: You do not need to submit copies of any documents associated with any enforcement actions with your application initially, although the Agency retains the right to request these documents at a later date.

# 7 | Forms and Applications

## 7.6 | Aquifer Protection Inspection Report



[CITY/TOWN NAME]  
AQUIFER PROTECTION AGENCY  
[PHONE NUMBER]

# Aquifer Protection Inspection Report

[MONTH] [YEAR]

[Aquifer Protection Inspection Report]

[Form Number]

# 7 | Forms and Applications

## 7.6 | Aquifer Protection Inspection Report (continued)

TOWN  
LOGO

### Aquifer Protection Inspection Report



**Site Background Information**

**Facility name:**

**Address:**

**Property Owner:**

**Type of Business:**

**Facility Representative(s):**

**Phone:**

**Comments:**

**Aquifer Protection Agent/Inspectors:**

**Other Inspectors:**

**Date:**                      **Arrival Time:**                      **Depart Time:**

**Weather Conditions:**

**Attachments:** Photos of the site

**Inspection Report Date:**

**Submitted by:**            [NAME]                      \_\_\_\_\_

   [NAME]                      \_\_\_\_\_

**Agency/Office/Phone:**

# 7 | Forms and Applications

## 7.6 | Aquifer Protection Inspection Report (continued)

### Aquifer Protection Inspection Report

#### General Site Information

Registered/Permitted Regulated Activities:  by State DEEP  by APA Agency

APA Agency:

APA Name:

APA Regulations effective:

Registered Activity(s):

Permitted Activity(s):

Unregistered/unpermitted Activity

Activity

Facility boundary violation

Water and Sewage:

on-site septic system OR  public sewer

on-site well OR  public water supply

DEEP Permits/Registrations:

Wastewater

Stormwater

Solid Waste

Hazardous Waste

Other

**Comments:**

**Additional Note:**

# 7 | Forms and Applications

## 7.6 | Aquifer Protection Inspection Report (continued)

### Aquifer Protection Inspection Report

#### Site Checklist of Potential Pollution Sources

##### Wastes/Wastewaters

##### Disposal/Handling Method

- hazardous or regulated wastes
- non-domestic wastewaters
- floor drains
- dumpsters, solid wastes storage
- other areas of concern

##### Fuel and Chemical Storage

##### Type of fuel/chemical

##### Volume

##### Above Ground

##### Underground

##### Containment

Waste oil

Waste antifreeze

Gasoline

Motor oil/hydraulic fluid

##### Other Potential Site Hazards

- spills/leaks
- illegal dumping
- oil/chemical stained areas
- outside work or transfer areas
- pesticide or chemical applications
- other

##### Stormwater Drainage

Description of system:

##### Potential Stormwater Pollution Source

- |   |  |
|---|--|
| <input type="checkbox"/> exposed materials/storage                    | <input type="checkbox"/> deicing salt            |
| <input type="checkbox"/> unauthorized connections                     | <input type="checkbox"/> loading/transfer area   |
| <input type="checkbox"/> discharge to drywell or subsurface structure | <input type="checkbox"/> fueling/dispensing area |
| <input type="checkbox"/> large parking or pavement areas              | <input type="checkbox"/> other                   |

# 7 | Forms and Applications

## 7.6 | Aquifer Protection Inspection Report (continued)

### Aquifer Protection Inspection Report

#### Best Management Practices (BMPs) Checklist

(RCSA Section 22a-354i-9)

Key: C  Compliance  
 NC  Non-compliance  
 N/A  Not applicable

Hazardous materials stored above ground within an aquifer protection area only in accordance with the following conditions:

	1. hazardous material shall be stored in a building or under a roof that minimizes storm water entry to the hazardous material storage area, except that a roof is not required for a bulk storage facility
	2. floors within a building or under a roof where hazardous material may be stored shall be constructed or treated to protect the surface of the floor from deterioration due to spillage of any such material
	3. a structure which may be used for storage or transfer of hazardous material shall be protected from storm water run-on, and ground water intrusion
	4. hazardous material shall be stored within an impermeable containment area which is capable of containing at least the volume of the largest container of such hazardous material present in such area, or 10% of the total volume of all such containers in such area, whichever is larger, without overflow of released hazardous material from the containment area
	5. hazardous material shall not be stored with other hazardous materials that are incompatible and may create a hazard of fire, explosion or generation of toxic substances
	6. hazardous material shall be stored only in a container that has been certified to meet state or federal specifications for containers suitable for the transport or storage of such material
	7. hazardous material shall be stored only in an area that is secured against un-authorized entry by the public
	8. no person shall increase the number of underground storage tanks used to store hazardous materials
	9. an underground storage tank used to store hazardous materials shall not be replaced with a larger tank unless (A) there is no more than a 25% increase in volume of the larger replacement tank, and (B) the larger replacement tank is a double-walled tank with co-axial piping, both meeting new installation component standards pursuant to §22a-449(d)-1(e) and §22a-449(d)-102 of the Regulations of Connecticut State Agencies, and with interstitial monitoring
	10. no person shall use, maintain or install floor drains, dry wells or other infiltration devices or appurtenances which allow the release of waste waters to the ground, unless such release is permitted by the Commissioner in accordance with §22a-430 or §22a-430b of the C.G.S.

Aquifer Protection Inspection Report

Page 4 of 6

[DATE]

# 7 | Forms and Applications

## 7.6 | Aquifer Protection Inspection Report (continued)

### Aquifer Protection Inspection Report

<p>A Materials Management Plan (MMP) shall be developed and implemented, as required by RCSA Section 22a-354i-9, in accordance with the following:</p>	
<p><b>Comment:</b></p>	
	<p>11. a pollution prevention assessment consisting of a detailed evaluation of alternatives to the use of hazardous materials or processes and practices that would reduce or eliminate the use of hazardous materials, and implementation of the alternatives where possible</p>
<p>A description of any operations or practices which may pose a threat of pollution to the aquifer, which include the following:</p>	
	<p>12. a process flow diagram identifying where hazardous materials are stored, disposed and used, and where hazardous wastes are generated and subsequently stored and disposed</p>
	<p>13. an inventory of all hazardous materials which are likely to be or will be manufactured, produced, stored, utilized or otherwise handled</p>
	<p>14. a description of waste, including waste waters generated, and a description of how such wastes are handled, stored and disposed</p>
	<p>15. the name, street address, mailing address, title and telephone number of the individual(s) responsible for implementing the materials management plan and the individual(s) who should be contacted in an emergency</p>
	<p>16. a record-keeping system to account for the types, quantities, and disposition of hazardous materials which are manufactured, produced, utilized, stored, or otherwise handled or which are discharged or emitted; such record-keeping system shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal aquifer protection agency</p>
	<p>17. an emergency response plan for responding to a release of hazardous materials. Such plan shall describe how each such release could result in pollution to the underlying aquifer and shall set forth the methods used or to be used to prevent and abate any such a release</p>
	<p>18. the materials management plan shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal aquifer protection agency</p>

# 7 | Forms and Applications

## 7.6 | Aquifer Protection Inspection Report (continued)

### Aquifer Protection Inspection Report

#### Inspection Information

Violations/Problems:

Notes:

Recommendations:

Aquifer Protection Inspection Report

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[DATE]



# Form Letters, Registrations and Permits

# 8 | Form Letters, Registrations and Permits

Sample form letters are provided in this manual to help you with administration. These sample form letters include:

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These documents are available for download at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection).

## 8 | Form Letters, Registrations and Permits

### 8.1 | Initial Program Notice to Business and Facility Owners

On Town/City Letterhead

[DATE]

[BUSINESS OR FACILITY NAME]

[ADDRESS]

[CITY/TOWN] [STATE] [ZIP CODE]

RE: New Aquifer Protection Area Regulations in [CITY/TOWN] which may affect your business

Dear [NAME]:

The [CITY/TOWN] is in the initial stages of adopting Aquifer Protection Area Regulations. State law requires the [CITY/TOWN] Aquifer Protection Agency to adopt and enforce these new regulations.

The focus of the new Aquifer Protection Area Regulations is to provide protection of our public water supply wells from contamination by regulating certain land use activities in the areas feeding those wells. Certain businesses located in the Aquifer Protection Area are required to register. Under the program, generally, businesses that are required to register include:

- Most manufacturing industries
- Trades and services such as gasoline stations, auto and engine repair services, machine shops, dry cleaners, furniture strippers, printers, photo processors, medical offices and laboratories
- Other businesses that use, store, or handle hazardous materials.

Attached is a map of the new regulated Aquifer Protection Area. You are being notified because a survey of the Aquifer Protection Area and potentially regulated land uses indicate that you own a business in this area or property on which a business is located in this area and that you may be required to register. Also attached is an Aquifer Protection Area Program Fact Sheet.

If you have any questions, please contact [NAME OF CHAIRMAN OR AGENT OR OTHER AGENCY CONTACT] at [PHONE NUMBER] or [EMAIL].

Sincerely,

[NAME OF CHAIRMAN]

[AQUIFER PROTECTION AGENCY]

[TOWN NAME]

Enclosed: Aquifer Protection Area Program Fact Sheet  
Map of the [NAME OF AQUIFER PROTECTION AREA]

# 8 | Form Letters, Registrations and Permits

## 8.2 | Notice of Potential Registration to Facility and Property Owners

On Town/City Letterhead

[DATE]

[BUSINESS OR FACILITY NAME]

[ADDRESS]

[CITY/TOWN] [STATE] [ZIP CODE]

RE: Notification of Potential Requirement to Register under the Aquifer Protection Area Program of [CITY/TOWN]

Dear [NAME]:

The [CITY/TOWN] is hereby notifying you that you may be required to register with the [CITY/TOWN] Aquifer Protection Agency, as required by the [CITY/TOWN] Aquifer Protection Area Regulations. You are being notified because a survey of the Aquifer Protection Area and the potentially regulated land uses indicate that you own a business in this area or property on which a business is located in this area and that you may be required to register.

The Aquifer Protection Area Regulations became effective on [DATE]. All businesses that are required to register under these new regulations must do so within 180 days of this date; in [TOWN] that date will be [DATE].

Copies of the Aquifer Protection Area Regulations and the [CITY/TOWN] Zoning District Map designating the Aquifer Protection Area Boundaries are available in the [OFFICE/DEPARTMENT] at [CITY/TOWN] Hall, [STREET ADDRESS].

To help you determine whether or not you need to register, enclosed is a form, **Determining Your Regulatory Status Form**, to help you. Also enclosed is a copy of the registration form as well as instructions for completing the form.

If you have any questions, please contact [NAME OF CHAIRMAN OR AGENT OR OTHER AGENCY CONTACT] at [PHONE NUMBER] or [EMAIL].

Sincerely,

[NAME OF CHAIRMAN]

[AQUIFER PROTECTION AGENCY]

[TOWN NAME]

Enclosed: Determining Your Regulatory Status Form  
Registration Form and Instructions

# 8 | Form Letters, Registrations and Permits

## 8.3 | Registration Acknowledgement

On Town/City Letterhead

[DATE]

[NAME], [TITLE]

[COMPANY]

[STREET], [PO BOX]

[CITY/TOWN] [STATE] [ZIP CODE]

Dear Applicant:

This letter is to confirm the receipt of the Aquifer Protection Area registration package for [BUSINESS NAME].

Your registration has been assigned the following application number: [NUMBER]

Please include this number on all correspondence regarding this application. As of today, the following materials have been received:

Item	Required Fee	Fee Received	Received on
Registration Package:			[DATE]
Registration Fee:	[\$AMOUNT]	[\$AMOUNT]	[DATE]

If there are any questions regarding this notice, please feel free to contact: [NAME] at [PHONE NUMBER]

If you have specific technical questions regarding your application, please contact the Aquifer Protection Agency directly: [NAME] at [PHONE NUMBER]

Your registration is under review. You will receive notice from this office once the registration is approved. The agency may request further information to evaluate your registration.

Sincerely,

[NAME OF CHAIRMAN]

[AQUIFER PROTECTION AGENCY]

[TOWN NAME]

# 8 | Form Letters, Registrations and Permits

## 8.4 | Registration Cover Letter

On letterhead if available

[DATE]

[NAME], [TITLE]

[COMPANY]

[STREET], [PO BOX]

[CITY/TOWN] [STATE] [ZIP CODE]

Re: Aquifer Protection Area Registration

Dear Registrant:

Enclosed is a certificate of registration for the regulated activities being conducted at your facility in the Aquifer Protection Area.

This certificate will serve two purposes. First, this is a way for us to acknowledge to you that your registration has been processed. Second, it is a way for our inspection staff to know that you have the appropriate regulated activities registered for your facility.

The expiration date for this registration is noted on the registration certificate. When corresponding with our office regarding your registration, please use the "Registration Number" on the certificate. This number is unique to your registered activities and the location of this facility.

The following general provisions apply to the issuance of this and all registrations:

- (1) the Agency has relied in whole or in part on information provided by the registrant and if such information subsequently proves to be false, deceptive, incomplete or inaccurate, the registration may be modified, suspended or revoked;
- (2) all registrations issued by the Agency are subject to and do not derogate any present or future rights or powers of the Commissioner, Agency, or municipality, and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the subject land or activity;
- (3) the registration shall expire five (5) years from the date of receipt of such registration by the Agency;
- (4) the registrant shall apply to the Agency to renew the registration on a form prescribed by the Agency for a facility prior to expiration of such registration; and
- (5) If a registered regulated activity is out of business or inactive when registration renewal is required, a five (5) year allowance shall be in effect from the date the registration expires. If the registrant has not applied to renew the registration within five (5) years of the date the registration expires, the facility is no longer eligible for registration.

If you have any questions regarding this registration or the aquifer protection area program, please feel free to call [NAME] at [PHONE NUMBER].

Sincerely,

[NAME OF CHAIRMAN]

[AQUIFER PROTECTION AGENCY]

[TOWN NAME]

Enclosed: Registration Certificate

Cc: Connecticut Department of Energy and Environmental Protection  
Connecticut Department of Public Health  
Water Utility

# 8 | Form Letters, Registrations and Permits

## 8.5 | Certificate of Registration

TOWN/CITY LOGO

TOWN/CITY  
AQUIFER PROTECTION AGENCY  
STREET ADDRESS  
CITY, STATE ZIP CODE

### Certificate of Registration

Issued to:

[FACILITY NAME]

For the following activities:

[LIST OF ACTIVITIES]

### Aquifer Protection Area Registration

In accordance with the [Town/City] Aquifer Protection Area Regulations

[NAME]

[CHAIR, AQUIFER PROTECTION AGENCY]

Facility Information:

[NAME] [NUMBER]  
[STREET][PO BOX] [NUMBER]  
[CITY][STATE][ZIP]

Registration Number: [NUMBER]  
Application Number: [NUMBER]  
Issue Date: [NUMBER]  
Expiration Date: [NUMBER]

# 8 | Form Letters, Registrations and Permits

## 8.6 | Permit Application Acknowledgement

On letterhead if available

[DATE]

[NAME], [TITLE]

[COMPANY]

[STREET], [PO BOX]

[CITY/TOWN] [STATE] [ZIP CODE]

Dear Applicant:

This letter is to confirm the receipt of the Aquifer Protection Area permit application package for [BUSINESS NAME]:

Your permit application has been assigned the following number: [NUMBER]

Please include this number on all correspondence regarding this application. As of today, the following materials have been received:

Item	Required Fee	Fee Received	Received on
Permit Application Package:			[DATE]
Permit Application Fee:	[\$AMOUNT]	[\$AMOUNT]	[DATE]

If there are any questions regarding this notice, please feel free to contact: [NAME] at [PHONE NUMBER]

If you have specific technical questions regarding your application, please contact the Aquifer Protection Agency directly: [NAME] at [PHONE NUMBER]

Your permit application is under review. You will receive notice from this office once the permit application is approved. The agency may request further information to evaluate your permit application.

Sincerely,

[NAME OF CHAIRMAN]

[AQUIFER PROTECTION AGENCY]

[TOWN NAME]

# 8 | Form Letters, Registrations and Permits

## 8.7 | Permit Cover Letter

On letterhead if available

[DATE]

[NAME], [TITLE]

[COMPANY]

[STREET], [PO BOX]

[CITY/TOWN] [STATE] [ZIP CODE]

Application No.: [NUMBER]

Town(s): [TOWN NAME]

Aquifer Protection Area: [AQUIFER PROTECTION AREA NAME]

Dear [NAME]:

The Aquifer Protection Agency has approved your application to add a regulated activity to your registered facility. Your attention is directed to the conditions of the enclosed permit. You should read your permit carefully and adhere to the best management practices you have attested to in your application and the permit conditions.

The expiration for this permit is noted near the top of the enclosed permit. You should submit a renewal of your permit 90 days before the expiration of this permit.

When corresponding with our office regarding your permit, please use the "Permit Number" listed. This number is unique to your regulated activity and the location of the facility.

If you have any questions regarding this permit, please contact the Aquifer Protection Agency at [PHONE NUMBER].

Sincerely,

[NAME OF CHAIRMAN]

[AQUIFER PROTECTION AGENCY]

[TOWN NAME]

Enclosed: Permit

cc: All Parties

Connecticut Department of Energy and Environmental Protection

Connecticut Department of Public Health

Water Utility

# 8 | Form Letters, Registrations and Permits

## 8.8 | Permit

On letterhead if available

### PERMIT

PERMITTEE: [NAME], [TITLE]  
[COMPANY]  
[STREET], [PO BOX]  
[TOWN/CITY], [STATE] [ZIP CODE]

PERMIT NO.: [NUMBER]

DATE OF ISSUANCE: [DATE]

DATE OF EXPIRATION: [DATE]

TOWN(S): [TOWN NAME]

AQUIFER: [AQUIFER PROTECTION AREA NAME]

Dear [NAME]:

Pursuant to Section [NUMBER] of the [TOWN/CITY] Aquifer Protection Area Regulations, the [NAME] (the "permittee") is hereby authorized to [INSERT REGULATED ACTIVITY TO BE PERMITTED] at the [FACILITY NAME AND ADDRESS] (the "facility") in accordance with permittee's application dated [DATE OF APPLICATION], filed with the Agency on [DATE] and described herein. The purpose of the permit is to authorize a new regulated activity at the registered facility.

### AUTHORIZED ACTIVITY

This permittee is authorized to conduct [REGULATED ACTIVITY] located at [FACILITY NAME AND ADDRESS]. The activity will be conducted in accordance with this permit, [PERMIT NUMBER], and facility plans entitled, [NAME OF FACILITY PLANS].

**Permittee's failure to comply with terms and conditions of this permit shall subject permittee and permittee's operator(s) to enforcement actions and penalties as provided by law.**

### SPECIAL CONDITIONS

1. [INSERT CONDITION]
2. [INSERT CONDITION]
3. [INSERT CONDITION]

### GENERAL CONDITIONS

1. Best Management Practices - Every regulated activity shall be conducted in accordance with the following:
  - a. Hazardous materials may be stored above ground within an Aquifer Protection Area only in accordance with the following conditions:
    - (i) hazardous material shall be stored in a building or under a roof that minimizes stormwater entry to the hazardous material storage area, except that a roof is not required for a bulk storage facility as defined in Section 2 of the APA Regulations,
    - (ii) floors within a building or under a roof where hazardous material may be stored shall be constructed or treated to protect the surface of the floor from deterioration due to spillage of any such material,
    - (iii) a structure which may be used for storage or transfer of hazardous material shall be protected from stormwater run-on and groundwater intrusion,
    - (iv) hazardous material shall be stored within an impermeable containment area which is capable of containing at least the volume of the largest container of such hazardous material present in such area, or 10% of the total volume of all such containers in such area, whichever is larger, without overflow of released hazardous material from the containment area, *(continued on next page)*

# 8 | Form Letters, Registrations and Permits

## 8.8 | Permit (continued)

On letterhead if available

- (v) hazardous material shall not be stored with other hazardous materials that are incompatible and may create a hazard of fire, explosion or generation of toxic substances,
  - (vi) hazardous material shall be stored only in a container that has been certified by a state or federal agency or the American Society of Testing Materials as suitable for the transport or storage of such material,
  - (vii) hazardous material shall be stored only in an area that is secured against unauthorized entry by the public, and
  - (viii) the requirements of this subdivision are intended to supplement, and not to supersede, any other applicable requirements of federal, state, or local law, including applicable requirements of the Resource Conservation and Recovery Act of 1976;
- b. no person shall increase the number of underground storage tanks used to store hazardous materials;
  - c. an underground storage tank used to store hazardous materials shall not be replaced with a larger tank unless (A) there is no more than a 25% increase in volume of the larger replacement tank, and (B) the larger replacement tank is a double-walled tank with coaxial piping, both meeting new installation component standards pursuant to §22a-449(d)-1(e) and §22a-449(d)-102 of the Regulations of Connecticut State Agencies, and with interstitial monitoring;
  - d. no person shall use, maintain or install floor drains, dry wells or other infiltration devices or appurtenances which allow the release of waste waters to the ground, unless such release is permitted by the Commissioner in accordance with §22a-430 or §22a-430b of the Connecticut General Statutes; and
  - e. the approved a materials management plan shall be implemented and shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal Aquifer Protection Agency.
- 2. The approved stormwater management plan shall be implemented to assure that stormwater run-off generated by the subject regulated activity is managed in a manner so as to prevent pollution of groundwater, and shall comply with all of the requirements for the General Permit of the Discharge of Stormwater associated with a Commercial Activity issued pursuant to §22a-430b of the Connecticut General Statutes.
  - 3. The permittee shall notify the Agency in writing two weeks prior to: (A) commencing construction or modification of structures or facilities authorized therein, and (B) initiating the authorized activity.
  - 4. The permittee may not conduct any regulated activity, as defined under Section 22a-354i-1, unless specifically authorized under this permit or the registration cited above, unless the permittee applies for and receives a modification of this permit in accordance with the provisions of Section [NUMBER] of the Aquifer Protection Area Regulations.
  - 5. All structures, facilities, or activities constructed, maintained, or conducted pursuant hereto shall be consistent with the terms and conditions of this permit, and any structure, facility or activity not specifically authorized by this permit, or the registration cited above, or exempted pursuant to Section 22a-354i-8 or section 22a-354i-6 of the Regulations of Connecticut State Agencies, shall constitute a violation hereof which may result in modification, revocation or suspension of this permit or in the institution of other legal proceedings to enforce its terms and conditions.
  - 6. The Agency has relied in whole or in part on information provided by the applicant and if such information subsequently proves to be false, deceptive, incomplete or inaccurate, the permit may be modified, suspended or revoked.
  - 7. All permits issued by the Agency are subject to and do not derogate any present or future rights or powers of the Agency, and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the subject land or activity. *(continued on next page)*

# 8 | Form Letters, Registrations and Permits

## 8.8 | Permit (continued)

On letterhead if available

8. The permit shall expire ten (10) years from the date of issuance of such permit by the Agency.
9. A person shall apply to the Agency to renew the permit on a form prescribed by the Agency prior to expiration of such permit. Such renewal shall be granted upon request by the Agency, 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 shall be submitted and reviewed in accordance with the provisions of Section [NUMBER] of the Aquifer Protection Area Regulations.
10. A person may request a modification of a permit from the Agency. Such request shall be on a form prescribed by the Agency, and shall include the facts and reasons supporting the request. The Agency may require the applicant to submit a new application for a permit or renewal in lieu of a modification request.
11. In constructing or maintaining any structure or facility or conducting any activity authorized herein, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of the state.
12. In constructing or maintaining any structure or facility or conducting any activity authorized herein, the permittee shall employ best management practices to control discharges, and to otherwise prevent pollution of water of the State. The permittee shall immediately inform the Agency of any adverse impact or hazard to the environment which occurs or is likely to occur as the direct result of the construction, maintenance, or conduct of structures, facilities, or activities authorized herein.
13. This permit is not transferable without the prior written consent of the Agency.
14. This permit shall expire on [DATE].
15. Certification of Documents: Any document, including but not limited to any notice, which is required to be submitted to the Agency under this permit, shall be signed by the permittee or a responsible corporate officer of the permittee, a general partner of the permittee, and by the individual or individuals responsible for the actually preparing such document, each of whom shall certify in writing as follows:  
  
"I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachment may be punishable as a criminal offense under 53a-157 of the Connecticut General Statutes or any other applicable law."
16. Submission of Documents: Any document or notice required to be submitted to the Agency under this permit shall, unless otherwise specified in writing by the Agency, be directed to:

[TOWN/CITY] Aquifer Protection Agency

[STREET]

[TOWN/CITY] [STATE] [ ZIP CODE]

The date of submission to the Agency of any document required by this permit shall be the date such document is received by the Agency. The date of any notice by the Agency under this permit, including but not limited to notice of approval or disapproval on any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Agency, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this permit means any calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

This authorization constitutes the permit required by Section [NUMBER] of the Aquifer Protection Area Regulations.

Issued as a permit of the [TOWN/CITY] Aquifer Protection Agency on [DATE].

[NAME]

Chair, Aquifer Protection Agency

# 8 | Form Letters, Registrations and Permits

## 8.9 | Letter of Incompleteness

On letterhead if available

[DATE]

[APPLICANT'S NAME and ADDRESS]

RE: Application No. [NUMBER]

Town of [TOWN NAME]

Dear [APPLICANT'S NAME]:

The [NAME OF AGENCY] has reviewed your registration/permit application, and has determined that it is incomplete. Please submit the following information and answer the following questions in writing by the Agency's meeting to be held on [DATE] to complete the registration/permit application.

- 1.
- 2.
- 3.

[ETC.]

Failure to submit this information may result in the denial of your registration/permit application because it is incomplete. If you have any questions please contact [NAME OF CHAIRMAN OR AGENT OR OTHER AGENCY CONTACT] at [PHONE NUMBER].

Sincerely,

[NAME OF CHAIRMAN]

[AQUIFER PROTECTION AGENCY]

[TOWN NAME]

Cc: [Other Commissions]

[PARTIES]

# 8 | Form Letters, Registrations and Permits

## 8.10 | Public Notice for a Hearing

On letterhead if available

TOWN OF [TOWN NAME]  
NOTICE OF PUBLIC HEARING  
APPLICATION NO. [NUMBER]

Pursuant to section [NUMBER OF SECTION] of the Aquifer Protection Area Regulations, the Aquifer Protection Agency has scheduled a public hearing on the application of [NAME OF APPLICANT, BRIEF DESCRIPTION OF THE PROPOSED ACTIVITY OR ACTIVITIES, AND LOCATION OF SITE].

The hearing will be held on [DATE OF HEARING] at [TIME OF DAY] in [LOCATION – ROOM NUMBER, STREET ADDRESS AND TOWN].

A copy of the application is available for inspection in the [PLACE WHERE APPLICATION INFORMATION IS AVAILABLE FOR REVIEW].

DATED: [DATE OF NOTICE]  
[NAME OF CHAIRMAN]  
[AQUIFER PROTECTION AGENCY]

# 8 | Form Letters, Registrations and Permits

## 8.11 | No Permit Required

On letterhead if available

[DATE]

[NAME, OWNER]  
[FACILITY NAME]  
[FACILITY STREET ADDRESS]  
[CITY, STATE, ZIP]

Dear [APPLICANT'S NAME]:

The [NAME OF AGENCY] received the site plan and/or documents you submitted titled "[TITLE OF PLANS OR DOCUMENT]" dated [DATE OF PLANS]. A review of this information reveals that no regulated activity as defined in section [SECTION(S) IN REGULATIONS] of the [NAME OF THE AQUIFER PROTECTION AGENCY] of the town of [TOWN NAME] is proposed and, therefore, an Aquifer Protection Area Permit is not required. This letter applies only to the specific plans and documents noted above. Any revision of these plans will require further review by this agency.

If you have any questions about this letter, please contact [NAME OF CHAIRMAN OR AGENT OR OTHER AGENCY CONTACT] at [PHONE NUMBER].

Sincerely,

[NAME OF CHAIRMAN]  
[AQUIFER PROTECTION AGENCY]  
[TOWN NAME]

Cc: [PARTIES]

# 8 | Form Letters, Registrations and Permits

## 8.12 | Notice of Decision, Permit Granted or Denied

On letterhead if available

### NOTICE OF DECISION

#### APPLICATION [NUMBER]

Pursuant to section [NUMBER] of the [CITY/TOWN] Aquifer Protection Area Regulations, the Aquifer Protection Agency gives notice that it has [DENIED/GRANTED] the Aquifer Protection Area permit application of [NAME OF APPLICANT] to conduct activities on property located at [ADDRESS OR LOCATION OF THE PARCEL UNDER REVIEW].

DATED: [DATE OF NOTICE]  
[NAME OF CHAIRMAN]  
[AQUIFER PROTECTION AGENCY]



# Public Hearings

# 9 | Public Hearings

## 9.1 | Member Participation

No member or alternate member of the Agency may participate in any hearing or decision of the Agency upon any matter in which he is directly or indirectly interested in a personal or financial sense. In the event of disqualification, the fact must be entered on the records of the Agency and an alternate replacement made.

## 9.2 | Public Inspection

Under the Freedom of Information Act, CGS § 1-19(a), “all records maintained or kept on file by any public agency... shall be public records and every person shall have the right to inspect such records promptly during regular office or business hours or to receive a copy of such records.” There are exceptions to this rule (see CGS §§ 1-19(b), but they would seldom apply in the context of aquifer protection applications.

In addition to the general inspection requirements under the Freedom of Information Act, CGS § 22a-354p specifically requires Aquifer Protection Agencies to make application materials available to the public. In some towns, the aquifer protection regulations mandate that material that must be submitted in connection with an application be available for public inspection at least 10 days before any public hearing. This gives the public an opportunity to inspect such materials and gives Agency members enough time to familiarize themselves with the proposal. We encourage all Aquifer Protection Agencies to follow this procedure.

## 9.3 | The Hearing Record

The official “hearing record” consists of all information submitted to the Aquifer Protection Agency from all sources in connection with an application. This includes information submitted with the application, during meetings and hearings, and at any other time.

It is essential that the Aquifer Protection Agency establish a comprehensive hearing record for each hearing. Written reports, correspondence, and other material the Agency receives should be incorporated into the hearing record by reading them aloud at the hearing. They may also be incorporated by specific reference to an exhibit (reference number, title, author, date, revision dates, or any other pertinent information).

## 9.4 | Recording the Hearing

A court stenographer or recorder should record all aquifer protection hearings. If a party appeals the Agency’s decision, the court can review the complete record without the need for it to be reconstructed. We strongly recommend that Aquifer Protection Agencies record all of their hearings.

## 9.5 | Opportunity to Examine Witnesses

The Aquifer Protection Agency is not required to institute courtroom-like proceedings at the public hearing. The hearing can be run informally and yet protect the rights of all parties. However, the Aquifer Protection Agency may wish to conduct a more formal hearing, especially if attorneys are involved. For all hearings, the Agency should consider requiring sworn testimony from all expert witnesses. Also, every party to the hearing should be allowed to cross-examine witnesses and/or respond to all evidence entered into the record.

## 9.6 | Continuation of Hearings

If the Agency recesses or continues a hearing, it must give adequate public notice of its reconvening. If the Agency, at the time of recess, was unable to set the next hearing date, it must notify all parties of the new date, in writing, as soon as possible.

Any Aquifer Protection Agency hearing may be continued to any subsequent regular meeting. The Agency must provide notice of the continuance to all parties. Under the Freedom of Information Act, if the hearing is to convene less than 24 hours after it was adjourned, the Agency must post written notice on or near the door of the place the hearing was held immediately following the meeting at which the continuance was ordered. If the Agency plans to recommence the hearing more than 24 hours after the adjournment, it must post written notice in the town clerk’s office at least 24 hours before the commencement. It must also post notice on or near the hearing room within 24 hours after the adjournment.

### The Hearing Record

The official “hearing record” consists of all information submitted to the Aquifer Protection Agency from all sources in connection with an application.

This includes information submitted with the application, during meetings and hearings, and at any other time.

## 9 | Public Hearings

### 9.7 | Receipt of Information After the Hearing

In order to ensure due process, any additional information submitted must be provided to all parties prior to the proceeding. The parties must be allowed to comment on such information for the record. It is often preferable to reconvene the hearing for presentation or discussion of such additional information.

### 9.8 | Ex Parte Communications

The Agency members may not discuss information with anyone, except at the public hearing or the next meeting when they convene to discuss and decide upon the application. This way, all parties can participate. Discussions involving Agency members or any interested parties held outside of the public hearing are known as “ex parte communications” and they endanger Agency decision. Such discussions have sometimes caused an Agency’s decision to be reversed upon appeal. Discussions with municipal personnel (such as a town engineer or planner) or consultants employed by the Agency, regarding a pending application, should take place only at regularly scheduled meetings when the matter appears on the published agenda, or at public hearings.

### 9.9 | Making the Decision/Completing the Record

In making a decision, the Aquifer Protection Agency should make sure that all information it receives is maintained in the official application record. Since future court challenges will be based mostly or entirely on the record, a complete record is necessary to accurately reflect the Agency’s position. All information that a statute or regulation requires the Agency to receive and review must be included in the public record.



# Enforcement

# 10 | Enforcement

An Aquifer Protection Agency's enforcement authority comes from the CGS § 22a-354(p)(d), which establishes procedures for suspending or revoking permits, and CGS § 22a-354s, which establishes procedures from issuing orders to obtaining injunctive relief from a court of law.

An Agency's regulations serve to implement the statutes, and should address the procedures to be followed when pursuing a violation or investigating a potential violation. Section 14 of the Model provides this framework. The Agency should designate an individual or individuals as the duly authorized agent for enforcement purposes.

## 10.1 | Types of Violations

An enforcement action may be warranted when someone commits, takes part in, or assists in any of the following violations:

1. conducts or maintains any regulated activity without a registration or permit for that activity;
2. fails to comply with the terms, conditions or limitations placed on a registration or a permit;
3. exceeds the scope of regulated activities described in the registration or permit;
4. fails to comply with the best management practices or procedures described in the registration or permit;
5. violates the municipality's Aquifer Protection Area Regulations;
6. violates an order issued pursuant to CGS § 22a-354s.

A flow chart showing the steps in an enforcement action is provided at the end of this section.

## 10.2 | Investigation and Collection of Evidence

The Agency has the burden to prove that a violation has occurred or is occurring. Often, the Agency may need to investigate and document facts in order to adequately define the scope of a violation. Once the Agency obtains sufficient documentation to confirm that a violation exists, it may request the violator to provide further information such as surveys of existing and prior conditions, and analyses by qualified consultants of the scope and impacts of the violation.

There are a variety of tools that an Agency can use to develop evidence that a violation exists, including the following:

### 1. Aquifer Protection Agency Files

The first step in investigating a potential violation is to search the Agency's files to determine if a registration or a permit or other form of approval was issued; to ascertain to whom it was issued; and to determine the terms, conditions or limitations placed on a permit.

Other town files, such as those of the tax assessor's office and those of the Town Clerk's office, can assist in determining the ownership of the property.

The APA Inventory should be reviewed for sites that were identified as potential regulated facilities.

### 2. State Agencies and Water Companies

When pursuing a violation, it is appropriate for the Agency to communicate its findings with other regulatory agencies (municipal commissions and local officials, the Connecticut Department of Energy and Environmental Protection, the Connecticut Department of Public Health) and the affected water company. State agencies and water companies may have concurrent jurisdiction in the Aquifer Protection Area(s).

### 3. Maps

Maps may be used to determine the location and scope of the violation, and to determine the potential for environmental harm. These maps include, but are not limited to, the official zoning (or inland wetlands) map with the delineated aquifer protection area boundary, topographic maps, the town assessor's map, and water company maps.

### 4. Aerial Photographs

Aerial photographs taken before and after site alterations can be very useful in determining the scope of the violation and in determining the seriousness of the environmental harm or potential for environmental harm. Aerial photographs, however, are a specialized resource. The use of photographs or GIS layers of flyovers of the state in a legal proceeding requires expert testimony in order for a decision maker to draw conclusions about what is depicted, and where, as well as conclusions about the size and scale of what is

depicted. The Agency may have file photographs in a registration, a permit application, permit or previous violation file. Many municipal planning departments or tax assessor's offices have aerial photography or GIS layers of the municipality on file. The Department of Energy and Environmental Protection's Maps and Publication Sales office has complete sets of aerial photos for the state, which are taken about every five years. Originals are available for review in the office and copies are available for sale (contact DEEP Maps and Publication Sales at 860-424-3555).

## 5. Site Plans

Site plans submitted for registrations or permits show Aquifer Protection Area boundaries and property boundaries that may be useful in an enforcement action. Applications and site plans submitted by previous applicants for a particular property may be very useful as well. These items may exist in the files of the Agency, land use or building department or town clerk, and may include approved site plans, zoning special permits, building permits, or subdivision plans and maps.

## 6. Field Inspections

The Agency should contact the landowner, permittee, or his or her agent to request permission to inspect the property and to explain the problem and the reasons for the inspection.

It is important to remember that there are legal limitations on entry to property. Without permission from the landowner, a municipal official does not have authority to conduct an inspection on the landowner's property.

Note, however, that the APA registration and permit applications have standard language which gives permission to the agency or its duly authorized agent to make regular inspections of the facility and associated property, except a private residence, at reasonable hours.

When making field inspections, it is important to keep a field book for future reference. Field notes should be recorded at the time of the inspection and should include:

- a. the time and date of the inspection;
- b. the location of the violation;
- c. the reasons for the inspection;
- d. who was met at the site;

- e. summary of conversations at the site;
- f. what was seen (description of site conditions, problems, size of violation, an assessment of observed or potential impacts, etc.);
- g. weather conditions – present and past several days;
- h. names and phone numbers of any contractors working on the site;
- i. a record of the number of photographs taken, the location and compass direction in which they were taken, and a short description of what they depict;
- j. a diagram or drawing showing approximate location of areas of interest and/or problem areas (including reference points, distances, area estimates and specific vantage points of photographs taken).

The notes taken during the field inspections may be compiled into a report. A sample Aquifer Protection Inspection Report is provided in the Forms and Applications section of this manual.

In some instances, a violation can be viewed from an adjacent road or property. If the owner of the adjacent property cooperates and grants permission to be on his/her land, such a remote viewing may be acceptable for gathering necessary information.

## 7. Site Photographs

Photographs are an important component of field inspections. Once the photographs are printed, certain essential information should be written on the back of each photograph. This information should include at least the following:

- a. the time and date when the photograph was taken;
- b. the town name and street location;
- c. the property owner's or the violator's name;
- d. Aquifer Protection Agency's file reference;
- e. what the photograph shows (notes should be taken in field book and referred to in order to ensure proper descriptions and information);
- f. who took the photograph and recorded the information.

## 8. Personal Knowledge

An Agency may accept personal knowledge to help determine if a violation exists. Such information may be provided through sworn testimony at the Show Cause Hearing for an order, even if it is the personal knowledge of an Agency member.

## 9. Expert Knowledge

An Agency may need to obtain an expert to assist in proving a violation has occurred. The expert may be an individual within the Agency, such as the Town Engineer, or an Aquifer Protection Agent (who is a certified professional that has expert knowledge pertaining to the violation), water company agent or someone contracted specifically for his expert assessment of a set of facts and circumstances central to the enforcement case.

## 10.3 | Investigation Follow-up

Upon completion of the investigation, an investigation report should be prepared. If the agency or investigating official determines that no violation has occurred, then the file may be closed. If the agency or investigating official determines that a violation has occurred or is occurring, the report should include the information noted under sections above, as well as:

1. the name(s) of the inspector(s);
2. the exact name and address of the property owner;
3. the name and address of any contractor(s) involved in the violation;
4. the assessor's map reference for the property; and
5. the most current deed to the property.

A property owner can be identified through the town's land records. The tax assessor's office can usually provide the last known owner's name and address, although this may not be the current owner. The municipality's daybook should be consulted to obtain the name of any new property owner not yet recorded on the town's tax records. (Consult the Town Clerk's office for the location of the daybook.) The tax assessor's office can also provide the map number, block number, and lot number of the property involved in the violation.

It is important to obtain the most current deed to the property. The tax assessor's office can provide the volume and page number of the land records where the deed is located for the listed owner. The Town Clerk's office has on file all recorded deeds of properties located in the municipality. Property deeds, and accompanying plans and maps, provide a history of transactions and actions affecting the property (sale, subdivision, easements, liens, etc.).

If a corporation or limited liability company owns the property, or is responsible for the violation, the Office of the Secretary of State (860-509-6001) can provide information on the agent for service and the corporation's business address.

The Agency should also notify the Department of Energy and Environmental Protection if a violation involves a wastewater discharge, hazardous waste disposal, or commercial underground storage tank.

## 10.4 | Evaluation

Upon determining the existence of a violation, the Agency should evaluate:

1. the seriousness of the violation;
2. the seriousness of the environmental harm or potential for environmental harm; and
3. the best method to address the harm to the environmental resources, subject to the jurisdiction of the Aquifer Protection Agency.

It is important to remember that:

1. each violation is a separate and distinct offense; and
2. each day's continuance of a violation can be a separate and distinct offense.

## 10.5 | Enforcement Approaches

When pursuing a violation, there are several options that the Agency can follow. They range in increasing progressive degrees of formality, from a phone call, to a warning letter, to court action. *The Agency should tailor its enforcement approach to the magnitude of the violation.* It is important to note that a person may seek a registration or permit for a regulated activity that is under an enforcement action. The violator/applicant has the right to apply for a registration or permit.

**The following are examples of enforcement approaches that may be taken:**

- 1. Telephone call or personal contact by the duly authorized agent**
- 2. The Warning Letter**  
The warning letter is an informal enforcement device. It informs the alleged violator of the potential violation taking place and provides an opportunity to address the issue before further action is taken.
- 3. Issuance of a Notice of Violation (NOV)**  
The NOV informs the violator that he or she is maintaining a condition that, unless addressed, may be treated formally by the Agency as a violation of the Aquifer Protection Area Act, the Agency's regulations, or a registration or permit issued by the Agency. *An NOV is not an administrative order; it is an informal enforcement device, like the warning letter.* The NOV provides the alleged violator with direction regarding how to come into compliance, and may further direct the alleged violator to certify correction of the alleged violation within a reasonable period of time. The issuance of an NOV requires follow-up by the Agency in order to be a meaningful enforcement device.

A sample NOV letter is provided at the end of this section.

## 4. Registration or permit revocation or suspension (CGS § 22a-354(p)(d))

An Agency may revoke or suspend a registration or permit if the registrant/permittee has not complied with registration or permit conditions or limitations, or has exceeded the scope of the work described in the registration/application as permitted by the Agency. The Agency is required to provide written notice to the registrant/permittee of the facts or conduct that warrant suspension or revocation. The Agency is also required to conduct a hearing at which the registrant/permittee is given an opportunity to show compliance with the requirements for retention of the registration or permit. The Agency must notify the registrant/permittee of its decision by certified mail, return receipt requested, within 15 days of the decision. In addition, the Agency must publish its decision in the local newspaper, and the decision is subject to appeal under CGS § 22a-354(q).

## 5. Cease and Desist order/Cease and Correct order (CGS § 22a-354s)

A Cease and Desist Order, or Cease and Correct order, is one of the Agency's strongest tools short of court action. An order must be written and is effective upon service upon the alleged violator. The Agency must send a copy of the order to any affected water company. The order should be issued in the case of a major or significant violation, even if the alleged violator intends to correct the violation. A Cease and Correct order may either order the activity that is in violation of the Agency's regulations to cease immediately, or the order may contain a description of a required remedial or corrective action that the Agency wants the alleged violator to undertake. The Agency is required to conduct a hearing within ten days of issuing the order, and, within ten days of completing the hearing, the Agency must notify the alleged violator of its decision. The decision may be to affirm, modify or dissolve the order. The details of the procedure involved with the issuance of a Cease and Desist or Cease and Correct order must be carefully attended to by the Agency. As a practical matter, it may be important to clearly state and set timetables in the order that carry through to final resolution of a violation.

## 6. Court action

An Aquifer Protection Agency should consider, after due consultation with the town attorney, taking court action if administrative approaches fail to resolve a violation. The town may be able to recoup fees and expenses,

in addition to injunctive relief awarded by the court ordering correction or removal of the violation. Court actions may take the following paths:

- a. court proceeding to enforce Cease and Desist Order or Cease and Correct Order (CGS § 22a-354s(a)) – the court may order injunctive relief and penalties, and the court may award attorneys' fees;
- b. court proceeding to stop illegal activity and/or correct a condition or facility without the Agency's first issuing a Cease and Desist order or Cease and Correct order (CGS § 22a-354s(b)) – impact of a violation is so severe that the Agency determines that an order is not sufficient. A court may order injunctive relief and penalties, and the court may also award attorneys' fees; or
- c. criminal enforcement action (CGS § 22a-354 s(c)) – requires willful and knowing violation. (Such actions are not initiated by the Agency; they require consultation with the town's attorney and formal action by the Office of the State's Attorney after referral.)

## 10.6 | Who Is Potentially Subject to Enforcement Action

The Aquifer Protection Area Regulations provide for Agencies or their duly authorized agents to take an enforcement action against any "person" who violates the Statute or local regulations. Such "person" is also subject to penalties as provided in CGS § 22a-354. A person is defined in state and municipal regulations as:

"any individual, firm, partnership, association, syndicate, company, trust, corporation, limited liability company, municipality, agency, political or administrative subdivision of the state, federal agencies as permitted by law, or other legal entity of any kind."

This broad definition of "person" means that an enforcement action can be taken, for example, against:

1. the owner of the property;
2. the facility operator or manager;
3. a contractor(s) working on the property; (When issuing orders or seeking penalties, the Agency should consider the nature of any violation and the role that a particular contractor may have played in the violation. Naming a contractor in an order where the contractor was a prime contributor to the violation can often motivate the contractor to promptly take corrective measures.);

# 10 | Enforcement

4. a tenant or lessee in possession of the property; and/or
5. any person who commits, takes part in, or assists in any violation of the Aquifer Protection Area Statute (CGS § 22a-354s).

## 10.7 | Recordkeeping

To keep track of enforcement proceedings, an Agency should establish a recordkeeping system that is easy to understand and maintain. The system should allow both active and closed files to be stored and retrieved easily. Since violations are specific to location, it might be helpful to use the same file system as that used by the municipality's tax collector.

In addition to a file system, each Agency should set up a procedure to monitor current violations. A logbook, a calendar, or a computer database are suitable tools for the monitoring procedure. It is not sufficient to rely on staff memory to ensure follow-through on violations. All enforcement proceedings information should be documented.

It is important to set timetables that carry through to final resolution of a violation. To ensure success, an enforcement action must be based on a properly developed and technically adequate documentary record.

## 10.8 | Hearing on Cease and Desist Order/ Cease and Correct Order

The burden of proof is on the enforcement officer or presenter and NOT on the alleged violator.

If a Cease and Desist Order or Cease and Correct Order is issued, a hearing must commence within ten (10) days after the issuance of the order. If the hearing is not held within ten (10) days, the order will lapse and be void. The purpose of this hearing is to allow the orderee (the recipient of the order) to answer the order, provide whatever rebuttal evidence and testimony respecting compliance that he wishes, and challenge the facts in the order.

The property owner, facility operator, contractor, and/or violator should be notified of the hearing by certified mail.

The hearing on an order differs from the public hearing associated with a permit application. The public may attend and observe this hearing but may not speak, and no prior publication of a legal notice is required. FOIA notice is required. Often, this hearing is referred to as a "Show Cause Hearing."

At least the following items must be entered into the record during the hearing:

1. a copy of the order or registration or permit and permit application;

2. a copy of the field book with field notes;
3. a copy of the investigation report;
4. copies of photographs;
5. statements or receipts that prove certified mailing;
6. other documents the Agency relied upon in issuing the order, such as maps and deeds;
7. testimony from the orderee responding to or rebutting issues raised by the Agency;
8. any expert testimony that challenges the order;  
The Agency has the right to, and should, ask an expert for his credentials including but not limited to his:
  - a. education;
  - b. professional experience/certifications;
  - c. publications;
  - d. professional memberships;
  - e. prior expert witness experience; and
  - f. data collection methods/experience.
9. any evidence offered by staff, violator or witnesses (including Agency members) that responds to or rebuts issues raised by the Agency or orderee.

Evidence must be in the form of sworn testimony if personal knowledge was relied upon.

The Agency should make sure that the record demonstrates or contains adequate information regarding the Agency's authority and jurisdiction in the situation, and that the Agency followed statutory/regulatory procedures in the conduct of its enforcement proceedings.

Within ten (10) days of completion of the hearing, the orderee must be notified by certified mail that the original order remains in effect, that a revised order is in effect, or that the order has been withdrawn.

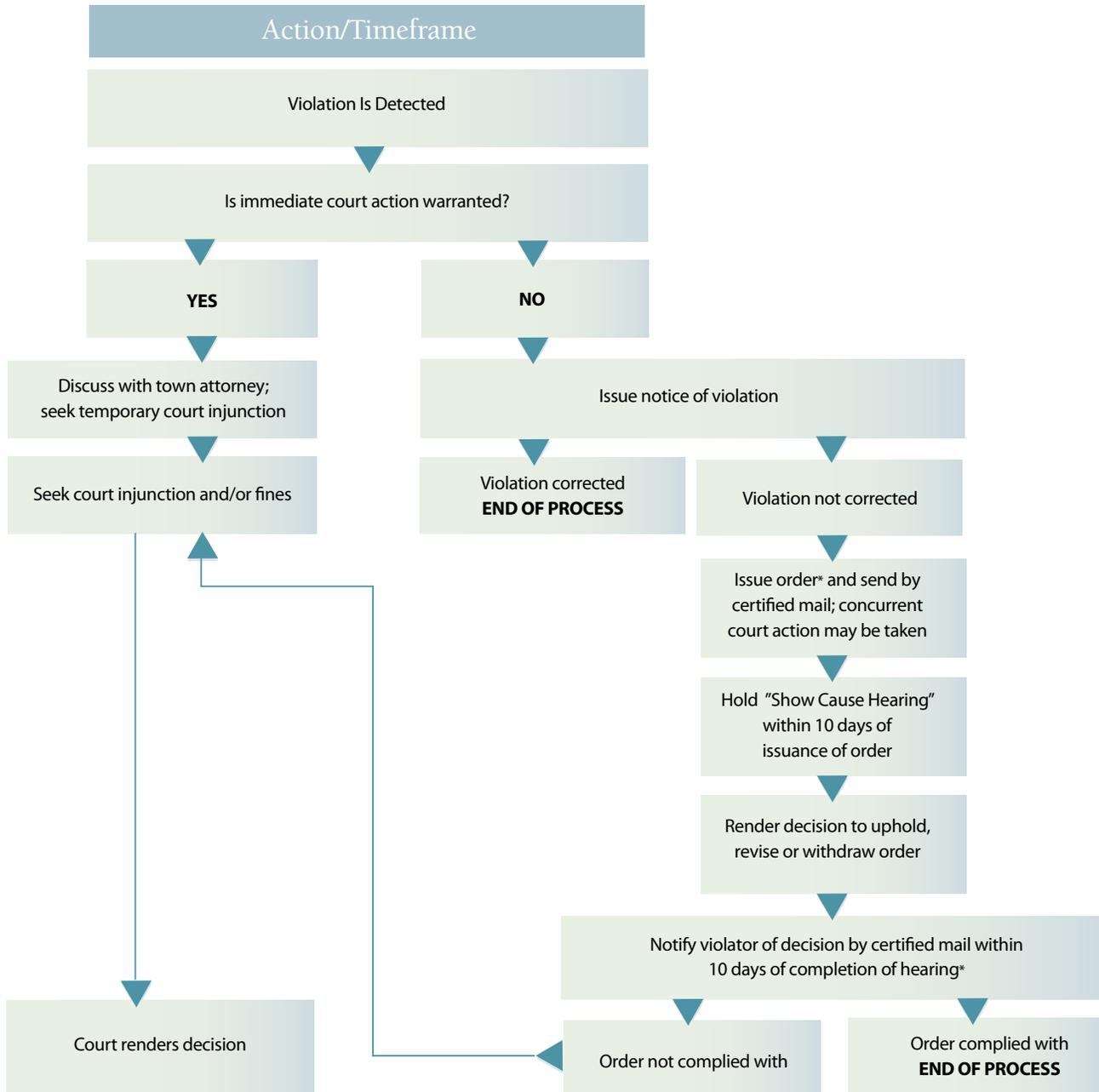
Although not required, it is good practice to publish a notice of the decision in the local newspaper.

# 10 | Enforcement

## 10.9 | Enforcement Flow Chart

[CGS § 22a-354s]

This flow chart is provided for convenience and to guide the Agency through the enforcement process.



\* Although not required by statute, it is good practice to publish a notice of the decision in the newspaper.

# 10 | Enforcement

## 10.10 | Registration and Permit Revocation Flow Chart [CGS § 22a-354p(d)]



\* For regulated activity exceeding the scope of a registration or a permit, additional enforcement action (e.g., an order, see "Enforcement Flow Chart" on previous page) may be initiated concurrently.

# 10 | Enforcement

## 10.11 | Notice of Violation

On letterhead if available

CERTIFIED MAIL | RETURN RECEIPT REQUESTED

[DATE]

[NAME and ADDRESS]

RE: NOTICE OF VIOLATION

[ADDRESS OF VIOLATION]

Town of [TOWN NAME]

Dear [NAME OF VIOLATOR]:

It has come to our attention that you are [DESCRIBE ACTIVITY BEING PERFORMED IN VIOLATION OF AQUIFER PROTECTION AREA REGULATIONS] at property located at [ADDRESS OF VIOLATION]. Such activity constitutes a regulated activity pursuant to section [NUMBER] of the [TOWN NAME] Aquifer Protection Agency. Connecticut General Statutes section 22a-354p requires that a registration/permit be obtained prior to conducting regulated activities affecting Aquifer Protection Areas. A review of our files indicates that no registration/permit was issued for the activity described above.

Accordingly, such work has been conducted in violation of the law.

You are directed to: [CHOOSE FROM OPTIONS BELOW]

1. immediately cease work in the aquifer protection area;
2. appear at the next regularly scheduled meeting of the Aquifer Protection Agency to discuss the unauthorized activity;
3. provide a written reply to this notice within thirty (30) days, explaining the nature of the work and why no registration/permit was obtained from the Aquifer Protection Agency;
4. file an application for a registration/permit to conduct the work.
5. [ANY OTHER REMEDIES THE AGENCY DEEMS APPROPRIATE]

The issuance of this Notice of Violation shall not delay or bar an action pursuant to Section 22a-354 of the General Statutes.

If you have any questions, please contact [NAME OF CHAIRMAN OR AGENT OR OTHER AGENCY CONTACT] at [PHONE NUMBER]. Your prompt cooperation is appreciated.

Sincerely,

[NAME OF CHAIRMAN]

[NAME OF AGENCY]

[TOWN NAME]

Cc: [ANY OTHER COMMISSIONS] or [PARTIES]



## Related State and Local Programs

# 11 | Related State and Local Programs

## 11.1 | Related State Programs

In addition to obtaining a registration or a permit from the Aquifer Protection Agency, applicants should be aware of and obtain any other state permits or approvals that may be required by law. The Department of Energy and Environmental Protection's primary responsibility is "to conserve, improve and protect its natural resources and environment, and to control air, land and water pollution in order to enhance the health, safety and welfare of the people of the State." In doing so, the department regulates activities that may impact the state's natural resources and environment through the administration of its environmental permitting programs.

### 11.1.1 | Wastewater Discharge Permit Program

The **Wastewater Discharge Permit Program**, administered by the Bureau of Waste Management and Compliance Assurance Permitting Division, regulates discharges to waters of the state, including all surface waters, groundwaters and Publicly Owned Treatment Works (POTW) (i.e., sewage treatment plants).

PERMITTING AND ENFORCEMENT DIVISION

BUREAU OF MATERIALS MANAGEMENT AND COMPLIANCE ASSURANCE

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

79 ELM STREET

HARTFORD, CT 06106-5127

860-424-3018

[www.ct.gov/deep/permits&licenses](http://www.ct.gov/deep/permits&licenses)

### 11.1.2 | Hazardous Waste Program

The **Hazardous Waste Program**, administered by the Bureau of Materials Management and Compliance Assurance's Engineering and Enforcement Division, regulates facilities that manage through treatment, storage or disposal, hazardous waste as identified pursuant to the federal Resource Conservation and Recovery Act (RCRA). RCRA hazardous wastes are the wastes identified in Title 40 Code of Federal Regulations (CFR) Part 261 and regulated in Connecticut pursuant to Sec. 22a-449(c)-100 through 110 and Sec. 22a-449(c)-11 of the Regulations of Connecticut State Agencies (RCSA).

WASTE ENGINEERING AND ENFORCEMENT DIVISION

BUREAU OF MATERIALS MANAGEMENT AND COMPLIANCE ASSURANCE

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

79 ELM STREET

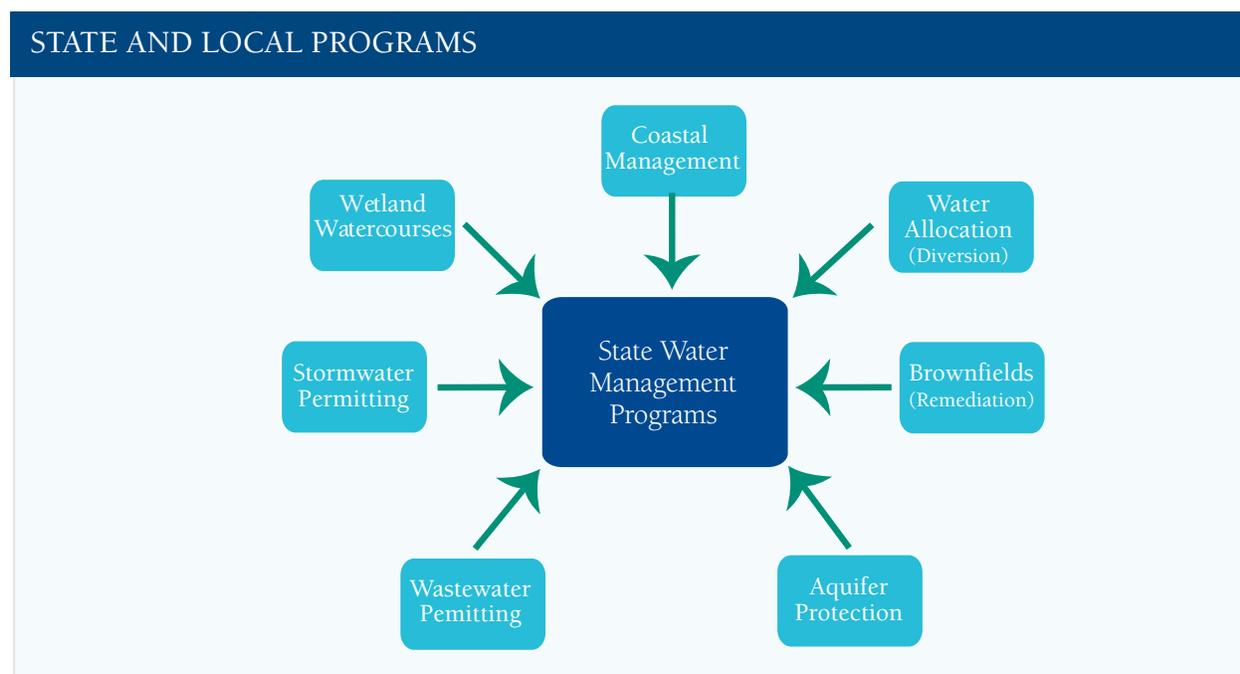
HARTFORD, CT 06106-5127

860-424-3366 or 888-424-4193 (toll-free)

[www.ct.gov/deep/hazardouswaste](http://www.ct.gov/deep/hazardouswaste)

Figure 16. State Water Management Programs.

The Aquifer Protection Area Program is one of the overall State Water Management Programs.



# 11 | Related State & Local Programs

## 11.1.3 | Underground Storage Tanks Program

The **Underground Storage Tank (UST) Program**, administered by the Bureau of Materials Management and Compliance Assurance, is designed to prevent releases by closely monitoring petroleum and chemical USTs and by imposing deadlines for the removal of older USTs, connected underground piping, and ancillary equipment before they fail.

**UNDERGROUND STORAGE TANK  
ENFORCEMENT PROGRAM**

**BUREAU OF MATERIALS MANAGEMENT  
AND COMPLIANCE ASSURANCE**

**DEPARTMENT OF ENERGY AND  
ENVIRONMENTAL PROTECTION**

79 ELM STREET  
HARTFORD, CT 06106-5127  
860-424-3374  
[www.ct.gov/deep/ust](http://www.ct.gov/deep/ust)

## 11.1.4 | Remediation Program

The **Remediation Program** is overseen by the Remediation Division of the Bureau of Water Protection and Land Reuse and involves the investigation and remediation of environmental contamination and the redevelopment of contaminated properties. The program areas include Property Transfer, Voluntary Remediation, Brownsfields/Urban Sites, Federal Superfund, State Superfund, Potable Water, RCRA Closure and Corrective Action. Their goal is to clean up contaminated sites to meet Connecticut's Remediation Standard Regulations, which ensure that human health and the environment are protected.

**REMEDIATION DIVISION**

**BUREAU OF WATER PROTECTION AND LAND REUSE**

**DEPARTMENT OF ENERGY AND  
ENVIRONMENTAL PROTECTION**

79 ELM STREET  
HARTFORD, CT 06106-5127  
860-424-3705  
[www.ct.gov/deep/remediation](http://www.ct.gov/deep/remediation)

## 11.1.5 | The Hazardous Waste Compliance Assistance (COMPASS) Program

The **Hazardous Waste Compliance Assistance (COMPASS) Program** was created to assist Connecticut businesses and industries in complying with waste management regulations by developing and implementing outreach programs that disseminate information and offer site-specific assistance. **COMPASS** has three main components:

- A toll-free number (888-424-4193) has been established for the regulated community, which provides immediate access to DEEP hazardous waste management staff for general compliance assistance information requests.
- Compliance Assistance Information – **The Waste Engineering and Enforcement Division (WEED)** offers guidance documents and sponsors training conferences and seminars for the regulated community. In addition, a Compliance Assistance Handbook is available, which contains information on obtaining additional guidance documents and services.
- Consultative Services – **WEED** offers consultative services in the form of site-specific conferences focusing on hazardous waste regulations applicable to the facility and its operations.

DEEP also offers on-site voluntary compliance audits to operators of new or expanding businesses available by contacting:

**888-424-4193 (toll-free)**  
[www.ct.gov/deep/hazardouswaste](http://www.ct.gov/deep/hazardouswaste)

## 11.1.6 | Pollution Prevention Program

The **Pollution Prevention (P2 for short) Program** concentrates on preventing or minimizing pollution, rather than controlling it once it is generated. Pollution Prevention covers a broad range of environmental concerns, such as addressing climate change, managing and reducing waste, landscape stewardship, green building and renewable energy. The "Lead by Example" initiative of this program offers strategies for state and local governments to prevent pollution and "go green." Information is available by contacting:

**860-424-3297**  
[www.ct.gov/deep/p2](http://www.ct.gov/deep/p2)

# 11 | Related State & Local Programs

## 11.2 | Related Local Programs

In addition to obtaining a registration or a permit from the Aquifer Protection Agency, applicants should be aware of and obtain any other local permits or approvals required by law.

With regard to the additional zoning, subdivision, or other requirements, please note that Section 13 “Other State, Federal and Local Laws” of the Aquifer Protection Area Regulations requires Aquifer Protection Area permittees to obtain any zoning, subdivision, or other requirements prior to initiating the regulated activity.

### 11.2.1 | Planning and Plans of Conservation and Development

Aquifer Protection Areas should be taken into consideration when updating your local Plan of Conservation and Development. The areas should be discussed in the appropriate element of the plan and considered for conservation or for low-risk types of development on the proposed land use plan. Of particular concern would be existing Plans of Conservation and Development that have identified major proposed industrial parks or commercial centers in these areas.

### 11.2.2 | Municipal Improvement Projects

Aquifer Protection Areas should also be considered in making any major municipal improvement decisions, such as sanitary sewer extensions, water line extensions, gas line extensions, highway construction, stormwater improvements, municipal facilities construction, and acquisition or conservation of open space or other land.

### 11.2.3 | Zoning in Aquifer Protection Areas

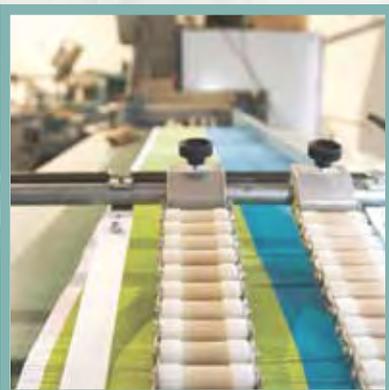
Zoning may provide protection beyond the mandated state aquifer protection land use regulations. Towns are allowed to broadly consider protection of existing and potential public supply aquifers under their zoning authority (CGS § 8-2). Further guidance for additional protection measures and protection of future potential Aquifer Protection Areas is provided in the DEEP document “Protecting Connecticut’s Groundwater – A Guide for Local Officials.” This guide is available online at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection).

When considering changes to zoning in Aquifer Protection Areas, the following is recommended:

- Maintain existing low-impact zoning such as residential or light retail commercial designations where possible.
- Where areas of heavy industrial or commercial business growth have been designated for APAs on the town’s plan of conservation and development, but not yet zoned or developed, the town may want to re-examine the plan of conservation and development designation. Re-examination should consider, from an overall town standpoint, whether intensive growth areas should now be relocated, and should consider the impact that the state APA land use regulations will have by restricting certain types of growth originally intended.
- Consideration may be given to APAs if the town is considering overall zoning revisions in town or an individual parcel rezoning. Where these areas are still primarily undeveloped and significant nonconformities will not be created, low-impact uses should be encouraged.

### 11.2.4 | Land Acquisition

CGS § 22a-354r(b) states that in order to carry out the purposes of the APA Regulations, the municipality may at any time purchase land or an interest in land in fee simple or other acceptable title, or subject to acceptable restrictions or exceptions, and enter into covenants and agreements with landowners.



# Model Documents

# 12 | Model Documents

## 12.1 | Model Municipal Ordinance to Designate Agency



[CITY/TOWN NAME]  
AQUIFER PROTECTION AGENCY  
[PHONE NUMBER]

### **Model Municipal Ordinance to Designate Municipal Aquifer Protection Agency**

[MONTH] [YEAR]

# 12 | Model Documents

## 12.1 | Model Municipal Ordinance to Designate Agency (continued)

**Model Municipal Ordinance to Designate Municipal Aquifer Protection Agency  
(The municipality is not required to follow this format, it is a sample only.)**

PROPOSED ORDINANCE NUMBER \_\_\_\_\_  
CONCERNING THE DESIGNATION OF THE \_\_\_\_\_ AS THE TOWN'S  
AQUIFER PROTECTION AGENCY

WHEREAS, Section 22a-354o of the Connecticut General Statutes (CGS) provides that each municipality in which an aquifer protection area is located shall authorize by ordinance an existing board or commission to act as an aquifer protection agency; and

WHEREAS, it has been determined that it is in the best interest of the town of \_\_\_\_\_ to designate the  [name of board/commission]  as the town's aquifer protection agency.

NOW THEREFORE BE IT ORDAINED BY THE TOWN OF \_\_\_\_\_  
THAT:

(1) Designation and membership

- (a) In accordance with the provisions of CGS §22a-354a, *et seq.*, the  [name of board/commission]  is hereby designated as the Aquifer Protection Agency (hereinafter the "Agency") of the town of \_\_\_\_\_. [The staff of the \_\_\_\_\_ shall serve as the staff of the Agency.]
- (b) Members of the \_\_\_\_\_ shall serve coexisting terms on the Agency. The membership requirements of the Agency shall be the same as those of the \_\_\_\_\_ including, but not limited to the number of members, terms, method of selection and removal of members, and filling of vacancies.
- (c) At least one member of the Agency or staff of the Agency shall complete the course in technical training formulated by the Commissioner of Environmental Protection of the State of Connecticut, pursuant to CGS § 22a-354v.

(2) Regulations to be adopted<sup>1</sup>

<sup>1</sup> *Procedures for adoption of local regulations of requires a local public hearing and public notice requirements in accordance with CGS § 22a-354p(b) to allow opportunity for the public to be heard. Also approval by the DEEP Commissioner is required in accordance with CGS § 22a-354p(f) and RCSA Sec. 22a-354i-3. The DEEP approval requires a determination that the regulations are not inconsistent with the State Land Use Regulations, are reasonably related to groundwater, and shall not be deemed inconsistent if they provide a greater level of protection.*

- (a) The Agency shall adopt regulations in accordance with CGS § 22a-354p and Regulations of Connecticut State Agencies (RCSA) § 22a-354i-3. Said regulations shall provide for:
  - (i) The manner in which boundaries of aquifer protection areas shall be established and amended or changed.
  - (ii) Procedures for the regulation of activity within the area.
  - (iii) The form for an application to conduct regulated activities within the area.
  - (iv) Notice and publication requirements.
  - (v) Criteria and procedures for the review of applications.
  - (vi) Administration and enforcement.
- (3) Inventory of Land Use<sup>2</sup>
  - (a) In order to carry out the purposes of the Aquifer Protection Program, the Agency will conduct an inventory of land use within the area to assess potential contamination sources.
  - (b) Not later than three months after approval by the Commissioner of the Connecticut Department of Energy and Environmental Protection of Level B Mapping of aquifers, the Agency will inventory land uses overlying the mapped zone of contribution and recharge areas of such aquifers in accordance with guidelines established by the Commissioner pursuant to CGS § 22a-354f. Such inventory shall be completed not more than one year after authorization of the Agency. [CGS § 22a-354e]

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<sup>2</sup> *This requirement is essentially done. The majority of inventories were completed by DEEP in 2000. The purpose of the inventories is to give a general assessment of the areas and to provide a starting point for informing potentially regulated facilities of the program requirements. Towns should consider this a good baseline and update it to reflect current conditions.*

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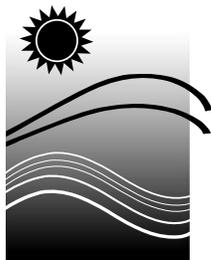
## 12.2 | Model Municipal Regulations (continued)



[CITY/TOWN NAME]  
AQUIFER PROTECTION AGENCY  
[PHONE NUMBER]

### **Model Municipal Aquifer Protection Area Regulations**

[MONTH] [YEAR]



Connecticut Department of

**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

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### **Model Municipal Aquifer Protection Area Regulations**

Effective Date: June 1, 2005

Revised on January 1, 2006

Revised on October 1, 2007

Revised on October 1, 2010

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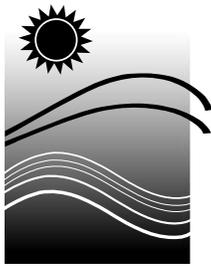
October 1, 2010 revisions

The following revisions made the Model Municipal Regulations consistent with statutory amendments to Public Act No. 10-135, An Act Concerning Brownfield Remediation Liability:

Page 11, Section 4(b)(3) – new, added “a regulated activity which is on any municipally owned site undergoing remedial action pursuant to 40 CFR 271 at the time the applicable aquifer protection area is designated on a municipal zoning district map or inland wetland map, provided: (1) no such regulated activity substantially commenced or was in active operation for the five-year period preceding the date that at the applicable aquifer protection area is designated on a municipal zoning district map or inland wetland map, and (2) any person who engages in such regulated activity within the ten-year period commencing on the date that such applicable aquifer protection area is designated on a municipal zoning district map or inland wetland map registers such regulated activity on a form prescribed by the Commissioner of Environmental Protection and in accordance with the provisions of section 22a-354i-7 of the Regulations of Connecticut State Agencies.”

Page 14, Section 8(a) – new, added “... , or for any municipally owned site undergoing remedial action pursuant to 40 CFR 271, any person who engages in a regulated activity within the ten (10) year period commencing on the date the applicable aquifer protection area is designated on a municipal zoning district map or inland wetlands map, ...”

Page 14, Section 8(a)(2) – new, added “... Any municipally owned site undergoing remedial action pursuant to 40 CFR 271, the person engaged in such regulated activity shall submit a registration within the ten (10) year period commencing on the date the applicable aquifer protection area is designated on a municipal zoning district map or inland wetlands map. Any person submitting a registration pursuant to the requirements of this subsection ...”



Connecticut Department of

**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

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### **Model Municipal Aquifer Protection Area Regulations**

Effective Date: June 1, 2005

Revised on January 1, 2006

Revised on October 1, 2007

Revised on October 1, 2010

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### Model Municipal Aquifer Protection Area Regulations

#### SECTION 1. Title and Authority

- (a) Aquifers are an essential natural resource and a major source of public drinking water for the State of Connecticut. Use of groundwater will increase as the population grows and opportunities for new surface water supplies diminish due to the rising cost of land and increasingly intense development. At the same time, numerous drinking water wells have been contaminated by certain land use activities, and others are now threatened. To address this problem, Connecticut has established the Aquifer Protection Area Program (Connecticut General Statutes §22a-354a to §22a-354bb) to identify critical water supply aquifers and to protect them from pollution by managing land use. Protection requires coordinated responsibilities shared by the state, municipality and water companies to ensure a plentiful supply of public drinking water for present and future generations. It is therefore the purpose of these regulations to protect aquifer protection areas within the City/Town of \_\_\_\_\_ by making provisions for:
- (1) implementing regulations consistent with state regulations and An Act Concerning Aquifer Protection Areas, Connecticut General Statutes §22a-354a to §22a-354bb ("the Act");
  - (2) delineating aquifer protection areas on the city/town zoning or inland wetland and watercourse areas maps;
  - (3) regulating land use activity within the aquifer protection area including: prohibiting certain new activities; registering existing regulated activities; and issuing permits for new regulated activities at registered facilities; and
  - (4) administering and enforcing these regulations.
- (b) These regulations shall be known as the Aquifer Protection Area Regulations (the "APA Regulations") of the City/Town of \_\_\_\_\_.
- (c) These regulations were adopted and may be amended, from time to time, in accordance with the provisions of §22a-354p of An Act Concerning Aquifer Protection Areas, the Connecticut General Statutes §22a-354a to §22a-354bb and the Regulations of Connecticut State Agencies §22a-354i-1 through §22a-354i-10.
- (d) The \_\_\_\_\_ [board or commission] of the City/Town of \_\_\_\_\_ is established as the Aquifer Protection Agency (the "Agency") in accordance with the "Ordinance for the Establishment of an Aquifer Protection Agency," (the "APA Ordinance") effective \_\_\_\_\_, and shall implement the purposes and provisions of the APA Ordinance and the Act.
- (e) The Agency shall administer all provisions of the Act and shall approve or deny registrations, issue permits, issue permits with terms, conditions, limitations or modifications, or deny permits for all regulated activities in aquifer protection areas in the City/Town of \_\_\_\_\_ pursuant to the Act.

### SECTION 2. Definitions

- (a) As used in these regulations, the following definitions apply:
- (1) "Affected water company" means "affected water company" as defined in §22a-354h of the Connecticut General Statutes;
  - (2) "Agency" means the board or commission authorized by the municipality under §22a-354o of the Connecticut General Statutes;
  - (3) "Agriculture" means "agriculture" as defined in the §1-1(q) of the Connecticut General Statutes;
  - (4) "Applicant" means, as appropriate in context, a person who applies for an exemption under §22a-354i-6 of the Regulations of Connecticut State Agencies, a permit under §22a-354i-8 of the Regulations of Connecticut State Agencies or a permit under Section 9 of the APA Regulations;
  - (5) "Application" means, as appropriate in context, an application for an exemption under §22a-354i-6 of the Regulations of Connecticut State Agencies, an application for a permit under §22a-354i-8 of the Regulations of Connecticut State Agencies or an application for a permit under Section 9 of the APA Regulations;
  - (6) "Aquifer protection area" means "aquifer protection area" as defined in §22a-354h of the Connecticut General Statutes and any extension of such area approved by the Commissioner pursuant to §22a-354i-4 of the Regulations of Connecticut State Agencies;
  - (7) "Area of contribution" means "area of contribution" as defined in §22a-354h of the Connecticut General Statutes and as mapped in accordance with §22a-354b-1 of the Regulations of Connecticut State Agencies;
  - (8) "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;
  - (9) "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;
  - (10) "Commissioner" means the commissioner of environmental protection, or his or her agent;
  - (11) "Domestic sewage" means "domestic sewage" as defined in §22a-430-3(a) the Regulations of Connecticut State Agencies;
  - (12) "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

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## 12.2 | Model Municipal Regulations (continued) (continued)

person; and includes contiguous land owned, leased, or for which there is an option to purchase by that person;

- (13) "Floor drain" means any opening in a floor or surface which opening or surface receives materials spilled or deposited thereon;
- (14) "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 §22a-449(c)-101 of the Regulations of Connecticut State Agencies, (C) any pesticide as defined in §22a-47 of the Connecticut General Statutes, or (D) any oil or petroleum as defined in §22a-448 of the Connecticut General Statutes;
- (15) "Hazardous waste" means "hazardous waste" as defined in §22a-449(c)-101 of the Regulations of Connecticut State Agencies;
- (16) "Industrial laundry" means a facility for washing clothes, cloth or other fabric used in industrial operations;
- (17) "Infiltration device" means any discharge device installed below or above the ground surface that is designed to discharge liquid to the ground;
- (18) "Inland wetland and watercourse areas map" means a map pursuant to §22a-42a of the Connecticut General Statutes;
- (19) "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);
- (20) "Level A mapping" means the lines as shown on Level A maps approved or prepared by the Commissioner pursuant to §22a-354c, §22a-354d or §22a-354z of the Connecticut General Statutes encompassing the area of contribution and recharge areas;
- (21) "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;
- (22) "Municipality" means "municipality" as defined in §22a-354h of the Connecticut General Statutes;
- (23) "Owner" means the owner or lessee of the facility in question;
- (24) "De-icing chemical" means sodium chloride, calcium chloride, or calcium magnesium acetate;
- (25) "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;

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## 12.2 | Model Municipal Regulations (continued)

- (26) "Pollution" means "pollution" as defined in §22a-423 of the Connecticut General Statutes;
- (27) "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;
- (28) "Professional engineer" means a professional engineer licensed in accordance with Chapter 391 of the Connecticut General Statutes, 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;
- (29) "Publicly Owned Treatment Works" means "publicly owned treatment works" as defined in §22a-430-3 of the Regulations of Connecticut State Agencies;
- (30) "Public service company" means "public service company" as defined in §16-1 of the Connecticut General Statutes;
- (31) "Public supply well" means "public supply well" as defined in §19-13-B51b of the Regulations of Connecticut State Agencies;
- (32) "Recharge area" means "recharge area" as defined in §22a-354h of the Connecticut General Statutes and as mapped in accordance with §22a-354b-1 of the Regulations of Connecticut State Agencies;
- (33) "Registered regulated activity" means a regulated activity which has been registered under §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;
- (34) "Registrant" means a person, who or which, has submitted a registration for an existing regulated activity under §22a-354i-7 of the Regulations of Connecticut State Agencies or Section 4 of the APA Regulations;
- (35) "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 §22a-354i-5(c) and §22a-354i-6 of the Regulations of Connecticut State Agencies, 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 §22a-354c or §22a-354z of the Connecticut General Statutes, 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,

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## 12.2 | Model Municipal Regulations (continued)

- (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 ground water other than domestic sewage and stormwater, except for discharges from the following that have received a permit from the Commissioner pursuant to §22a-430 of the Connecticut General Statutes: (i) a pump and treat system for ground water 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 waste waters 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 waste waters from such activity are lawfully 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 §22a-174-22(a)(2) of the Regulations of Connecticut State Agencies, 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 waste waters 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 waste waters 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 §22a-449(c)-100 to §22a-449(c)-110, inclusive, of the Regulations of Connecticut State

# 12 | Model Documents

## 12.2 | Model Municipal Regulations (continued)

Agencies,

- (Q) biological or chemical testing, analysis or research which involves the use, storage or disposal of hazardous material, unless all waste waters 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 waste water 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, anti-freeze or spent lead-acid batteries which are subject to a general permit issued by the Commissioner under §22a-208(i) and §22a-454(e)(1) of the Connecticut General Statutes,
  - (W) production of rubber, resin cements, elastomers or plastic, which involves the use, storage or disposal of hazardous materials,
  - (X) storage of de-icing chemicals, unless such storage takes place within a weather-tight water-proof structure for the purpose of retail sale or for the purpose of de-icing 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 §22a-207b, §22a-208a, and §22a-208c of the Connecticut General Statute, except for a potable water treatment sludge disposal area,
  - (Z) dying, 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;
- (36) "Release" means "release" as defined in §22a-133k-1 of the Regulations of Connecticut State Agencies;

- (37) "State aquifer protection regulations" means §22a-354i-1 to §22a-354i-10, inclusive, of the Regulations of Connecticut State Agencies;
- (38) "Storage" means the holding or possession of any hazardous material;
- (39) "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;
- (40) "Topographic feature" means an object, whether natural or man-made, located on the earth surface and of sufficient size that it appears on a 1:24,000 scale topographic quadrangle map drawn by the United States Geological Survey;
- (41) "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;
- (42) "Vehicle" or "vehicles" means a "vessel" as defined by §15-170 of the Connecticut General Statutes, 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;
- (43) "Waters" means "waters" as defined in §22a-423 of the Connecticut General Statutes;
- (44) "Well field" means "well field" as defined in §22a-354h of the Connecticut General Statutes; and
- (45) "Zoning district map" means any map showing zoning districts prepared in accordance with maps adopted pursuant to §8-3 of the Connecticut General Statutes.

### **SECTION 3. Delineation of Aquifer Protection Area Boundaries**

- (a) The zoning, planning, or planning and zoning commission shall delineate the aquifer protection areas on the City/Town of \_\_\_\_\_ zoning district map or, if zoning district maps do not exist, the inland wetland and watercourse areas map adopted pursuant to §22a-42a the Connecticut General Statutes. Such delineation shall consist of the combined areas of contribution and recharge areas as shown on Level A maps approved or prepared by the Commissioner.
  - (1) Such boundaries shall be delineated within one hundred twenty (120) days after being notified by the Commissioner that an aquifer protection area is located partially or entirely within the City/Town of \_\_\_\_\_.
  - (2) Notice of such delineation shall be published in a newspaper having substantial circulation in the affected area. Such notice shall include at least the following:
    - (A) a map or detailed description of the subject aquifer protection area; and
    - (B) the name, telephone number, and address of a representative of the Agency who

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## 12.2 | Model Municipal Regulations (continued)

may be reached for further information.

- (b) In order to clarify the location of an aquifer protection area boundary, the Agency may apply to the Commissioner to extend such boundary to coincide with the nearest property line, municipal boundary or topographic feature pursuant to §22a-354i-4 of the Regulations of Connecticut State Agencies. Such extension shall, at a minimum, fully encompass the aquifer protection areas bounded by the approved level A mapping but shall not exceed the distance necessary to clarify the location of the aquifer protection area or to facilitate the administration of regulations pertaining thereto. An aquifer protection area boundary may not be extended without prior written approval of the Commissioner.
  - (1) Any request by the Agency to the Commissioner for extension of an aquifer protection area boundary shall include at least the following:
    - (A) A map to scale delineating (i) the aquifer protection area boundary mapped under Section 3(a) of the APA regulations and (ii) the proposed extension of the aquifer protection area boundary;
    - (B) A certification by the chairperson or duly authorized agent of the Agency that notice of such request has been provided to all owners of property within the proposed extended aquifer protection area and all affected water companies in accordance with the following:
      - (i) Such notice shall include at least the following:
        - (aa) A map showing the aquifer protection area boundaries and the proposed extension of such boundaries,
        - (bb) the name, address, and telephone number of a representative of the Agency who may be contacted for further information, and
        - (cc) a statement that any person may, not later than thirty (30) days after said notification, submit to the Agency written comments on such proposed boundary extension;
      - (ii) Such notice shall be effectuated by the following:
        - (aa) Delivery of notice by certified mail to those individuals and entities identified in Subsection (b)(1)(B) of this Section, or
        - (bb) the publication of a notice in a newspaper having substantial circulation in the affected area; and posting of notice near the proposed boundaries of the subject aquifer protection area of at least four signs each of which shall be at least four square feet in size (2' x 2'); and
    - (C) A summary of comments received by such Agency regarding the proposed boundary extension and the Agency's response.
  - (2) Not later than sixty (60) days after receiving the Commissioner's written approval of a

request to extend an aquifer protection area boundary, the Agency shall cause such boundary to be delineated in accordance with Subsection (a) of this Section.

- (c) No person may challenge the boundaries of the aquifer protection area under the APA Regulations unless such challenge is based solely on a failure by the Agency to properly delineate the boundaries in accordance with §22a-354n of the Connecticut General Statutes.
- (d) A map of the location and boundaries of the aquifer protection areas, or regulated areas, shall be available for inspection in the Office of the City/Town Clerk or the Agency.
- (e) If the Level A mapping is amended in accordance with §22a-354b-1(i) or §22a-354b-1(j) of the Regulations of Connecticut State Agencies, the Agency shall cause the amended aquifer protection area boundary to be delineated in accordance with Subsections (a) or (b) of this Section.

#### **SECTION 4. Prohibited and Regulated Activities**

- (a) All regulated activities are prohibited in aquifer protection areas, except as specified in Subsection (b) of this Section.
- (b) The following regulated activities are not prohibited in aquifer protection areas:
  - (1) a registered regulated activity which is conducted in compliance with §22a-354i-9 of the Regulations of Connecticut State Agencies or Section 12 of the APA Regulations;
  - (2) a regulated activity which has received a permit issued pursuant to §22a-354i-8 of the Regulations of Connecticut State Agencies or Section 9 of the APA Regulations; and
  - (3) a regulated activity which is on any municipally owned site undergoing remedial action pursuant to 40 CFR 271 at the time the applicable aquifer protection area is designated on a municipal zoning district map or inland wetland map, provided: (1) no such regulated activity substantially commenced or was in active operation for the five-year period preceding the date that the applicable aquifer protection area is designated on a municipal zoning district map or inland wetland map, and (2) any person who engages in such regulated activity within the ten-year period commencing on the date that such applicable aquifer protection area is designated on a municipal zoning district map or inland wetland map registers such regulated activity on a form prescribed by the Commissioner of Environmental Protection and in accordance with the provisions of section 22a-354i-7 of the Regulations of Connecticut State Agencies.
- (c) The following are not regulated activities:
  - (1) Any activity conducted at a residence without compensation;
  - (2) any activity involving the use or storage of no more than two and one-half (2.5) gallons of each type of hazardous material on-site at any one time, provided the total of all hazardous materials on-site does not exceed fifty-five (55) gallons at any one time;
  - (3) any agricultural activity regulated pursuant to §22a-354m(d) of the Connecticut General

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## 12.2 | Model Municipal Regulations (continued)

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- (4) any activity provided all the following conditions are satisfied:
  - (A) such activity takes place solely within an enclosed building in an area with an impermeable floor,
  - (B) such activity involves no more than 10% of the floor area in the building where the activity takes place,
  - (C) any hazardous material used in connection with such activity is stored in such building at all times,
  - (D) all waste waters generated by such activity are lawfully disposed through a connection to a publicly owned treatment works, and
  - (E) such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above ground storage of more than one hundred and ten (110) gallons of hazardous materials;
- (5) any activity solely involving the use of lubricating oil provided all the following conditions are satisfied:
  - (A) such activity does not involve cleaning of metals with chlorinated solvents at the facility,
  - (B) such activity takes place solely within an enclosed building in an area with an impermeable floor,
  - (C) any hazardous material used in connection with such activity is stored in such building at all times, and
  - (D) such activity does not involve: (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above ground storage of more than one hundred ten (110) gallons of such lubricating oil and associated hazardous waste; and
- (6) any activity involving the dispensing of oil or petroleum from an above-ground storage tank or tanks with an aggregate volume of two thousand (2000) gallons or less provided all the following conditions are satisfied:
  - (A) such dispensing activity takes place solely on a paved surface which is covered by a roof,
  - (B) the above-ground storage tank(s) is a double-walled tank with overfill alarms, and
  - (C) all associated piping is either above ground, or has secondary containment.

- (d) Determination of a non-regulated activity
  - (1) Any person proposing to carry out a non-regulated activity, as set forth in Section 4(c) of these regulations, in an aquifer protection area shall, prior to commencement of such activity, notify the Agency or its duly authorized agent on a form provided by the Agency. Such form shall provide sufficient information to enable the Agency or its duly authorized agent to properly determine that the proposed activity is a regulated activity or a non-regulated activity within the aquifer protection area.
  - (2) If such activity is determined to be a non-regulated activity, then no further action under the APA Regulations is necessary.

### **SECTION 5. Activities Regulated by the State**

- (a) The Commissioner shall exclusively regulate activities within aquifer protection areas that are specified in §22a-354p(g) of the Connecticut General Statutes. The Agency shall regulate all other regulated activities.
- (b) Any person conducting regulated activities that are within the authority of the Commissioner shall submit a registration or obtain a permit or exemption from the Commissioner prior to engaging in such activity. The Commissioner shall process applications for those regulated activities.
- (c) The Agency may submit an advisory decision to the Commissioner for consideration on any permit regulated under this Section in accordance with the Connecticut General Statutes §22a-354p(g).

### **SECTION 6. Application for an Exemption from Prohibition or Regulation**

- (a) The owner or operator of a regulated activity may seek an exemption from the Commissioner pursuant to §22a-354i-6 of the Regulations of Connecticut State Agencies. Any person seeking an exemption from the Commissioner shall concurrently submit a copy of the application for an exemption to the Agency and any affected water company.
- (b) The Agency may submit written comments to the Commissioner on any exemption regulated under this Section in accordance with §22a-354i-6(c) of the Regulations of Connecticut State Agencies within sixty (60) days of the agency receipt of copy of the application.

### **SECTION 7. General Registration, Permit Application and Transfer Procedures**

- (a) All applications for permits and registrations shall contain sufficient information for a fair and informed determination of the issues. The Agency may request additional information from the applicant for this purpose.
- (b) The day of receipt of a registration, permit application or transfer form shall be the day of the next regularly scheduled meeting of the Agency, immediately following the day of submission of the application to the Agency or its duly authorized agent, or thirty-five (35) days after such

submission, whichever is sooner.

- (c) At any time during the review period, the Agency may require the applicant or registrant to provide additional information about the regulated activity. Requests for additional information shall not stay the time limitations for registrations and permits as set forth in Sections 8 and 9 of the APA Regulations.
- (d) All permit applications and registrations shall be open for public inspection.
- (e) Incomplete permit applications and registrations may be denied without prejudice.
- (f) No permit or registration issued under Sections 8 or 9 of the APA Regulations shall be assigned or transferred except with written approval by the Agency.
- (g) The Agency shall notify the town clerk of any adjoining municipality of the pendency of any application, petition, appeal, request or plan concerning any project on any site in which: (1) any portion of the property affected by a decision of such agency is within five-hundred feet of the boundary of the adjoining municipality; (2) a significant portion of the traffic to the completed project on the site will use streets within the adjoining municipality to enter or exit the site; (3) a significant portion of the sewer or water drainage from the project on the site will flow through and significantly impact the drainage or sewerage system within the adjoining municipality; or (4) water runoff from the improved site will impact streets or other municipal or private property within the adjoining municipality. Such notice shall be made by certified mail, return receipt requested, and shall be mailed within seven days of the date of receipt of the application, petition, request or plan. Such adjoining municipality may, through a representative, appear and be heard at any hearing on any such application, petition, appeal, request or plan.

### **SECTION 8. Registration Requirements**

- (a) Any person engaged in a regulated activity which substantially commenced, or was in active operation within the past five (5) years, or with respect to which a municipal building permit was issued, either (A) before the effective date of the state aquifer protection regulations, or (B) before the date an applicable aquifer protection area is designated on a municipal zoning district map or inland wetland and watercourse areas map, whichever occurs later, or for any municipally owned site undergoing remedial action pursuant to 40 CFR 271, any person who engages in a regulated activity within the ten (10) year period commencing on the date the applicable aquifer protection area is designated on a municipal zoning district map or inland wetlands map, shall register the activity in accordance with this Section unless such person has pending an application for an exemption pursuant to §22a-354i-6 of the Regulations of Connecticut State Agencies.
  - (1) The Commissioner shall process registrations for those regulated activities specified in §22a-354p(g) of the Connecticut General Statutes. The Agency shall process registrations for all other regulated activities.
  - (2) If the regulated activity is not specified in §22a-354p(g) of the Connecticut General Statutes, the person engaged in such activity shall submit a registration to the Agency not later than one hundred eighty (180) days after adoption of regulations pursuant to §22a-354p of the

Connecticut General Statutes, or the designation the aquifer protection area pursuant to §22a-354i-2 of the Regulations of Connecticut State Agencies, whichever occurs later. Any municipally owned site undergoing remedial action pursuant to 40 CFR 271, the person engaged in such regulated activity shall submit a registration within the ten (10) year period commencing on the date the applicable aquifer protection area is designated on a municipal zoning district map or inland wetlands map. Any person submitting a registration pursuant to the requirements of this subsection shall simultaneously file a copy of the registration with the Commissioner, Commissioner of Public Health and the affected water company.

- (b) All registrations shall be provided on a form prescribed by the Agency and shall be accompanied by the correct registration fee in accordance with Section 18 of the APA Regulations. Such registration forms may be obtained from the \_\_\_\_\_ City/Town Clerk or the Agency. Such registration forms shall include at least the following information in writing or on maps or drawings:

- (1) The name, business telephone number, street address and mailing address of the:
  - (A) Registrant; if the registrant is a corporation or limited partnership, the full name of the facility and such corporation or limited partnership as registered with the Connecticut Secretary of State, and any officer or governing or managing body of any partnership, association, firm or corporation,
  - (B) owner of such facility if different than the registrant, and
  - (C) manager or operator overseeing the operations of such facility;
- (2) the location of such facility, using street address or other appropriate method of location, and a map showing the property boundaries of the facility on a 1:24,000 scale United States Geological Survey topographic quadrangle base;
- (3) an identification of the regulated activity or activities conducted at the facility, as described in Section 2(a)(35) of the APA Regulations, which regulated activity or activities shall consist of any regulated activity which substantially commenced, was in active operation, or with respect to which a municipal building permit was issued within the past five years; and
- (4) a certification by the registrant that the subject regulated activity is in compliance with the best management practices set forth in Section 12(a) of the APA Regulations, as follows, signed after satisfying the statements set forth in the following certification:

"I have personally examined and am familiar with the information submitted in this registration and all attachments, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in this document or certification may be punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law."

- (c) When deemed necessary to protect a public supply well subject to regulation under §22a-354c or §22a-354z of the Connecticut General Statutes, the Agency may:

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## 12.2 | Model Municipal Regulations (continued)

- (1) require, by written notice, any registrant to submit for review and written approval a storm water management plan prepared in accordance with Section 12(b) of the APA Regulations. If so required, the storm water management plan shall be implemented by the registrant immediately upon its approval; or
- (2) require, by written notice, any registrant to submit for review and written approval the materials management plan prepared in accordance with Section 12(a) of the APA Regulations. If so required, the materials management plan shall be implemented by the registrant immediately upon its approval.
- (d) If the Agency determines that a registration is incomplete, it shall reject the registration and notify the registrant of what additional information is required and the date by which it shall be submitted.
- (e) If the registration is determined to be complete, and the regulated activity is eligible for registration, the Agency shall send written notification of such registration to the registrant. Such registration shall be determined to be complete and eligible if the registrant has not otherwise received a notice of rejection from the Agency, not later than one hundred and eighty (180) days after the date the registration is received by the Agency.
- (f) The following general provisions shall be included in the issuance of all registrations:
  - (1) The Agency has relied in whole or in part on information provided by the registrant and if such information subsequently proves to be false, deceptive, incomplete or inaccurate, the registration may be modified, suspended or revoked;
  - (2) all registrations issued by the Agency are subject to and do not derogate any present or future rights or powers of the Commissioner, Agency, or municipality, and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the subject land or activity;
  - (3) a complete registration shall expire five (5) years from the date of receipt of such registration by the Agency;
  - (4) the registrant shall apply to the Agency to renew the registration on a form prescribed by the Agency for a facility prior to expiration of such registration; and
  - (5) If a registered regulated activity is out of business or inactive when registration renewal is required, a five (5) year allowance shall be in effect from the date the registration expires. If the registrant has not applied to renew the registration within five (5) years of the date the registration expires, the facility is no longer eligible for registration.
- (g) If a regulated activity which is eligible for registration in accordance with Subsection (a) of this Section fails to be registered or if the registrant of an active registered activity fails to apply for renewal prior to expiration, the Commissioner or municipal aquifer protection agency, as appropriate, may accept a late registration at their discretion, subject to the limitations in Subsection (f)(5) of this Section.

- (h) Any person wishing to assume the benefits under a registration for regulated activities shall apply to transfer such registration on a form prescribed by the Agency and submitted to the Agency.

### **SECTION 9. Permit Requirements**

- (a) Any person may apply for a permit to add a regulated activity to a facility where a registered regulated activity occurs.
- (b) The Agency shall process permit applications for those registrants that have registered pursuant to Section 8 of the APA Regulations. The Commissioner shall process permit applications for regulated activities specified in §22a-354p(g) of the Connecticut General Statutes and for those registrants that have registered pursuant to §22a-354i-7(b)(1) of the Regulations of Connecticut State Agencies.
- (c) Action shall be taken on permit applications within sixty-five (65) days after the completion of a public hearing or in the absence of a public hearing within sixty-five (65) days from the date of receipt of the application. The applicant may consent to one or more extensions of either of these timeframes, provided the total extension of all such periods is sixty-five (65) days or less.
- (d) An application for a permit shall be made on a form prescribed by the Agency and shall be accompanied by the correct application fee in accordance with Section 18 of the APA Regulations. Such permit application forms may be obtained from the \_\_\_\_\_ City/Town Clerk or the Agency. Simultaneously with filing an application, the applicant shall send a copy of the application to the Commissioner, the Commissioner of Public Health and the affected water company. An application shall include the following information:
  - (1) The information as required for a registration under Section 8(b) of the APA Regulations shall be provided for the proposed regulated activity;
  - (2) a confirmation and certification that the existing and proposed activity:
    - (A) remains and shall remain in compliance with Section 12(a) of the APA Regulations,
    - (B) shall not increase the number of underground storage tanks used for storage of hazardous materials, and
    - (C) remains and shall remain in compliance with all local, state, and federal environmental laws;
  - (3) a materials management plan in accordance with Section 12(a) of the APA Regulations;
  - (4) a storm water management plan in accordance with Section 12(b) of the APA Regulations;
  - (5) the following environmental compliance information with respect to environmental violations which occurred at the facility where the regulated activities are conducted, within the five years immediately preceding the date of the application:
    - (A) any criminal conviction involving a violation of any environmental protection law,

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## 12.2 | Model Municipal Regulations (continued)

- (B) any civil penalty imposed in any state or federal judicial proceeding, or any penalty exceeding five thousand dollars imposed in any administrative proceeding, and
- (C) any judicial or administrative orders issued regarding any such violation together with the dates, case or docket numbers, or other information which identifies the proceeding. For any such proceeding initiated by the state or federal government, the Agency may require submission of a copy of any official document associated with the proceeding, the final judgment or order;
- (6) any additional information deemed necessary by the Agency regarding potential threats to the ground water and proposed safeguards; and
- (7) the following certification signed by the applicant and the individual responsible for preparing the application, after satisfying the statements set forth in the certification:

"I have personally examined and am familiar with the information submitted in this document and all attachments, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law."

- (e) The Commissioner, any affected water company or the Commissioner of Public Health may, not later than thirty (30) days after receiving a copy of an application for a permit under this Section, submit to the Agency written comments on such application. The Agency shall give due consideration to any such comments, and shall provide a copy of the decision to the Commissioner, the affected water company and the Commissioner of Public Health.
- (f) To carry out the purposes of the Act, the Agency may grant an application as filed, grant it upon such terms, conditions, limitations or modifications necessary, or deny it. The Agency shall state upon the record the reason for its decision.
- (g) The Agency may hold a public hearing on an application for a permit in accordance with Section 10 of the APA regulations.
- (h) The Agency shall not issue a permit unless a complete application has been received and the applicant demonstrates to the Agency's satisfaction that all requirements of this Section of the APA regulations have been satisfied and all of the following standards and criteria have been met:
  - (1) the proposed regulated activity shall take place at a facility where a registered regulated activity occurs;
  - (2) the proposed regulated activity shall not increase the number, or storage capacity of underground storage tanks used for hazardous materials except for the replacement of an existing underground storage tank in accordance with Section 12(a)(3) of the APA Regulations;
  - (3) the materials management plan and storm water management plan have been satisfactorily

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## 12.2 | Model Municipal Regulations (continued)

- prepared in accordance with Sections 12(a) and 12(b) of the APA Regulations;
- (4) the applicant has submitted a confirmation and certification that all regulated activities remain and shall remain in compliance with all local, state and federal environmental laws in accordance with Subsection (d)(2) of this Section;
  - (5) the applicant's compliance record does not indicate (A) that any noncompliance resulted from indifference to or disregard for the legal requirements, (B) an unwillingness or inability to devote the resources necessary to comply and remain in compliance, or (C) that instances of noncompliance have led to serious environmental harm, harm to human health or safety, or a substantial risk of such harm;
  - (6) the proposed regulated activity shall be conducted in accordance with Section 12 of the APA Regulations;
  - (7) the existing regulated activity is being conducted in accordance with Section 12 of the APA Regulations; and
  - (8) the certification required under Subsection (d)(7) of this Section has been signed by the applicant and the individual responsible for preparing the application.
- (i) The Agency may impose reasonable conditions or limitations on any permit issued under this Section to assure protection of the ground water, including, but not limited to the following:
    - (1) best management practices in addition to those set forth in Section 12 of the APA Regulations; and
    - (2) ground water monitoring.
  - (j) The following general provisions shall be included in the issuance of all permits:
    - (1) the Agency has relied in whole or in part on information provided by the applicant and if such information subsequently proves to be false, deceptive, incomplete or inaccurate, the permit may be modified, suspended or revoked;
    - (2) all permits issued by the Agency are subject to and do not derogate any present or future rights or powers of the Commissioner, Agency, or municipality, and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the subject land or activity;
    - (3) the permit shall expire ten (10) years from the date of issuance of such permit by the Agency; and
    - (4) a person shall apply to the Agency to renew the permit on a form prescribed by the Agency prior to expiration of such permit. Such renewal shall be granted upon request by the Agency unless a substantial change in the permitted activity is proposed, or enforcement action with regard to the regulated activity has been taken, in which case, a new permit application shall be submitted and reviewed in accordance with the provisions of this

Section.

- (k) The Agency shall notify the applicant or permittee within fifteen (15) days of the date of the decision by certified mail, return receipt requested, and the Agency shall cause notice of its order in issuance or denial of a permit to be published in a newspaper having a general circulation in the municipality in which the aquifer protection area is located.
- (l) A permittee may request a modification of a permit from the Agency. Such request shall be on a form prescribed by the Agency, and shall include the facts and reasons supporting the request. The Agency may require the permittee to submit a new application for a permit or renewal in lieu of a modification request.
- (m) A person wishing to assume the benefits under a permit for regulated activities shall apply to transfer such permit on a form prescribed by the Agency and submitted to the Agency.

**SECTION 10. Public Hearings Regarding Permit Applications**

- (a) If the Agency decides to hold a public hearing regarding an application for a permit to conduct a regulated activity within an aquifer protection area, such hearing shall commence no later than sixty-five (65) days after the receipt of such application.
- (b) Notice of the hearing shall be published at least twice at intervals of not less than two (2) days, the first not more than fifteen (15) days and not fewer than ten (10) days, and the last not less than two (2) days before the date set for the hearing in a newspaper having a general circulation in each city/town where the affected aquifer, or any part thereof, is located.
- (c) The Agency shall send to any affected water company, at least ten (10) days before the hearing, a copy of the notice by certified mail, return receipt requested. Any affected water company may, through a representative, appear and be heard at any such hearing.
- (d) All applications, maps and documents relating thereto shall be open for public inspection.
- (e) At such hearing any person or persons may appear and be heard.
- (f) The hearing shall be completed within thirty-five (35) days of its commencement.
- (g) The applicant may consent to an extension of the time frames in Subsections (a) or (f) of this Section, provided the total extension of all such periods, including any extensions provided in Section 9(c), totals sixty-five (65) days or less.
- (h) In reaching its decision on any application after a public hearing, the Agency shall base its decision on the record of that hearing. Documentary evidence or other material not in the hearing record shall not be considered by the Agency in its decision.
- (i) The applicant or permittee shall be notified of the Agency's decision in accordance with Section 9(k) of the APA Regulations.

### **SECTION 11. Bond and Insurance Relevant to Permit Applicants**

- (a) An applicant may be required to file a bond as a condition of the permit.
- (b) Any bond or surety shall be conditioned on compliance with all provisions of these regulations and the terms, conditions and limitations established in the permit.

### **SECTION 12. Best Management Practices**

- (a) Every regulated activity shall be conducted in accordance with the following:
  - (1) hazardous materials may be stored above ground within an aquifer protection area only in accordance with the following conditions:
    - (A) hazardous material shall be stored in a building or under a roof that minimizes storm water entry to the hazardous material storage area, except that a roof is not required for a bulk storage facility as defined in Section 2 of the APA Regulations,
    - (B) floors within a building or under a roof where hazardous material may be stored shall be constructed or treated to protect the surface of the floor from deterioration due to spillage of any such material,
    - (C) a structure which may be used for storage or transfer of hazardous material shall be protected from storm water run-on, and ground water intrusion,
    - (D) hazardous material shall be stored within an impermeable containment area which is capable of containing at least the volume of the largest container of such hazardous material present in such area, or 10% of the total volume of all such containers in such area, whichever is larger, without overflow of released hazardous material from the containment area,
    - (E) hazardous material shall not be stored with other hazardous materials that are incompatible and may create a hazard of fire, explosion or generation of toxic substances,
    - (F) hazardous material shall be stored only in a container that has been certified to meet state or federal specifications for containers suitable for the transport or storage of such material,
    - (G) hazardous material shall be stored only in an area that is secured against unauthorized entry by the public, and
    - (H) the requirements of this subdivision are intended to supplement, and not to supersede, any other applicable requirements of federal, state, or local law, including applicable requirements of the Resource Conservation and Recovery Act of 1976;
  - (2) no person shall increase the number of underground storage tanks used to store hazardous materials;

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## 12.2 | Model Municipal Regulations (continued)

- (3) an underground storage tank used to store hazardous materials shall not be replaced with a larger tank unless (A) there is no more than a 25% increase in volume of the larger replacement tank, and (B) the larger replacement tank is a double-walled tank with co-axial piping, both meeting new installation component standards pursuant to §22a-449(d)-1(e) and §22a-449(d)-102 of the Regulations of Connecticut State Agencies, and with interstitial monitoring;
- (4) no person shall use, maintain or install floor drains, dry wells or other infiltration devices or appurtenances which allow the release of waste waters to the ground, unless such release is permitted by the Commissioner in accordance with §22a-430 or §22a-430b of the Connecticut General Statutes; and
- (5) a materials management plan shall be developed and implemented in accordance with the following:
  - (A) a materials management plan shall contain, at a minimum, the following information with respect to the subject regulated activity:
    - (i) a pollution prevention assessment consisting of a detailed evaluation of alternatives to the use of hazardous materials or processes and practices that would reduce or eliminate the use of hazardous materials, and implementation of such alternatives where possible and feasible,
    - (ii) a description of any operations or practices which may pose a threat of pollution to the aquifer, which shall include the following:
      - (aa) a process flow diagram identifying where hazardous materials are stored, disposed and used, and where hazardous wastes are generated and subsequently stored and disposed,
      - (bb) an inventory of all hazardous materials which are likely to be or will be manufactured, produced, stored, utilized or otherwise handled, and
      - (cc) a description of waste, including waste waters generated, and a description of how such wastes are handled, stored and disposed,
    - (iii) the name, street address, mailing address, title and telephone number of the individual(s) responsible for implementing the materials management plan and the individual(s) who should be contacted in an emergency,
    - (iv) a record-keeping system to account for the types, quantities, and disposition of hazardous materials which are manufactured, produced, utilized, stored, or otherwise handled or which are discharged or emitted; such record-keeping system shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal aquifer protection agency, and
    - (v) an emergency response plan for responding to a release of hazardous materials. Such plan shall describe how each such release could result in pollution to the

underlying aquifer and shall set forth the methods used or to be used to prevent and abate any such a release;

- (B) when a materials management plan is required under either Section 8(c) or 9(d) of the APA Regulations, such materials management plan shall be completed and certified by a professional engineer or a certified hazardous materials manager, or, if the facility where the regulated activity is conducted has received and maintained an ISO 14001 environmental management system certification, then the registrant may complete and certify the materials management plan; and
  - (C) the materials management plan shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal aquifer protection agency.
- (b) The development and implementation of a storm water management plan required for regulated activities in accordance with Sections 8(c) and 9(d) of the APA Regulations, shall be as follows: A storm water management plan shall assure that storm water run-off generated by the subject regulated activity is (i) managed in a manner so as to prevent pollution of ground water, and (ii) shall comply with all of the requirements for the General Permit of the Discharge of Storm Water associated with a Commercial Activity issued pursuant to §22a-430b of the Connecticut General Statutes.

### **SECTION 13. Other State, Federal and Local Laws**

- (a) Nothing in these regulations shall obviate the requirement for the applicant to obtain any other assents, permits or licenses required by law or regulation by the City/Town of \_\_\_\_\_, State of Connecticut and the Government of the United States including any approval required by the Connecticut Department of Energy and Environmental Protection and the U.S. Army Corps of Engineers and the United States Environmental Protection Agency. Obtaining such assents, permits or licenses are the sole responsibility of the applicant.
- (b) No person shall conduct any regulated activity within an aquifer protection area which requires zoning or subdivision approval without first having obtained a valid certificate of zoning or subdivision approval, special permit, special exception or variance, or other documentation establishing that the proposal complies with the City/Town of \_\_\_\_\_ zoning or subdivision regulations.

### **SECTION 14. Enforcement**

- (a) The Agency may appoint a duly authorized agent to act in its behalf with the authority to issue notices of violation or cease and desist orders.
- (b) If the Agency or its duly authorized agent finds that any person is conducting or maintaining any activity, facility or condition which violates any provision of these regulations, the Agency or its duly authorized agent may:

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## 12.2 | Model Municipal Regulations (continued)

- (1) Issue a notice of violation.
  - (A) The notice of violation shall state the nature of the violation, the jurisdiction of the Agency, and the necessary action required to correct the violation including without limitation halting the activity in the aquifer protection area.
  - (B) The Agency may request that the person appear at the next regularly scheduled meeting of the Agency to discuss the unauthorized activity, and/or provide a written reply to the notice or file an application for the necessary permit or registration. Failure to carry out the action(s) directed in a notice of violation may result in issuance of an order under Subsection (2) of this Section or other enforcement proceedings as provided by law.
- (2) Issue a written order.
  - (A) Such order shall be issued by certified mail, return receipt requested to such person conducting such activity or maintaining such facility or condition to cease such activity immediately or to correct such facility or condition. The Agency shall send a copy of such order to any affected water company by certified mail, return receipt requested.
  - (B) Within ten (10) days of the issuance of such order the Agency shall hold a hearing to provide the person an opportunity to be heard and show cause why the order should not remain in effect. Any affected water company may testify at the hearing. The Agency shall consider the facts presented at the hearing and, within ten (10) days of the completion of the hearing, notify the person by certified mail, return receipt requested, that the original order remains in effect, that a revised order is in effect, or that the order has been withdrawn.
- (3) Suspend or revoke registration or permit.
  - (A) The Agency may suspend or revoke a registration or a permit if it finds, after a hearing, that the registrant or permittee has not complied with the terms, conditions or limitations set forth in the registration or the permit. Prior to revoking or suspending any registration or permit, the Agency shall issue notice to the registrant or the permittee, personally or by certified mail, return receipt requested, setting forth the facts or conduct that warrants the intended action.
  - (B) The Agency shall hold a hearing to provide the registrant or permittee an opportunity to show that it is in compliance with its registration or permit. The Agency shall notify the registrant or permittee of its decision by certified mail within fifteen (15) days of the date of its decision. The Agency shall publish notice of a suspension or revocation in a newspaper having general circulation in the City/Town of \_\_\_\_\_.
- (c) An order issued pursuant to Subsection (b)(2) of this Section shall be effective upon issuance, shall remain in effect until the Agency affirms, revises, or withdraws the order, and shall not delay or bar an action pursuant to Subsection (b)(3) of this Section.
- (d) A court may assess criminal and or civil penalties to any person who commits, takes part in, or assists in any violation of any provision of the APA regulations in accordance with §22a-354s(b)

and §22a-354s(c) of the Connecticut General Statutes.

### **SECTION 15. Amendments**

- (a) These regulations may be amended, changed or repealed in accordance with §22a-354p(b) of the Connecticut General Statutes.
- (b) If a complete application is filed with the Agency which is in conformance with the APA regulations as of the date of its filing, the permit issued shall not be required to comply with any changes in regulations taking effect on or after the filing date. The provisions of this Section shall not apply to the establishment, amendment, or change of the boundaries of the aquifer protection area or to any changes in the APA Regulations necessary to make the regulations consistent with Chapter 446i of the Connecticut General Statutes as of the date of the Agency's decision.

### **SECTION 16. Appeals**

- (a) Appeal of the Agency's regulation, order, decision or action shall be made in accordance with §22a-354q of the Connecticut General Statutes.

### **SECTION 17. Conflict and Severance**

- (a) If there is a conflict between the provisions of the APA Regulations, the provision that imposes the most stringent standards shall govern. The invalidity of any word, clause, sentence, section, part, subsection, subdivision or provision of these regulations shall not affect the validity of any other part that can be given effect without such valid part or parts.
- (b) If there is a conflict between the provisions of the APA Regulations and the Act, the provisions of the Act shall govern.

### **SECTION 18. Registration and Permit Application Fees**

- (a) All fees required by these regulations shall be submitted to the Agency by certified check or money order payable to the City/Town of \_\_\_\_\_ at the time the registration or permit application is filed with the Agency.
- (b) No registration or permit application shall be granted or approved by the Agency unless the correct registration/application fee is paid in full or unless a waiver has been granted by the Agency pursuant to Subsection (f) of this Section.
- (c) The registration or permit application fee is nonrefundable.
- (d) Registration or permit application fees shall be based on the following schedule:

# 12 | Model Documents

## 12.2 | Model Municipal Regulations (continued)

Fee Schedule			
	Facility Size		
	Small (< 1 acre)	Medium (1-5 acres)	Large (> 5 acres)
<b>Registrations:</b>			
Industrial			
Commercial			
Other			
Fee Schedule (continued)			
	Facility Size		
	Small (< 1 acre)	Medium (1-5 acres)	Large (> 5 acres)
<b>Permits:</b>			
Industrial			
Commercial			
Other			
<b>Materials Management Plan Reviews</b>			
<b>Storm water Management Plan Reviews</b>			
<b>Public Hearing</b>			
<b>Facility Inspection/Monitoring</b>			
<b>Regulation Petition</b>			
<b>Transfer Fee</b>			

- (e) Boards, commissions, councils and departments of the City/Town of \_\_\_\_\_ are exempt from all fee requirements.
- (f) The registrant or applicant may petition the Agency to waive, reduce or allow delayed payment of the fee. Such petitions shall be in writing and shall state fully the facts and circumstances the Agency should consider in its determination under this Section. The Agency may waive all or part of the application fee if the Agency determines that:
  - (1) the activity applied for would clearly result in a substantial public benefit to the environment or to the public health and safety and the registrant or applicant would reasonably be deterred from initiating the activity solely or primarily as a result of the amount of the registration or permit application fee; or
  - (2) the amount of the registration or permit application fee is clearly excessive in relation to the cost to the City/Town for reviewing and processing the application.
- (g) Extra Assessments
 

In the event that additional expenses, including but not limited to outside consultants, experts, or legal advisors are incurred in processing the registration or permit application the applicant/registrant may be assessed an additional fee not to exceed \$\_\_\_\_\_ to cover said costs. Said fees are to be estimated by the duly authorized agent and submitted with the

application fee and held until the application is completely processed after which time any residual funds pertaining to this assessment are to be returned to the applicant/registrant.

For the purpose of this assessment, an “outside consultant” means a professional who is not an employee of the City/Town of \_\_\_\_\_ including but not limited to engineering, environmental, hydrogeology and hazardous materials management professionals.

- (h) The Agency shall state upon its record the basis for all actions under this Section.

### **SECTION 19. Effective Date of Regulations**

The APA Regulations, APA boundaries and amendments thereto, shall become effective upon (1) the Commissioner’s determination that such regulations are reasonably related to the purpose of ground water protection and not inconsistent with the Regulations of Connecticut State Agencies §22a-354i-1 through §22a-354i-10 and (2) filing in the Office of the City/Town Clerk.

**Adopted Date:** \_\_\_\_\_ (e.g. public hearing date)

**DEEP Approval Date:** \_\_\_\_\_ (date of approval letter)

**Effective Date:** \_\_\_\_\_ (e.g. 60 days after hearing date)

**Revision Date:** \_\_\_\_\_ (as needed)

# 12 | Model Documents

## 12.3 | Reference Document for Model Municipal Regulations



[CITY/TOWN NAME]  
AQUIFER PROTECTION AGENCY  
[PHONE NUMBER]

### **Reference Document for Model Municipal Regulations Aquifer Protection Areas**

[MONTH] [YEAR]



Connecticut Department of  
**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

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### **Reference Document for Model Municipal Regulations Aquifer Protection Areas**

October 1, 2007  
Revised October 1, 2010

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The Connecticut Department of Energy and 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. DEEP 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 Energy and Environmental Protection pursuant to CGS §22a-354b to §22a-354d, inclusive, within which land uses or activities shall be required to comply with regulations adopted pursuant to CGS §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 DEEP'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](http://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 (RCSA Sec. 22a-354b-1). DEEP 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 Sec. 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 RCSA Sec. 22a-430-1 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 CGS §16-243b, or an exempt wholesale generator, as defined in 15 USC 79z-5a.

**2(a)(31)** RCSA Sec. 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 Sec. 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 electricity 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 Sec. 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 RCSA Sec. 16-11-115(a);

(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 DEEP'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 Sec. 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 Model APA Regulations.

**3(b)** DEEP 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 DEEP & 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 Model 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 CGS §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 CGS §16-1, providing gas, electric, pipeline, water or telephone service,

(C) any large quantity generator, as defined in regulations adopted by the Commissioner under CGS §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 CGS §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 CGS §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 CGS §22a-354p(g).

**9(c)** CGS §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 §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 CGS §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 CGS §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 DEEP 2004 Connecticut Stormwater Quality Manual provides comprehensive stormwater guidance and is available on the DEEP's website at <http://www.deep.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 CGS §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.

(CGS §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 DEEP and Department of Transportation are required to conduct.)

CGS §22a-354s(c) reads:

(c) Any person who wilfully or knowingly violates any provision of CGS §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**

**A MODEL FORM  
FOR DEVELOPING A  
MATERIALS MANAGEMENT PLAN  
FOR REGULATED ACTIVITIES IN  
AQUIFER PROTECTION AREAS**

August 2011



**DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
BUREAU OF WATER PROTECTION AND LAND REUSE  
PLANNING AND STANDARDS DIVISION  
AQUIFER PROTECTION AREA PROGRAM  
79 ELM STREET, HARTFORD, CT 06106**

Printed on recycled paper

### INSTRUCTIONS

This model document was prepared by the Department of Energy and Environmental Protection to assist you in complying with the requirements of the Aquifer Protection Area Program. The document provides a general form for developing and implementing a site-specific Materials Management Plan (MMP) for regulated activities conducted at facilities in aquifer protection areas.

This document is an example of what a Plan might look like. Depending on the business or industry you are in, your own plan may be different. The Plan has eight sections including:

- Section 1 – Facility and Site Information
- Section 2 – Tables
- Section 3 – Emergency Response Plan
- Section 4 – Employee Training
- Section 5 – Record Keeping System
- Section 6 – Individual Responsible for Implementing MMP
- Section 7 – Additional Protection Actions
- Section 8 – Certification

Please keep in the following in mind when completing the Plan:

1. *If any section does not apply to your facility, state that it is not applicable. Do not skip it or leave it blank.*
2. You do not need to type your forms as long as they are legible.
3. If other similar information has already been prepared for the site for other purposes (i.e. site plans, emergency response procedures, spill plans, etc) and meets the MMP requirement, it may be submitted as an attachment instead of the MMP form.

Once the Plan is complete, you are required by the Aquifer Protection Area Program to keep your Materials Management Plan on file at your facility and use it to assist you in controlling inventory of hazardous materials, monitoring and inspecting your site operations, responding to an emergency and training employees.

Keep the Plan up to date! By using common sense, good housekeeping and by following your Plan, pollutants that could potentially contaminate ground water can be managed or eliminated without significant cost. Remember, it costs less to keep pollutants out of the ground water than to remediate later!

Below are some phone numbers you may find useful in assembling your Plan.

Aquifer Protection Area Program: 860-424-3020 (for any questions specific to completing the Plan, its format or its contents)

Pollution Prevention: 860-424-3297 (for any question about pollution prevention or best management practices)

Bureau of Materials Management and Compliance Assistance: 860-424-3023 (for any questions about spills, hazardous materials, waste engineering and enforcement)

Wastewater Permitting and Enforcement: 860-424-3018 (for any questions about floor drains or waste water discharges)

Emergency Response and Spill Prevention

Emergency Line: 860-424-3333 OR 860-424-3338 (to report spills)

General Information: 860-424-3024 (for questions on underground storage tanks or spill preparedness)

# 12 | Model Documents

## 12.4 | Model Materials Management Plan (continued)

### **Aquifer Protection Area Materials Management Plan (MMP)**

#### **SECTION 1 □ FACILITY AND SITE INFORMATION**

##### **FACILITY INFORMATION**

Facility Name: \_\_\_\_\_ Date of Plan: \_\_\_\_\_

Facility Address: \_\_\_\_\_

\_\_\_\_\_

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_ Phone: \_\_\_\_\_

Type of Business: \_\_\_\_\_

Standard Industrial Code (SIC) (if known): \_\_\_\_\_

Products and Services Produced: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

##### **SITE INFORMATION**

Property size: \_\_\_\_\_

Number and size of buildings/ storage areas: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Number and size of paved surfaces: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Number of employees: \_\_\_\_\_

MMP1

### **Aquifer Protection Area Materials Management Plan (MMP)**

#### **SECTION 1 (CONT.)**

##### **SITE MAP**

Attach a site map of the facility and label it "Figure 1".

The following is a list of items that if applicable to your facility should be included on your site map:

- Site boundary
- Outline of buildings, sheds or other storage structures, pavement
- Stormwater structures, controls, and drainage flow direction
- Location of fueling stations
- Location of loading/unloading areas
- Location of wastewater disposal systems- sewer line or septic system
- Location of waste storage and disposal areas including- dumpsters, used oil storage tanks, and other waste storage
- Location of liquid storage areas including- underground and above ground storage tanks, and their filling and discharging or distribution lines
- Location of any other outdoor structures or processing service areas that may impact groundwater or have materials exposed to precipitation

MMP2

### **Aquifer Protection Area Materials Management Plan (MMP)**

#### **SECTION 1 (CONT.)**

#### **PROCESS FLOW DIAGRAM**

Attach a building plan or diagram showing the site operations and label it "Figure 2".

Identify the following on your building floor plan or diagram:

- Hazardous materials and hazardous waste storage areas
- Hazardous materials and hazardous waste transfer, handling, and processing areas
- Waste water generation areas, collection lines, and disposal areas including floor drains, sinks, sewer line or septic system connections
- Hazardous materials delivery routes, and hazardous waste transport through the site
- Designated loading and unloading areas, tank filling operations, and holding areas
- Location of vehicle and equipment maintenance and cleaning areas
- Location of roof areas that may be subject to chemical exhaust or drippage (do not include heating/ventilation/air conditioning (HVAC) condensate)

Note: For small or simple sites, information for site map and process flow diagram may be combined into one figure.

MMP3

### Aquifer Protection Area Materials Management Plan (MMP)

#### SECTION 2 ■ TABLES

**Table 1. HAZARDOUS MATERIAL INVENTORY**

Date of Inventory \_\_\_\_\_

Provide an inventory of all hazardous materials that could potentially pollute ground water. List hazardous materials that are handled or stored on site including: raw materials, intermediate products, final products and other materials.

Hazardous Material Type	Purpose / Description	Location	Container Type	Container Size	Maximum Quantity Stored

MMP4

### Aquifer Protection Area Materials Management Plan (MMP)

**SECTION 2 (CONT.)**

**Table 2. WASTE AND WASTEWATER INVENTORY**

Date of Inventory \_\_\_\_\_

Provide a description of all types and volumes of hazardous and solid wastes and wastewaters generated, and a description of how wastes are handled, stored and disposed.

Waste and Wastewater	Purpose / Description	Location	Quantity Stored / Generated	Disposal Method

MMP5









### **Aquifer Protection Area Materials Management Plan (MMP)**

#### **SECTION 3**

#### **EMERGENCY RESPONSE PLAN**

Provide an emergency spill prevention and response plan. You may reference any Spill Prevention Countermeasure Control Plan or other Spill Plan that you have as long as the plan includes the items below. Your Plan must include, at a minimum, the following:

#### **Response Procedures**

Identify where spill response equipment or materials are located and appropriate personnel who are instructed in its use:

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Identify the spill coordinator who will be advised immediately of all spills, regardless of quantity:

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Indicate how the spill will be evaluated to determine the necessary response. (If there is a health hazard, fire, or explosion potential, 911 will be called. If the spill is large or threatens ground water, the DEEP Oil and Chemical Spills Unit will be called at 860-424-3338. Any questions on pollution potential of spilled materials and proper disposal of spilled materials or wastes should be directed to DEEP Waste Management Bureau at 860-424-3372.)

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Indicate how the spill will be contained as close to the source as possible with a dike of absorbent materials from the emergency spill kit (such as socks, pads, pillows or "pigs"), how additional dikes will be constructed to protect swales, catch basins or other conveyances:

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MMP10

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## 12.4 | Model Materials Management Plan (continued)

### **Aquifer Protection Area Materials Management Plan (MMP)**

#### **SECTION 3 (CONT.)**

#### **EMERGENCY RESPONSE PLAN**

#### **Response Procedures (continued)**

Indicate how all waste material will be disposed of properly, including used absorbent materials. (The DEEP will be called at 860-424-3372 for any questions about proper disposal of hazardous or regulated wastes.)

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Indicate how spill response kit(s) will be kept up to date and fully stocked at all times: \_\_\_\_\_

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MMP11



### **Aquifer Protection Area Materials Management Plan (MMP)**

#### **SECTION 5**

#### **RECORD KEEPING SYSTEM - ACCOUNTING AND TRACKING OF MATERIALS**

Identify how you will track materials and account for any abnormal losses.

Maintain product Material Safety Data Sheets (MSDS): \_\_\_\_\_

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Maintain hazardous waste manifests: \_\_\_\_\_

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Ensure materials and waste containers are properly labeled: \_\_\_\_\_

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Mark purchase date on materials: \_\_\_\_\_

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Control access to materials that are hazardous: \_\_\_\_\_

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Maintenance of Spill Logs: \_\_\_\_\_

Other: \_\_\_\_\_

MMP13

### **Aquifer Protection Area Materials Management Plan (MMP)**

#### **SECTION 6**

#### **INDIVIDUAL RESPONSIBLE FOR IMPLEMENTING MMP**

Identify the person who will be responsible for implementing the plan.

#### **Contact Information**

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

#### **Emergency Contact Information**

Identify the emergency contact person who will be advised immediately of all spills, regardless of quantity.

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

List additional emergency contact numbers.

DEEP Oil and Chemical Spills Unit: 860-424-3338

Water Utility: \_\_\_\_\_

Other: \_\_\_\_\_

\_\_\_\_\_

MMP14



### **Aquifer Protection Area Materials Management Plan (MMP)**

#### **SECTION 8**

#### **CERTIFICATION**

You must certify your plan by signing and dating it. A Connecticut licensed Professional Engineer or Certified Hazardous Materials Manager may have to certify your Plan if the DEEP or the local Aquifer Protection Agency requires certification. You may obtain a list of consultants registered with the State of Connecticut by contacting the Bureau of Water Protection and Land Reuse at 860-424-3018 and asking for the Engineer of the Day.

Your Plan must be re-certified when there are substantial changes to the facility that would cause significant revisions to the plan and potential impacts. An example of a substantial change would be an addition to the facility that included an additional process or change in the activity at the facility. If you have any questions as to whether or not a change is "substantial", please contact the DEEP Aquifer Protection Area Program at 860-424-3020.

#### **Certification by owner/operator**

"I certify that the materials management plan prepared for this site meets the criteria set forth in Sections 22a-354i-8(c) or 7(d) of the Aquifer Protection Area Regulations. This certification is based on my review of the materials management plan for the site and an inspection of the site. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

\_\_\_\_\_  
Owner/Operator Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Owner/Operator Name (printed or typed)

#### **Certification by professional engineer**

"I certify that, in my professional judgment, the materials management plan prepared for this site meets the criteria set forth in Sections 22a-354i-8(c) or 7(d) of the Aquifer Protection Area Regulations. This certification is based on my review of the materials management plan for the site and an inspection of the site. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

\_\_\_\_\_  
P.E. Signature

\_\_\_\_\_  
P.E. Number and Seal

\_\_\_\_\_  
P.E. Name (printed or typed)

\_\_\_\_\_  
Date

MMP16

**INSTRUCTIONS  
FOR DEVELOPING A  
STORMWATER MANAGEMENT PLAN  
FOR REGULATED ACTIVITIES IN  
AQUIFER PROTECTION AREAS**

August 2011



**DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
BUREAU OF WATER PROTECTION AND LAND REUSE  
PLANNING AND STANDARDS DIVISION  
AQUIFER PROTECTION AREA PROGRAM  
79 ELM STREET, HARTFORD, CT 06106**

Printed on recycled paper

### INSTRUCTIONS

This document was prepared by the Department of Energy and Environmental Protection to assist you with the stormwater management requirements of the Aquifer Protection Area Program. Because many of the facilities in Aquifer Protection Areas have already registered for the General Permit Associated with Commercial Activity (GP-Commercial) or the General Permit for the Discharge of Stormwater Associated with Industrial Activity (GP-Industrial), those forms and the accompanying Stormwater Management Plan or Pollution Prevention Plan serve as the basis for the Aquifer Protection Stormwater Management Plan (APSWMP). Due to the sensitivity of aquifer protection areas, there are some special considerations beyond those in the general permits, so an Aquifer Protection Stormwater Supplement to the general permit stormwater plan is required. The Supplement should be used to revise your existing Stormwater management Plan or Pollution Prevention Plan. Facilities without an existing stormwater general permit should complete a registration form for GP-Commercial, and develop the associated stormwater management plan, taking into consideration the Aquifer Protection Stormwater Supplement.

The APSWMP therefore has 3 components:

1. The GP-Commercial **OR** GP-Industrial Registration Form. This form covers facility and site location and contact information;
2. The Stormwater Management Plan for the GP-Commercial **OR** A Stormwater Pollution Prevention Plan for the GP-Industrial. This plan covers basic pollution prevention considerations for stormwater, including the following (the terminology differs somewhat between the Commercial and Industrial plans, but the components are essentially):
  - a. The Pollution Prevention Team or individual responsible for implementation of the plan;
  - b. Identification of discharge points or potential pollution sources;
  - c. Housekeeping measures;
  - d. Spill control and response measures;
  - e. Maintenance and inspection provisions and checklists;
  - f. Employee training;
  - g. Regular compliance evaluations;
  - h. Future Considerations;
  - i. Record keeping requirements;
  - j. Monitoring requirements (Industrial only); and
  - k. Plan Certification; and
3. The Aquifer Protection Stormwater Supplement. This Supplement covers additional components required only in Aquifer Protection Areas due to the sensitive nature of the resource.

Specifically:

- a. Certain map features
- b. Prevention of illicit discharges
- c. No outside storage of hazardous materials
- d. Attenuation of paved-surface runoff

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## 12.5 | Stormwater Management Plan (continued)

- e. Existing subsurface infiltration devices
- f. Runoff management practices
- g. Infiltration of clean roof runoff
- h. Including aquifer protection information in employee training
- i. Aquifer protection certification

If you have an existing Stormwater Management Plan or Pollution Prevention Plan, go through each item in the Aquifer Protection Stormwater Supplement. Ensure that each item in the Supplement is addressed in the Stormwater Management Plan or Pollution Prevention Plan, and if not, modify the Plan to address each. Once modifications are made (if any are necessary), add the certification required by the Supplement and sign and date it.

Please keep in the following in mind when completing the Plan:

1. *If any section does not apply to your facility, state that it is not applicable. Do not skip it or leave it blank.*
2. You do not need to type your forms as long as they are legible.
3. If other similar information has already been prepared for the site for other purposes (i.e. site plans, emergency response procedures, spill plans, etc.) and meets the APSMP requirement, it may be submitted as an attachment instead of the APSMP form.

Once the Plan is complete, you are required by the Aquifer Protection Area Program to keep your APSWP on file at your facility and use it to assist you in maintaining your site. Keep the Plan up to date. By using common sense, good housekeeping and by following your Plan, pollutants that could potentially contaminate ground water can be managed or eliminated without significant cost. Remember, it costs less to keep pollutants out of the ground water than to remediate later.

Below are some phone numbers you may find useful in assembling your Plan.

Aquifer Protection Area Program: 860-424-3020 (for any questions specific to completing the Plan, its format or its contents)

Pollution Prevention: 860-424-3297 (for any question about pollution prevention or best management practices)

Bureau of Materials Management and Compliance Assistance: 860-424-3023 (for any questions about spills, hazardous materials, waste engineering and enforcement)

Wastewater Permitting and Enforcement: 860-424-3018 (for any questions about stormwater discharges)

Emergency Response and Spill Prevention

Emergency Line: 860-424-3333 OR 860-424-3338 (to report spills)

General Information: 860-424-3024 (for questions on underground storage tanks or spill preparedness)

# **AQUIFER PROTECTION STORMWATER MANAGEMENT PLAN SUPPLEMENT FORM**

August 2011



**DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
BUREAU OF WATER PROTECTION AND LAND REUSE  
PLANNING AND STANDARDS DIVISION  
AQUIFER PROTECTION AREA PROGRAM  
79 ELM STREET, HARTFORD, CT 06106**

Printed on recycled paper

### INTRODUCTION

This document was prepared by the Department of Energy and Environmental Protection to assist you with the stormwater management requirements of the Aquifer Protection Area Program. When aquifer protection area regulations require a storm water management plan, the plan shall assure that storm water run-off generated by the subject regulated activity is managed in a manner so as to prevent pollution of ground water, and shall comply with all of the requirements for the DEEP General Permit of the Discharge of Storm Water associated with a Commercial Activity (Commercial GP)

The Commercial GP requires the following:

1. Registration Form: including facility information, type of activity, stormwater discharge information: number and type of conveyance
2. Stormwater Management Plan: including measures for pollution prevention, pavement sweeping, outdoor storage and washing restriction, illicit discharge control, spill control/response, and maintenance and inspection of storm water structures.

The additional stormwater measures for Aquifer Protection Areas are to prevent contaminated stormwater discharges/releases to the ground, apply stormwater discharge and treatment measures that protect groundwater quality, and encourage safe recharge of stormwater where it does not endanger groundwater quality. Additional management measures include:

- prevent illicit discharges to stormwater discharged to the ground
- provide necessary impervious pavement in high potential pollutant release areas or storm water hot spots such as storage and loading areas, fueling areas, intensive parking areas and roadways.
- discharge paved surface runoff to aboveground type land treatment structures- surface drains, sheet flow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins. These measures take advantage of natural treatment processes in soil and vegetation before discharge to the groundwater, and promote natural aquifer recharge.

The DEEP 2004 Connecticut Stormwater Quality Manual provides comprehensive stormwater guidance including potential groundwater concerns and is available on the DEEP's website at [www.ct.gov/deep/stormwater](http://www.ct.gov/deep/stormwater).

While the emphasis is to minimize groundwater quality impacts of the runoff, a plan should be balanced and the extent possible include a combination of approaches to protect all water resources concerns including surface water quality, water quantity changes between pre-development and post-development runoff rates and volumes where possible. Most alternative site design designs, low impact development, and green infrastructure techniques will be beneficial to groundwater except for certain direct infiltration techniques.

### INSTRUCTIONS

Many of the facilities in Aquifer Protection Areas may have already registered for under the General Permit Associated with Commercial Activity (GP-Commercial). Those forms and the accompanying Stormwater Management Plan serve as the basis for the Aquifer Protection Stormwater Management Plan (APSMP). Note: a registration under the General Permit for the Discharge of Stormwater Associated with Industrial Activity (GP-Industrial) also can serve as the basis for the APSMP. Due to the sensitivity of aquifer protection areas, there are some special considerations beyond those in the general permits, so an Aquifer Protection Stormwater Supplement to the GP-Commercial Stormwater Management Plan is required. The Supplement should be used to revise or add to your existing stormwater management plan. For new facilities, or those without an existing stormwater general

SMP2

permit, complete the GP-Commercial registration form and develop the associated stormwater management plan, taking into consideration the Aquifer Protection Stormwater Supplement.

The APSMP therefore has 3 components:

1. The GP-Commercial Registration Form. This form covers basic facility site location and stormwater information;
2. The Stormwater Management Plan for the GP-Commercial. This plan covers basic pollution prevention and source controls for stormwater, including the following:
  - a. The Pollution Prevention Team or individual responsible for implementation of the plan;
  - b. Identification of discharge points or potential pollution sources;
  - c. Housekeeping measures;
  - d. Spill control and response measures;
  - e. Maintenance and inspection provisions and checklists;
  - f. Employee training;
  - g. Regular compliance evaluations;
  - h. Future Considerations;
  - i. Record keeping requirements;
  - j. Plan Certification
3. The Aquifer Protection Stormwater Supplement. This Supplement covers additional components required only in Aquifer Protection Areas due to areas of concern to groundwater, this includes:
  - a. Additional site features of concern to groundwater
  - b. Prevention of illicit discharges to ground
  - c. No outside storage of hazardous materials
  - d. Runoff management practices
  - e. Use of subsurface infiltration devices
  - f. Infiltration of clean roof runoff
  - g. Including aquifer protection information in employee training
  - h. Aquifer protection certification

If you have an existing Stormwater Management Plan go through each item in the Aquifer Protection Stormwater Supplement. Ensure that each item in the Supplement is addressed in the Stormwater Management Plan, if not modify the Plan to address each. Once modifications are made (if any are necessary), add the certification required by the Supplement and sign and date it.

Please keep in the following in mind when completing the Plan:

1. *If any section does not apply to your facility, state that it is not applicable. Do not skip it or leave it blank.*
2. You do not need to type your forms as long as they are legible.
3. If other similar information has already been prepared for the site for other purposes (i.e. site plans, material management plans, emergency response procedures, spill plans, etc.) and meets the APSMP requirement, it may be submitted as an attachment instead of the APSMP form information. **Note: in many cases the APA Material Management Plan will have addressed many of the pollution prevention and source controls for stormwater.**

Once the Plan is complete, you are required by the Aquifer Protection Area Program to keep your APSWP on file at your facility and use it to assist you in maintaining your site. Keep the Plan up to date. By using common sense, good housekeeping and by following your Plan, pollutants that could

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## 12.6 | Stormwater Management Plan Supplement Form (continued)

potentially contaminate ground water can be managed or eliminated without significant cost. Remember, it costs less to keep pollutants out of the ground water than to remediate later.

Below are some phone numbers you may find useful in assembling your Plan.

Aquifer Protection Area Program: 860-424-3020 (for any questions specific to completing the Plan, its format or its contents)

Pollution Prevention: 860-424-3297 (for any question about pollution prevention or best management practices)

Bureau of Materials Management and Compliance Assistance: 860-424-3023 (for any questions about spills, hazardous materials, waste engineering and enforcement)

Wastewater Permitting and Enforcement: 860-424-3018 (for any questions about stormwater discharges)

Emergency Response and Spill Prevention

Emergency Line: 860-424-3333 OR 860-424-3338 (to report spills)

General Information: 860-424-3024 (for questions on underground storage tanks or spill preparedness)

SMP4

### The Aquifer Protection Stormwater Supplement

The Aquifer Protection Stormwater Supplement is to be used in conjunction with the Commercial Stormwater General Permit Registration Forms, and the associated Stormwater Management Plan. This supplement includes additional stormwater considerations to minimize the potential for stormwater to cause groundwater contamination in aquifer protection areas, where stormwater can potentially impact a public water supply well. Discussed below are special considerations for Aquifer Protection Areas. These requirements may exceed those of the Commercial Stormwater General Permit, but because groundwater from sites in Aquifer Protection Areas feed into public water supply wells, such special requirements are warranted.

Consider each of the following, and make any needed changes to the SMP. Update the SMP to reflect these changes and keep it on file at the facility. Submit the SMP to the Aquifer Protection Agency or DEEP as required.

#### A. Additional stormwater and site features of concern to groundwater (as applicable):

- Outline of buildings, sheds or other storage structures, pavement
- Stormwater structures and conveyances to the ground- drainage flow direction, infiltration areas and structures, and treatment or controls
- Location of fueling stations
- Location of loading/unloading areas
- Location of wastewater disposal systems- sewer line or septic system
- Location of waste storage and disposal areas including: dumpsters, used oil storage tanks, and other waste storage
- Location of liquid storage areas including: underground and above ground storage tanks, and their filling and discharging or distribution lines
- Location of any other outdoor structures or processing service areas that may impact groundwater or have materials exposed to precipitation

#### B. Prevention of illicit discharges to the stormwater system.

Nothing but stormwater, uncontaminated groundwater seepage or permitted discharges should be in your stormwater system, and should be evaluated to ensure that there are no unpermitted non-stormwater discharges at the facility should be documented. Methods could include visual inspections of the facility and review of site plans, dry weather inspection of storm drains to ensure that there is no dry-weather flow, and dye or smoke testing if necessary.

Ensure that no washing of equipment or vehicles takes place outside where it can flow to the storm drain system, and include a statement to that effect in the SMP. Any washing must take place indoors, in an area where a permit has been obtained to discharge washwater through an approved oil/water/grit separator to a municipal sewage treatment facility, or in an area where all washwater discharges to a holding tank.

#### C. Ensure that no outside storage of hazardous materials is taking place.

Outside storage of hazardous materials (including salt storage) is prohibited in Aquifer Protection Areas. All hazardous materials must be stored in a building or under a roof, on an impermeable surface that is protected from stormwater run-on. Verify that no outside storage of materials is taking place, and include this as an item in the regular inspection schedule.

SMP5

### D. Runoff management practices

List any runoff management practices used at the facility. Note appropriate descriptions or qualifications to the practices listed, such as the portion of the site affected. Runoff management practices might include catch basins, drainage swales, riprap channels or pools, detention/ retention basins, infiltration basins or structures, impervious areas, sheet flow, biofilters or other measures used to manage/treat runoff. Management practices to be followed include:

- Runoff from paved surfaces should be directed to above-ground land treatment structures- surface drains, sheet flow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins. These provide an opportunity for volatilization of volatile organic compounds to the extent possible before the stormwater can infiltrate into the ground.
- Direct infiltration structures such as galleries, drywells, and leaching trenches, do not allow for attenuation of salt or other soluble compounds that may be contained in parking lot runoff. New direct infiltration structures should not be installed and existing ones should be considered for replacement. If clean roof runoff can be segregated from stormwater, it is a good source of recharge to the aquifer. In this case, subsurface infiltration structures such as dry wells, galleries, or leaching trenches are appropriate and encouraged.
- While the emphasis is to minimize groundwater quality impacts of the runoff, a plan should be balanced and the extent possible include a combination of approaches to protect all water resources concerns including surface water quality, water quantity changes between pre-development and post-development runoff rates and volumes where possible. Most alternative site designs, low impact development, and green infrastructure techniques will be beneficial to groundwater except for certain direct infiltration techniques.
- Non-structural measures to dissipate and treat runoff are encouraged, including sheetflow from uncurbed pavement and vegetated swales/basins. These provide an opportunity for volatilization of volatile organic compounds to the extent possible before the stormwater can infiltrate into the ground.
- If a stormwater collection system must be installed, it should discharge to an above-ground outlet point (swales, basins, channels, etc.).
- prevent illicit discharges to storm water, including fuel/chemical pollution releases to the ground.
- provide necessary impervious pavement in high potential pollutant release areas. These storm water hot spots include certain lands use types or storage and loading areas, fueling areas, intensive parking areas and roadways.
- direct paved surface runoff to aboveground type land treatment structures- sheet flow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins. These provide an opportunity for volatilization of volatile organic compounds to the extent possible before the stormwater can infiltrate into the ground.
- only use subsurface recharge structures such as dry wells, galleries, or leaching trenches, to directly infiltrate clean runoff such as rooftops, or other clean surfaces. These structures do not adequately allow for attenuation of salts, solvents, fuels or other soluble compounds in groundwater that may be contained in runoff.

SMP6

- Minimize impervious coverage, disconnect large impervious areas with natural or landscape areas, and use other low impact development techniques where possible.
- Minimize pavement deicing chemicals, or use an environmentally suitable substitute.
- Other measures to protect groundwater.

### **E. Identify and address existing subsurface infiltration devices in stormwater hot spots.**

Stormwater "hot spots" are areas or activities on the site with greater potential for high pollutant loads that may threaten groundwater quality. Examples of these include salvage areas, fueling facilities, dumpster or chemical storage areas, loading docks and large parking lots. In these areas, existing direct infiltration structures (galleries, dry wells, leaching trenches) are of particular concern as they can serve as a direct conduit for chemical pollutants to enter the groundwater and do not allow for attenuation of those chemical pollutants. Management of these stormwater hot spots should include measures to reduce potential impacts to groundwater such as the following:

- Isolate the "hot spot" by separating the activity or moving the activity to another location on the site. For example, a berm may be placed surrounding the activity to isolate it and redirect the stormwater runoff away from the infiltration device; a swale may be used to take the drainage from the hot spot away from the infiltration device; or the activity, such as storage of vehicles, may be moved or confined to an area that does not drain to the infiltration structures.
- Pre-treat the stormwater by modifying the infiltration device to include: a grass or stone filter strip area around entrance, an oil-water separator, or a media filters or inserts.
- Regular monitoring and inspection of the area by employees, temporary spill control devices such as speedy dry and absorbent pads, regular maintenance and cleaning of the drainage area and infiltration structure should be included in the SMP
- In some high-risk areas, if the above measures are not adequate it may be necessary to remove the infiltration device and use other above-ground stormwater measures such as sheet flow, swales and basins keeping the stormwater above ground to allow time for any volatile compounds to volatilize off before the stormwater enters the ground.

### **F. Include information on aquifer protection in the employee training program.**

Ensure that the employee training required under the SMP includes basic information about the aquifer protection area. Include that the facility is within an APA, what that means and why it is important. Summary information on the program, including a fact sheet, can be found at [www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection).

### **Aquifer Protection Certification**

Remember that when you develop or modify your SMP you must certify the Plan by signing and dating it. To show that you have considered the items discussed above, add the following certification to the Plan, as appropriate:

#### **Certification by owner/operator**

"I certify that the [SMP] prepared for this site meets the criteria set forth in Sections 22a-354i-9(b) of the Aquifer Protection Area Regulations. This certification is based on my review of the

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## 12.6 | Stormwater Management Plan Supplement Form (continued)

[SMP] for the site and an inspection of the site. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

\_\_\_\_\_  
Owner/Operator Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Owner/Operator Name (printed or typed)

### Certification by professional engineer

"I certify that, in my professional judgment, the [SMP] prepared for this site meets the criteria set forth in Sections 22a-354i-9(b) of the Aquifer Protection Area Regulations. This certification is based on my review of the [SMP] for the site and an inspection of the site. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements."

\_\_\_\_\_  
P.E. Signature

\_\_\_\_\_  
P.E. Number and Seal

\_\_\_\_\_  
P.E. Name (printed or typed)

\_\_\_\_\_  
Date

### J. Questions

Any questions regarding this supplement can be directed to the Aquifer Protection Area Program at (860) 424-3720 or [deep.aquiferprotection@ct.gov](mailto:deep.aquiferprotection@ct.gov).

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# **AQUIFER PROTECTION MODEL SITE REVIEW EVALUATION FORM**

August 2011



**DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
BUREAU OF WATER PROTECTION AND LAND REUSE  
PLANNING AND STANDARDS DIVISION  
AQUIFER PROTECTION AREA PROGRAM  
79 ELM STREET, HARTFORD, CT 06106**

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### **SITE REVIEW**

The site review is an opportunity to acquire a visual understanding of the existing facility or a facility where changes are proposed and to determine if additional information is needed for the registration or application process. During the site review, any natural or man-made site features that may influence water quality should be noted. Site features and activities to consider include topography, indoor and outdoor drainage systems, chemical and fuel storage and handling areas, waste storage areas, and waste and wastewater disposal methods. This will identify site-specific information to be used in making recommendations for best management practices, facility operation and maintenance, materials and stormwater management, and corrective actions, which are intended to minimize the risk of groundwater contamination. Any signs of illegal disposal of hazardous materials or contamination from past use or adjacent properties should be noted.

Site visits often generate additional questions. Following the site visit, the reviewer should discuss any additional informational requirements with the Agency staff and the applicant. Caution should always be used when doing a site visit. It is best to obtain prior permission from the owner and schedule the review at a reasonable hour. Avoid site reviews at private residences.

### **Evaluation**

Once all the submitted information has been reviewed and a site visit conducted, if any deficiencies relating to groundwater protection have been identified, they should be reported to the Aquifer Protection Agency. Both existing and proposed site activities should be evaluated. Examples of actual or potential adverse groundwater impacts include:

1. lack of adequate stormwater management controls;
2. improper waste disposal practices;
3. lack of secondary containment for fuel and/or chemical storage;
4. illegal wastewater discharges;
5. evidence of previous chemical releases to the environment; and
6. lack of adequate fuel and/or chemical handling procedures.

A systematic method of evaluating regulated activities should be followed to ensure consistency among reviews. (Refer to Regulated Activity Site Review Evaluation Form below).

### **Report**

The information obtained from the technical review process should be submitted to the Agency, with a copy to the applicant. If necessary, the report should include the following:

1. Reference to the project address, title, the date of the site review, information reviewed, and the date the information was received.
2. Description of existing and proposed site conditions and activities, including land use activities, type of ground coverage (i.e.; asphalt pavement, gravel parking area, lawn), structures, parking areas, water resources such as ponds or streams on the property, or nearby fuel and chemical storage facilities, underground storage tanks, stormwater drainage systems, sanitary systems, floor drains, types and volumes of hazardous materials and hazardous wastes, and any other information the reviewer believes might be pertinent to aquifer protection.

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## 12.7 | Model Site Review Evaluation Form (continued)

3. Additional Information requirements, particularly the need for stormwater or materials management plans for activities that are being registered.
4. List of items that need to be addressed to comply with APA regulations and required best management practices (BMPs).
5. List of other activities- the reviewer should identify any existing situations on a site that pose a threat to groundwater quality and/or violate existing aquifer protection or other environmental regulations.

The technical review process can be a valuable opportunity to get existing problems corrected, as municipal agencies sometimes stipulate corrective site improvements as conditions of permit approval. If the registered activity is acceptable as is and the reviewer feels that no modifications are necessary, the registration can simply be accepted without additional comments.

### REGULATED ACTIVITY SITE REVIEW EVALUATION FORM

Site address: \_\_\_\_\_ Contact name: \_\_\_\_\_

Regulated activity(s): \_\_\_\_\_

Date application submitted: \_\_\_\_\_ Address: \_\_\_\_\_

Aquifer Agency meeting date: \_\_\_\_\_ Phone: \_\_\_\_\_

Date of Public Hearing: \_\_\_\_\_ Reviewer: \_\_\_\_\_

#### **SITE CHARACTERISTICS**

##### **Stormwater Management**

Existing System Description \_\_\_\_\_

Oil/water separator: Yes \_\_\_ No \_\_\_ Location: \_\_\_\_\_

Dry wells: Yes \_\_\_ No \_\_\_ Number: \_\_\_ Location: \_\_\_\_\_

Infiltration galleries: Yes \_\_\_ No \_\_\_

Stormwater basins: Yes \_\_\_ No \_\_\_

Maintenance: \_\_\_\_\_

Proposed System Description \_\_\_\_\_

Oil/water separator: Yes \_\_\_ No \_\_\_ Location: \_\_\_\_\_

Dry wells: Yes \_\_\_ No \_\_\_ Number: \_\_\_ Location: \_\_\_\_\_

Infiltration galleries: Yes \_\_\_ No \_\_\_

Stormwater basins: Yes \_\_\_ No \_\_\_

Stormwater maintenance schedule: \_\_\_\_\_

Other: \_\_\_\_\_

Amount of impervious surface: \_\_\_\_\_

##### **Wastewater**

Sewered system \_\_\_\_\_

Septic system \_\_\_\_\_ Cleaning frequency: \_\_\_\_\_

Floor drains: Yes \_\_\_ No \_\_\_ Discharge point: \_\_\_\_\_

Holding tanks: Yes \_\_\_ No \_\_\_

# 12 | Model Documents

## 12.7 | Model Site Review Evaluation Form (continued)

### Chemical Storage

Volume of chemicals stored: \_\_\_\_\_

Types of chemicals stored: \_\_\_\_\_

Storage containers/tanks: \_\_\_\_\_

Underground \_\_\_\_\_ Aboveground \_\_\_\_\_

Storage area: secondary containment: Yes\_ No\_ Type: \_\_\_\_\_

Heating source: UST \_\_\_ AST\_\_\_ Size: \_\_\_\_\_

Type of fuel: gasoline\_\_\_ oil\_\_\_ propane\_\_\_ other \_\_\_\_\_

Type of containment: vault \_\_\_ diked area\_\_\_ other \_\_\_\_\_

### Waste Chemicals

Generator Status: LQG \_\_\_ SQG \_\_\_ CESQG\_

Volume of waste stored: \_\_\_\_\_

Types of waste stored: \_\_\_\_\_

Storage containers: \_\_\_\_\_

Storage area: secondary containment: Yes \_\_\_\_\_ No\_ Type: \_\_\_\_\_

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Follow-up required: Yes\_\_\_\_ No\_\_

Additional information requested: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date of review: \_\_\_\_\_

# **AQUIFER PROTECTION MODEL HAZARDOUS SPILL RESPONSE PLAN**

August 2011



**DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
BUREAU OF WATER PROTECTION AND LAND REUSE  
PLANNING AND STANDARDS DIVISION  
AQUIFER PROTECTION AREA PROGRAM  
79 ELM STREET, HARTFORD, CT 06106**

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### HAZARDOUS SPILL RESPONSE PLAN

These guidelines have been developed for municipalities to assist regulated facilities with the development of a comprehensive Hazardous Spill Response Plan. These are only guidelines and are not meant to serve as rigid standards. Incidents involving the release of hazardous or toxic materials including vehicle accidents, fuel or chemical storage tank leaks, or illegal dumping that occur within an aquifer area may present a serious threat of contamination to public water supply wells. Municipalities and facilities should be prepared to respond to hazardous materials spills through defensive measures, using proper equipment and trained personnel, in cooperation with a primary response unit such as the local fire department or the Connecticut Department of Energy and Environmental Protection (DEEP).

To enhance preparedness, regulated facilities should develop and periodically update a hazardous spill response plan which at a minimum establishes procedures and provides information necessary for effective communication and implementation of response activities. The plan should also address personnel training needs.

**Regulated facilities should carefully review OSHA regulations in 49 CFR 1910.120 to ensure compliance with all appropriate requirements pertaining to their emergency response operations.**

#### General Guidelines

A spill or release of a hazardous material within an aquifer protection area of a public water supply can pose a significant threat to the water supply source. Prompt recognition and response to a spill or release incident can minimize the threat to drinking water supplies. Planning and preparation are critical to effective execution of emergency response actions and should, at a minimum, address the types of incidents which may occur, procedures for communications and spill response, and staff training needs as appropriate.

Various types of incidents may cause a spill or release of hazardous materials. Some examples of these incidents include:

- 1) An overturned or leaking tanker truck containing fuel oil, gasoline, or any other hazardous chemicals.
- 2) Large vehicle fires or accidents involving fire department wash down.
- 3) A leaking underground storage tank.
- 4) A sanitary sewer line break.
- 5) A fire or accidental release at a facility which uses, produces, or stores hazardous materials.
- 6) Hazardous or toxic materials deposited in or near a watercourse (pesticides, salts, leaking chemical containers, etc.)

Extreme caution must be exercised by spill response personnel at the scene of a spill or release incident. Protection of individual health and safety is the first and foremost concern. Actions by response personnel should be defensive in nature for the purpose of protecting the source of supply without risk to an individual's health or safety. Offensive control

activities (e.g. plug-and-patch, clean up) should be performed only by emergency response units which are appropriately trained to handle the material in question.

### **Communication/Notification Procedures**

When a call is received, specific information is needed to assess the potential hazard and to determine appropriate response measures to be initiated. Information needed includes location and type of incident, type of hazardous material involved, names of individuals contacted, etc. A *Hazardous Spill Response Information Form* for recording this information is included at the end of this section. A copy of the completed form should be provided to the Aquifer Protection Agency and the water utility.

An internal notification procedure should be developed for calls received both during and after business hours. Employees directly involved in coordinating the spill response procedures should be listed in the plan as well as those employees responsible for responding to the spill. A public information officer should be designated to notify the DEEP, DPH, PURA, local agencies, media, etc. A list of these state agencies is included in the *Hazardous Spill Response Notification* at the end of this section.

The municipality should establish a separate communication procedure with local fire departments, the Local Emergency Preparedness Commission and the water utility for spills within the aquifer area. Copies of aquifer maps should be provided to these agencies and a list of municipal and utility contact names. The municipality should stress to these agencies the importance of notifying the municipality and water utility of any spill incidents within the aquifer area. The municipality and water utility should also discuss with these agencies how their response to a spill could potentially impact a water utility's source of supply, such as wash-down of chemicals into a catch basin. The municipality and water utility should work with the town's Public Works department and/or the state Department of Transportation for installation of aquifer area notification signs along major transportation routes.

### **Record Keeping**

An in-house spill response information record should be maintained for each incident. This record should include the initial report, *Hazardous Spill Response Information Form*, and a brief but detailed log of events, *Hazardous Spill Response Event Log*, and contacts made throughout the response effort both from the office and in the field. A copy of the completed form should be provided to the water utility.

### **Spill Response Procedures**

General procedures should be developed to guide the municipality with coordinating the municipality's response actions. The procedures addressed may include incident reconnaissance, risk assessment, establishment of a chain-of-command, deployment of personnel and equipment, strategic planning, and implementation of control measures. The municipality's response should be coordinated with the water utility. The specific response effort should be based on a risk assessment protocol which considers the type of spill and risk to the water supply source.

Only those employees with appropriate spill response training should be involved in spill response activities. Extreme caution must be used when approaching any type of spill. Employee training must include an appropriate level of hazardous materials emergency

response training in accordance with the OSHA requirements of 29 CFR 1910.120. Training should cover hazardous identification, site health and safety precautions, and proper deployment of spill containment equipment.

### **Emergency Spill Response Equipment List and Location**

Emergency spill response equipment should be stored at key locations within or near the regulated activity on site. A list of these locations and type of equipment available should be included in the plan.

### **EMERGENCY SPILL RESPONSE EQUIPMENT LIST**

- Containment Boom
- Sorbent Boom
- Square Sorbent Pads
- Razorback Shovel
- Bow Rake
- Short Handle Hammer
- Vinyl Gloves
- Tyvek Suits
- Hip Boots
- Polybags
- Rope
- Flashlight
- Wood Stakes
- DOT Hazardous Material Emergency Response Book

### **Spill Clean-Up Contractor List**

A list of spill clean-up contractors should be included in the plan. Only those contractors permitted by DEEP should be listed in the plan.

### **Site Maps**

Maps showing the regulated activity areas should be made part of the plan. Key locations for deployment of containment equipment should be noted on the maps.

### HAZARDOUS SPILL RESPONSE NOTIFICATION

The DEEP Oil and Chemical Spill Response Unit must be notified of the spill. The person coordinating the spill response operation should be responsible to make the contact with DEEP. Call immediately and report the basic information found in the Hazardous Spill Response Information and Event Log. Always insist DEEP come out and inspect the situation as soon as possible. Make it clear if the incident has occurred on an aquifer protection area and find out how soon they will respond.

Connecticut Department of Energy and Environmental Protection (DEEP)  
Oil and Chemical Spill Response Unit  
Bureau of Materials Management and Compliance Assurance  
79 Elm Street  
Hartford, CT 06106-5127  
860-424-3338 (weekdays and after hours, including weekends and holidays)

### ADDITIONAL NOTIFICATION

The person handling the spill may have to contact the following agencies listed below when a spill occurs.

#### State and National Agencies

- 1) CHEMTREC 1-800-424-9300

CHEMTREC, a public service offered by the Chemical Manufacturers Association, will help to identify the spill, give advice on how to approach a known spill, advise medical care for victims exposed to the spill, and will contact the shipper of the hazardous materials involved for more detailed assistance and appropriate action to be taken.

- 2) National Response Center 1-800-424-8802

The National Response Center (NRC), which is operated by the Coast Guard, receives reports required from spillers of hazardous substances. Federal law requires that anyone who releases a reportable quantity of a hazardous substance into the environment must immediately notify the NRC.

- 3) Connecticut Department of Public Health (DPH)  
Drinking Water Section  
Business Hours (8:30 a.m.-4:00 p.m.) 860-509-7333 or 860-509-8000
- 4) Connecticut Department of Energy and Environmental Protection (DEEP)  
Public Utilities Regulatory Authority (PURA)  
Water Unit  
10 Franklin Square  
New Britain, CT 06051  
Business Hours (8:30 a.m.- 4:00 p.m.) 860-827-2600

### HAZARDOUS SPILL RESPONSE INFORMATION FORM

1. **LOCATION:**  
 Town: \_\_\_\_\_  
  
 Nearest address or street intersection: \_\_\_\_\_  
 Source(s) that may be impacted: \_\_\_\_\_  
 Proximity to reservoir, tributary stream or well: \_\_\_\_\_
2. **DATE:** \_\_\_\_\_  
**TIME OF INCIDENT:** \_\_\_\_\_  
**TIME REPORTED TO UTILITY:** \_\_\_\_\_
3. **NATURE OF INCIDENT:** (vehicle accident; container of chemicals, fuel tank rupture; spill during delivery; fire; explosion; etc.)  
 \_\_\_\_\_  
 \_\_\_\_\_
4. **DESCRIPTION OF MATERIAL RELEASED:**  
 Type: \_\_\_\_\_ HAZARDOUS? \_\_\_\_ Yes \_\_\_\_ No  
 Quantity & Concentration: \_\_\_\_\_
5. **TYPE AND CONDITION OF CONTAINERS:**  
 \_\_\_\_\_
6. **SPILL REPORTING:** Get names and phone numbers of the individuals who reported the incident or other officials as well as the names of the persons who received the report at their office (Fire, DPH, etc.). Get this information at the scene if possible. Mark NA if no contact made.

<u>CONTACT</u>	<u>NAME &amp; NUMBER OF PERSON REPORTING INCIDENT</u>	<u>NAME &amp; NUMBER OF PERSON WHO RECEIVED REPORT</u>
Fire/Police _____	_____	_____
DEEP _____	_____	_____
Health Dept. _____	_____	_____
Spill Contractor _____	_____	_____
Water Utility _____	_____	_____

7. **INITIAL SPILL RESPONSE:** Describe initial response measures taken by the municipality or others at the scene (i.e. deploy booms, call spill contractor)  
 \_\_\_\_\_  
 \_\_\_\_\_
8. **OTHER INFORMATION:** Provide pertinent information such as:
  - Extent of contamination/potential impact on water supplies?
  - Any restrictions for access to scene?
  - Water supply source shut down? (name of source, time, duration)
  - Name of shipper/carrier, receiver and/or driver involved in transport
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Prepared by: \_\_\_\_\_

Date: \_\_\_\_\_

# 12 | Model Documents

## 12.8 | Model Hazardous Spill Response Plan (continued)

### HAZARDOUS SPILL RESPONSE EVENT LOG

Maintain a brief but detailed log of events and contacts at the scene for the duration of the response effort. This should include actions taken at the scene as well as communication and coordination with outside agencies (state and local officials, spill contractor, water utility). Provide names, phone numbers, and times wherever appropriate.

Describe all response efforts or remediation measures taken throughout the response effort.

**DATE OF SPILL:** \_\_\_\_\_ **TIME:** \_\_\_\_\_

**NAME:** \_\_\_\_\_

**PHONE NUMBER:** \_\_\_\_\_

**DESCRIPTION OF ACTION:**

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**Prepared by:** \_\_\_\_\_

**Date:** \_\_\_\_\_

# **AQUIFER PROTECTION MODEL LAND USE RISK ASSESSMENT**

August 2011



**DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
BUREAU OF WATER PROTECTION AND LAND REUSE  
PLANNING AND STANDARDS DIVISION  
AQUIFER PROTECTION AREA PROGRAM  
79 ELM STREET, HARTFORD, CT 06106**

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### LAND USE RISK ASSESSMENT

#### OVERVIEW

This methodology can be used to evaluate land uses within aquifer protection areas so that the relative risk to an aquifer of a certain land use can be compared to other land uses in a systematic manner. Assigning the risk parameter values to sites is a judgmental process. The process is intended to be used as a comparative guide to land uses rather than an exact determination of risk.

Identification of high risk sites can be useful in several ways. By identifying the highest risk sites, limited inspection and monitoring resources can be prioritized. High risk sites could be inspected on a more frequent basis than low risk sites with minor potential to impact the aquifer. Also, identification of high risk sites can prioritize land uses that may be acquired to eliminate the risk from the aquifer.

By evaluating certain individual site parameters, the potential overall risk of a site can be determined. Actual risk of a site depends on the practices that occur at each specific site. As an example, two machine shops would have the same relative risk, but depending on certain practices such as waste disposal and general housekeeping, the actual risks to the aquifer could be quite different. See *Risk Assessment Examples* at the end of this section.

#### RISK PARAMETERS

Proximity to well field is important. As the distance from the well field increases the potential risk is lessened to a certain extent. Contamination occurring adjacent to the well field will pose a more severe threat to water quality than contamination at the edge of the aquifer protection area. Reduced travel times reduce the opportunity to identify and contain a contaminant before it reaches a well. The site proximity to well field risk values are:

- 8 - 10 For locations within 1,500 feet
- 5 - 7 For locations between 1,500 and 3,000 feet
- 2 - 4 For locations greater than 3,000 feet

**Wastewater Disposal.** The risk from sewage disposal systems varies depending on the volume and type of materials disposed. Municipal sanitary disposal systems generally pose a lesser risk than on-site septic systems by removing waste to a central location typically outside the APA and treating it under controlled and monitored conditions. The ability of a septic system to treat waste material can be highly variable depending on (a) the materials disposed through the system, (b) the design and maintenance of the system, and (c) the soil characteristics where the leaching field is located.

- 9 -10 Commercial/industrial facilities using hazardous materials connected to on-site septic systems

- 7 - 8 Commercial/industrial facilities with very low, incidental hazardous materials connected to an on-site septic system
- 5 - 6 Multiple residential septic systems, institutions, restaurants
- 3 - 4 Single family residential connected to on-site systems
- 0 - 2 Properties connected to municipal sanitary sewer systems

**Fuel/Chemical Storage.** As the volume and hazard type of stored material increases, the risk to the aquifer from spills and leaks increases. Above-ground tanks with secondary containment offer the greatest protection from spills and leaks. The extent and type of tank monitoring should be considered when assigning a risk value.

Fuel/Chemical risk values are:

- 9 - 10 Facilities with multiple underground tanks 1,000 gallons or larger
- 7 - 8 Facilities with an underground storage tank and additional above-ground tanks without secondary containment
- 6 Facilities with one underground storage tank
- 5 Facilities with above-ground tanks without secondary containment
- 2 - 4 Facilities with above-ground tanks with secondary containment
- 1 Minor chemical storage in individual containers stored in a secured area
- 0 No chemical storage

**Chemical Usage.** Aquifer contamination can occur as a result of improper chemical usage or spills. Chemical usage risk values are:

- 9 - 10 Large quantities of various chemicals used (55 gallons or more), outdoor storage, no secondary containment, EPA hazardous waste large quantity generator
- 7 - 8 Large quantities, stored in secondary containment, minimal wastes produced, small quantity generator status
- 5 - 6 Moderate quantities of various chemicals and waste products, conditionally exempt small quantity generator
- 2 - 4 Minimal quantities used, typical office and household products

**Outside Activity.** Outdoor activities such as material storage, equipment maintenance, and refuse disposal can impact the quality of groundwater. Outside activity risk values are:

# 12 | Model Documents

## 12.9 | Model Land Use Risk Assessment (continued)

- 9 - 10 Outdoor equipment maintenance, manufacturing and production processes, material and waste storage
- 7 - 8 Outdoor storage of equipment, materials and refuse
- 5 - 6 Temporary storage of materials on impervious surface, loading dock
- 2 - 4 Outdoor storage of materials in covered secured area unpaved vehicle storage and parking areas
- 1 No outdoor storage or activities

Land Uses. Certain types of land uses increase the risk of aquifer contamination. Land use risk values are:

- 7 - 10 Industrial properties, commercial processor
- 5 - 6 Retail/Commercial mix
- 4 High Density Residential (less than 1 acre zoning)
- 3 Agriculture/Golf Courses
- 2 Low Density Residential (greater than or equal to 1 acre zoning)
- 1 Open Space

### RISK ASSESSMENT EXAMPLES

A municipal solid waste collection facility, vehicles stored on unpaved soils, outdoor storage of refuse containers, underground storage of diesel and heating fuel, located within 1,500 feet of well field

Location:	10
Wastewater disposal:	9
Fuel/Chemical Storage:	9
Chemical Usage:	8
Outside Activity:	10
Land Use:	9
	55

A trucking company on septic system with an outdoor loading dock, diesel and motor oil USTs, outside fueling of trucks, gravel parking area, close to the well field.

Location:	10
Wastewater disposal:	10
Fuel/Chemical Storage:	9
Chemical Usage:	8
Outside Activity:	8
Land Use:	9
	54

Commercial equipment wholesaler/repair, close to the well field, septic, oil heat, unpaved soils, outdoor storage and maintenance of equipment.

Location:	9
Wastewater disposal:	9
Fuel/Chemical Storage:	7
Chemical Usage:	7
Outside Activity:	8
Land Use:	8
	48

A vehicle repair facility close to well field on a septic system, oil tank in ground, outdoor storage of vehicles.

Location:	10
Wastewater disposal:	10
Fuel/Chemical Storage:	4
Chemical Usage:	7
Outside Activity:	3
Land Use:	7
	41

# 12 | Model Documents

## 12.9 | Model Land Use Risk Assessment (continued)

A high school, on septic system, 10,000 #2 fuel oil tank, an automotive and other industrial art classes, greater than 1,500 from well field.

Location:	6
Wastewater disposal:	8
Fuel/Chemical Storage:	6
Chemical Usage:	7
Outside Activity:	3
Land Use:	<u>5</u>
	35

A machine shop connected to the municipal sewer system, outside storage of chips and tailings roofed secured area, gas heat, greater than 1,500 feet from the well field.

Location:	5
Wastewater disposal:	2
Fuel/Chemical Storage:	1
Chemical Usage:	5
Outside Activity:	6
Land Use:	<u>7</u>
	26

A video rental store, gas heat, sewerred, paved parking area, greater than 3,000 feet from the well field.

Location:	2
Wastewater disposal:	0
Fuel/Chemical Storage:	0
Chemical Usage:	2
Outside Activity:	2
Land Use:	<u>5</u>
	11



# Statutes and Regulations

# 13 | Statutes and Regulations

## 13.1 | State Statutes 22a-354a to 354bb

### Aquifer Protection Area Program Statutes

#### Sections 22a-354a through 22a-354bb of the Connecticut General Statutes

**Sec. 22a-354a. “Existing well fields” and “potential well fields,” defined.** As used in sections 22a-354b to 22a-354f, inclusive, “existing well fields” means well fields in use by a public water supply system when mapping is required pursuant to section 22a-354c, and “potential well fields” means those well fields identified as future sources of supply in the water supply plan of the public water supply system approved pursuant to section 25-32d. (P.A. 88-324, S. 1.) Cited. 215 C. 616, 625.

**Sec. 22a-354b. Standards for modeling and mapping of locations of aquifers.** The Commissioner of Energy and Environmental Protection shall establish standards for two levels of modeling and mapping of the location in aquifers of well field areas, zones of contribution and recharge areas. Standards for mapping at Level A shall be established by regulations adopted by the Commissioner in accordance with the provisions of chapter 54, except that notice of intent to adopt such regulations shall be published on or before July 1, 1990, and shall be based on hydrogeological data of aquifer geometry, hydraulic characteristics and connection to surface water features, groundwater level data and surface water discharge information for model calibration, and pump test data for model verification. Standards for mapping at Level B shall be established by guidelines developed by the Commissioner and shall be based on existing geologic mapping of known aquifer characteristics, limited field verification, the location of existing and potential well fields and pumping rates. (P.A. 88-324, S. 2; P.A. 90-275, S. 7, 9.)

History: P.A. 90-275 required the notice of intent to adopt the regulations to be published on or before July 1, 1990. Cited. 215 C. 616, 625.

**Sec. 22a-354c. Mapping of well fields by water companies.** (a) On or before July 1, 1990, each public or private water company serving one thousand or more persons shall map at Level B all areas of contribution and recharge areas for its existing wells located in stratified drift aquifers. Not later than three years after the adoption by the Commissioner of Energy and Environmental Protection of a model municipal aquifer protection ordinance under section 22a-354l, each public and private water company serving ten thousand or more persons shall map at level A all areas of contribution and recharge areas for its existing wells located in stratified drift aquifers. The Commissioner of Energy and Environmental Protection may map at level A and at level B all areas of contribution and recharge areas for existing wells located in stratified drift aquifers that are used by any public or private water company serving less than one thousand persons.

(b) Each public or private water company serving ten thousand or more persons shall map all areas of contribution and recharge areas for potential wells that are located within stratified drift aquifers identified as future sources of water supply to meet their needs in accordance with the plan submitted pursuant to section 25-33h, (1) at level B two years after approval of such plan and, (2) at level A four years after approval of such plan. The Commissioner of Energy and Environmental Protection shall identify and make recommendations for mapping, or shall map, all remaining significant areas of contribution and recharge areas for potential wells located in stratified drift aquifers not identified by a public or private water company as a potential source of water supply within the region of an approved plan. Mapping of any other area of contribution and recharge areas for potential wells located in stratified drift aquifers by the Commissioner shall be completed at a time determined by the Commissioner. (P.A. 88-324, S. 3; P.A. 89-305, S. 22, 32; P.A. 90-275, S. 5, 9; P.A. 91-386, S. 1; May Sp. Sess. P.A. 92-11, S. 63, 70; P.A. 93-337, S. 3.)

History: P.A. 89-305 specified that mapping is required of areas of contribution and recharge areas for wells located in stratified drift aquifers and made technical changes; P.A. 90-275 deleted the requirement that the areas to be mapped at Level B by water companies be within their water supply service area, authorized the Commissioner to map at level A and at Level B areas of contribution and recharge areas for wells located in stratified drift aquifers which are used by water companies serving less than one thousand persons, and required the Commissioner to either map or make recommendations for mapping all remaining significant areas of contribution and recharge areas for potential wells located in stratified drift aquifers not identified by water companies as a potential source of water supply; P.A. 91-386 amended Subsec. (a) to extend the time for mapping at Level A from July 1, 1992, to July 1, 1994; May Sp. Sess. P.A. 92-11 amended Subsec. (a) to change date from July 1, 1994, to January 1, 1996, for aquifer mapping; P.A. 93-337 amended Subsec. (a) to change deadline for mapping from January 1, 1996, to three years after adoption by Commissioner of model ordinance under Sec. 22a-354l. Cited. 215 C. 616, 625.

**Sec. 22a-354d. Completion of mapping of well fields.** The mapping of aquifers by a public or private water company at Level B and Level A required pursuant to section 22a-354c shall not be deemed to be complete unless approved by the Commissioner of Energy and Environmental Protection. (P.A. 88-324, S. 4.) Cited. 215 C. 616, 625.

# 13 | Statutes and Regulations

## 13.1 | State Statutes 22a-354a to 354bb (continued)

**Sec. 22a-354e. Inventory of land uses overlying aquifers.** Not later than three months after approval of the Commissioner of Energy and Environmental Protection of mapping of aquifers at Level B, each municipal Aquifer Protection Agency authorized pursuant to section 22a-354o shall inventory land uses overlying the mapped zone of contribution and recharge areas of such aquifers in accordance with guidelines established by the Commissioner pursuant to section 22a-354f. Such inventory shall be completed not more than one year after authorization of the Agency. (P.A. 88-324, S. 5; P.A. 89-305, S. 27, 32.)

History: P.A. 89-305 required inventory to be completed within a year of Agency authorization and made technical changes. Cited. 215 C. 616, 625.

**Sec. 22a-354f. Guidelines for inventory.** The Commissioner of Energy and Environmental Protection shall develop guidelines to be used by municipal boards or commissions in conducting the inventory of land uses required under section 22a-354e.(P.A. 88-324, S. 6.) Cited. 215 C. 616, 625.

**Sec. 22a-354g. Findings.** The General Assembly finds that aquifers are an essential natural resource and a major source of public drinking water; that reliance on groundwater will increase because opportunities for development of new surface water supplies are diminishing due to the rising cost of land and increasingly intense development; that numerous drinking water wells have been contaminated by certain land use activities and other wells are now threatened; that protection of existing and future groundwater supplies demands greater action by state and local government; that a groundwater protection program requires identification and delineation of present and future water supplies in stratified drift aquifers supplying drinking water wells; that a comprehensive and coordinated system of land use regulations should be established that includes state regulations protecting public drinking water wells located in stratified drift aquifers; that municipalities with existing or proposed public drinking water wells in stratified drift aquifers should designate Aquifer Protection Agencies, and that the state should provide technical assistance and education programs on aquifer protection to ensure a plentiful supply of public drinking water for present and future generations. (P.A. 89-305, S. 1, 32.)

**Sec. 22a-354h. Definitions.** For the purposes of sections 19a-37, 22-6c, 22a-354c, 22a-354e, 22a-354g to 22a-354bb, inclusive, 25-32d, 25-33h, 25-33n and subsection (a) of section 25-84:

- (1) "Regulated activity" means any action, process or condition which the Commissioner of Energy and Environmental Protection determines, by regulations adopted in accordance with section 22a-354i, to involve the production, handling, use, storage or disposal of material that may pose a threat to groundwater in an Aquifer Protection Area, including structures and appurtenances utilized in conjunction with the regulated activity;
- (2) "Commissioner" means the Commissioner of Energy and Environmental Protection;
- (3) "Well field" means the immediate area surrounding a public drinking water supply well or group of wells;
- (4) "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;
- (5) "Recharge area" means the area from which groundwater flows directly to the area of contribution;
- (6) "Aquifer" means a geologic formation, group of formations or part of a formation that contains sufficient saturated, permeable materials to yield significant quantities of water to wells and springs;
- (7) "Affected water company" means any public or private water company owning or operating a public water supply well within an Aquifer Protection Area;
- (8) "Stratified drift" means a predominantly sorted sediment laid down by or in meltwater from glaciers and includes sand, gravel, silt and clay arranged in layers;
- (9) "Municipality" means any town, consolidated town and city, consolidated town and borough, city or borough;
- (10) "Aquifer Protection Area" means any area consisting of well fields, areas of contribution and recharge areas, identified on maps approved by the Commissioner of Energy and Environmental Protection pursuant to sections 22a-354b to 22a-354d, inclusive, within which land uses or activities shall be required to comply with regulations adopted pursuant to section 22a-354o by the municipality where the Aquifer Protection Area is located; and
- (11) "Best management practice" means a practice, procedure or facility designed to prevent, minimize or control spills, leaks or other releases that pose a threat to groundwater. (P.A. 89-305, S. 2, 32; P.A. 90-275, S. 1, 9; P.A. 95-218, S. 5.)

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## 13.1 | State Statutes 22a-354a to 354bb (continued)

History: P.A. 90-275 redefined “regulated activity” to include a condition which may pose a threat to groundwater and specified that the threatened groundwater must be in an Aquifer Protection Area; P.A. 95-218 redefined “area of contribution” to include other potentiometric surfaces in the location of such areas.

### Sec. 22a-354i. Regulations.

- (a) On or before July 1, 1991, the Commissioner of Energy and Environmental Protection shall publish notice of intent to adopt regulations in accordance with chapter 54 for land use controls in Aquifer Protection Areas. The regulations shall establish (1) best management practice standards for existing regulated activities located entirely or in part within Aquifer Protection Areas and a schedule for compliance of nonconforming regulated activities with such standards, (2) best management practice standards for and prohibitions of regulated activities proposed to be located entirely or in part within Aquifer Protection Areas, (3) procedures for exempting regulated activities in Aquifer Protection Areas upon determination solely by the Commissioner that such regulated activities do not pose a threat to any existing or potential drinking water supply, and (4) requirements for design and installation of groundwater monitoring within Aquifer Protection Areas. In addition, the Commissioner may adopt such other regulations as deemed necessary to carry out the purposes of sections 22a-354b, 22a-354c, 22a-354h, this section, sections 22a-354m, 22a-354n, subsection (e) of section 22a-354p and subsection (d) of section 22a-451 including, but not limited to, regulations which provide for the manner in which the boundaries of Aquifer Protection Areas shall be established and amended; criteria and procedures for submission and review of applications to construct or begin regulated activities; procedures for granting, denying, limiting, revoking, suspending, transferring and modifying permits for regulated activities; controls regarding the expansion of nonconforming regulated activities, including procedures for offsetting impacts from the expansion or modification of nonconforming regulated activities or procedures for modifying permits of regulated activities by the removal of other potential pollution sources within the subject well field, procedures for the granting of permits for such expansion or modification based on the certification of a qualified person that such expansion meets criteria established by the Commissioner; registration requirements for existing regulated activities and procedures for transferring registrations; procedures for landowners to notify a municipality or the Commissioner of a change in use and other provisions for administration of the aquifer protection program.
- (b) In adopting such regulations, the Commissioner shall consider the guidelines for Aquifer Protection Areas recommended in the report prepared pursuant to special act 87-63, as amended, and shall avoid duplication and inconsistency with other state or federal laws and regulations affecting aquifers. The regulations shall be developed in consultation with an advisory committee appointed by the Commissioner. The advisory committee shall include the Commissioners of Public Works and Public Health and the chairperson of the Public Utilities Control Authority, or their designees, members of the public, and representatives of businesses affected by the regulations, agriculture, environmental groups, municipal officers and water companies. (P.A. 89-305, S. 3, 32; P.A. 90-275, S. 2, 9; P.A. 93-381, S. 9, 39; P.A. 95-257, S. 12, 21, 58; P.A. 98-209, S. 9.)

History: P.A. 90-275 amended Subsec. (a) to require publication of the notice of intent on or before July 1, 1991, and authorized the Commissioner to adopt other regulations; P.A. 93-381 replaced Commissioner of Health Services with Commissioner of Public Health and Addiction Services, effective July 1, 1993; P.A. 95-257 replaced Commissioner and Department of Public Health and Addiction Services with Commissioner and Department of Public Health, effective July 1, 1995; P.A. 98-209 amended Subsec. (a) to authorize provision in regulations for procedures for offsetting nonconforming regulated activities.

**Sec. 22a-354j. Consistency of aquifer regulations with regulations re: farm resources management plans.** State regulations for Aquifer Protection Areas adopted by the Commissioner of Energy and Environmental Protection pursuant to section 22a-354i shall be consistent with regulations adopted by said Commissioner for farm resources management plans pursuant to section 22a-354m. (P.A. 89-305, S. 31, 32.)

**Sec. 22a-354k. Groundwater education program.** The Commissioner of Energy and Environmental Protection shall develop and implement a groundwater education program. In developing such program, the Commissioner shall consult with the Commissioner of Public Health, water utilities, state educational and research institutions, nonprofit environmental organizations and any other person or Agency the Commissioner deems necessary. The Cooperative Extension Service at the University of Connecticut shall assist the Commissioner in implementation of the program. (P.A. 89-305, S. 4, 32; P.A. 93-381, S. 9, 39; P.A. 95-257, S. 12, 21, 58.)

History: P.A. 93-381 replaced Commissioner of Health Services with Commissioner of Public Health and Addiction Services, effective July 1, 1993; P.A. 95-257 replaced Commissioner and Department of Public Health and Addiction Services with Commissioner and Department of Public Health, effective July 1, 1995.

# 13 | Statutes and Regulations

## 13.1 | State Statutes 22a-354a to 354bb (continued)

**Sec. 22a-354l. Model municipal aquifer protection ordinance.** Not later than October 1, 1995, the Commissioner of Energy and Environmental Protection shall prepare a model municipal aquifer protection ordinance, consistent with regulations adopted under section 22a-354i. The ordinance may be considered by municipal Aquifer Protection Agencies in adopting regulations pursuant to section 22a-354p. (P.A. 89-305, S. 5, 32; P.A. 93-337, S. 1.)

History: P.A. 93-337 added a deadline of October 1, 1995, for adoption of a model ordinance.

**Sec. 22a-354m. Farm resources management plans.**

- (a) The Commissioner of Energy and Environmental Protection may, in accordance with regulations adopted pursuant to subsection (d) of this section, require any person engaged in agriculture on land located within an Aquifer Protection Area and whose annual gross sales from agricultural products during the preceding calendar year were two thousand five hundred dollars or more to submit a farm resources management plan.
- (b) The soil and water conservation district where the Aquifer Protection Area is located shall establish and coordinate a technical team to develop each plan. Such team shall include a representative of the municipality in which the land is located and a representative of any affected water company upon request of such municipality or water company. For the purposes of developing the plan required pursuant to this section, if a farm is located in two or more soil and water conservation districts, the district in which the greater part of such farm is located shall be deemed to be the district in which the entire farm is located. In developing a plan, a district shall consult with the Commissioners of Energy and Environmental Protection and Agriculture, the College of Agriculture and Natural Resources at the University of Connecticut, the Connecticut Agricultural Experiment Station, the Soil Conservation Service, the state Agricultural and Conservation Committee and any other person or Agency the district deems appropriate.
- (c) The plan shall include a schedule for implementation and shall be periodically updated as required by the Commissioner. In developing a schedule for implementation, the technical team shall consider technical and economic factors including, but not limited to, the availability of state and federal funds. Any person engaged in agriculture in substantial compliance with a plan approved under this section shall be exempt from regulations adopted under section 22a-354o by a municipality in which the land is located. No plan shall be required to be submitted to the Commissioner before July 1, 1992, or six months after completion of level B mapping where the farm is located, whichever is later.
- (d) On or before July 1, 1999, the Commissioner of Energy and Environmental Protection, in consultation with the Commissioner of Agriculture, the United States Soil Conservation Service, the Cooperative Extension Service at the University of Connecticut and the Council for Soil and Water Conservation, shall publish notice of intent to adopt regulations in accordance with chapter 54 for farm resources management plans. Such regulations shall include, but not be limited to, a priority system and procedures for determining if a farm management plan is required and the priority that is assigned to the preparation of such a plan, best management practices, restrictions and prohibitions for manure management, storage and handling of pesticides, reduced use of pesticides through pest management practices, integrated pest management, fertilizer management and underground and above-ground storage tanks, and criteria and procedures for submission and review of farm resources management plans and amendments of such plans. In adopting such best management practices, restrictions and prohibitions, the Commissioner shall consider existing state and federal guidelines or regulations affecting aquifers and agricultural resources management. (P.A. 89-305, S. 6, 32; P.A. 90-275, S. 3, 9; P.A. 98-209, S. 10.)

History: P.A. 90-275 increased the annual gross sales requirement from one thousand to two thousand five hundred dollars, provided if a farm is located in two or more districts that the district in which the greater part of the farm is located shall be deemed to be the district in which the entire farm is located, extended the earliest time in which a plan is required to July 1, 1992, provided that the Commissioner shall publish notice of intent to adopt regulations concerning farm resources management plans on or before July 1, 1991, and required the regulations to include best management practices, restrictions and prohibitions for designated items; P.A. 98-209 amended Subsec. (a) to make submittal of farm resources management plans discretionary on the part of the Commissioner, and amended Subsec. (d) to extend the date for notice of intent to adopt regulations under this section and to authorize certain priorities within such regulations.

# 13 | Statutes and Regulations

## 13.1 | State Statutes 22a-354a to 354bb (continued)

**Sec. 22a-354n. Delineation of Aquifer Protection Areas on maps prepared by zoning commissions, planning commissions, or planning and zoning commissions. Challenges to boundaries.** The zoning commission, planning commission, or planning and zoning commission of each municipality with an Aquifer Protection Area shall, in accordance with regulations adopted by the Commissioner pursuant to section 22a-354i, delineate on any map showing zoning districts prepared in accordance with chapter 124 or 126 or any special act, the boundaries of Aquifer Protection Areas, including areas of contribution and recharge areas as shown on level A maps approved or done by the Commissioner pursuant to section 22a-354c or any other provision of the general statutes. An aquifer protection commission shall not delineate or alter the boundary of an Aquifer Protection Area except in accordance with regulations adopted by the Commissioner. No person may challenge the boundaries of the Aquifer Protection Area at the local level unless such challenge is based solely on a failure by the Aquifer Protection Agency to properly delineate the boundaries in accordance with regulations of the Commissioner. Any other challenge to established Aquifer Protection Area boundaries shall be in the form of a petition to the Commissioner to amend the boundaries, in accordance with regulations adopted by him. (P.A. 89-305, S. 7, 32; P.A. 90-275, S. 4, 9.)

History: P.A. 90-275 provided that the delineation of the boundaries of Aquifer Protection Areas be in accordance with regulations, provided that the only ground for challenging the boundaries of the Aquifer Protection Area be that the agency failed to delineate such in accordance with regulations and specified that any other challenge to established boundaries shall be a petition to amend the boundaries.

**Sec. 22a-354o. Municipal regulation of Aquifer Protection Areas.**

- (a) Each municipality in which an Aquifer Protection Area is located shall authorize by ordinance an existing board or commission to act as such Agency not later than three months after adoption by the Commissioner of regulations for Aquifer Protection Areas pursuant to section 22a-354i and approval by the Commissioner of mapping of areas of contribution and recharge areas for wells located in stratified drift aquifers in the municipality at Level B, pursuant to section 22a-354d. The ordinance authorizing the Agency shall determine the number of members and alternate members, the length of their terms, the method of selection and removal, and the manner for filling vacancies. No member or alternate member of such Agency shall participate in any hearing or decision of such Agency of which he is a member upon any matter in which he is directly or indirectly interested in a personal or financial sense. In the event of disqualification, such fact shall be entered on the records of the Agency and replacement shall be made from alternate members or an alternate to act as a member of such commission in the hearing and determination of the particular matter or matters in which the disqualification arose.
- (b) Not more than six months after approval by the Commissioner of mapping at Level A, pursuant to section 22a-354d, the Aquifer Protection Agency of the municipality in which such Aquifer Protection Area is located shall adopt regulations for aquifer protection.
- (c) At least one member of the Agency or staff of the Agency shall be a person who has completed the course in technical training formulated by the Commissioner pursuant to section 22a-354v. Failure to have a member of the Agency or staff with training shall not affect the validity of any action of the Agency and shall be grounds for revocation of the authority of the Agency under section 22a-354t. (P.A. 89-305, S. 8, 32; P.A. 95-218, S. 6.)

History: P.A. 95-218 amended Subsec. (b) to change “well” to “Aquifer Protection Area” for consistency in the text.

**Sec. 22a-354p. Adoption of regulations. Permits.**

- (a) The Aquifer Protection Agency authorized by section 22a-354o shall, by regulation, provide for (1) the manner in which the boundaries of Aquifer Protection Areas shall be established and amended or changed, (2) the form for an application to conduct regulated activities within the area, (3) notice and publication requirements, (4) criteria and procedures for the review of applications, and (5) administration and enforcement.
- (b) No regulations of an Aquifer Protection Agency shall become effective or be established until after a public hearing in relation thereto is held by the Agency at which parties in interest and citizens shall have an opportunity to be heard. Notice of the time and place of such hearing shall be published in the form of a legal advertisement, appearing at least twice in a newspaper having a substantial circulation in the municipality at intervals of not less than two days, the first not more than twenty-five days nor less than fifteen days, and the last not less than two days, before such hearing, and a copy of such proposed regulation shall be filed in the office of the town, city or borough clerk, as the case may be, in such municipality, for public inspection at least ten days before such hearing, and may be published in full in such paper. A copy of the notice and the proposed regulations or

# 13 | Statutes and Regulations

## 13.1 | State Statutes 22a-354a to 354bb (continued)

amendments thereto shall be provided to the Commissioner of Energy and Environmental Protection, the town clerk and any affected water company at least thirty- five days before such hearing. Such regulations may, from time to time, be amended, changed or repealed after a public hearing in relation thereto is held by the Agency at which parties in interest and citizens shall have an opportunity to be heard, and for which notice shall be published in the manner specified in this subsection. Regulations or changes therein shall become effective at such time as is fixed by the Agency, provided a copy of such regulation or change shall be filed in the office of the town, city or borough clerk, as the case may be. Whenever an Agency makes a change in regulations, it shall state upon its records the reason why the change was made. All petitions submitted in writing and in a form prescribed by the Agency requesting a change in the regulations shall be considered at a public hearing in the manner provided for establishment of such regulations within ninety days after receipt of such petition. The Agency shall act upon the changes requested in the petition within sixty days after the hearing. The petitioner may consent to extension of the periods provided for a hearing and for adoption or denial or may withdraw such petition.

- (c) Pursuant to municipal regulations adopted under subsection (b) of this section, no regulated activity shall be conducted within any Aquifer Protection Area without a permit. Any person proposing to conduct or cause to be conducted a regulated activity within an Aquifer Protection Area shall file an application with the Aquifer Protection Agency of each municipality wherein the aquifer in question is located. The application shall be in such form and contain such information as the Agency may prescribe. The day of receipt of an application shall be the day of the next regularly scheduled meeting of such Agency immediately following the day of submission to such Agency or its agent of such application, provided such meeting is no earlier than three business days after receipt, or within thirty-five days after such submission, whichever is sooner. No later than sixty-five days after the receipt of such application, the Agency may hold a public hearing on such application. Notice of the hearing shall be published at least twice at intervals of not less than two days, the first not more than fifteen days and not fewer than ten days, and the last not less than two days before the date set for the hearing in a newspaper having a general circulation in each town where the affected aquifer, or any part thereof, is located. The Agency shall send to any affected water company, at least ten days before the hearing, a copy of the notice by certified mail, return receipt requested. All applications, maps and documents relating thereto shall be open for public inspection. At such hearing, any person or persons may appear and be heard. The hearing shall be completed within forty-five days of its commencement. Action shall be taken on applications within thirty-five days after the completion of a public hearing, or in the absence of a public hearing, within sixty-five days from the date of receipt of the application.
- (d) In granting, denying or limiting any permit for a regulated activity, the Aquifer Protection Agency shall state upon the record the reason for its decision. In granting a permit, the Agency may grant the application as filed or grant it upon such terms, conditions, limitations or modifications of the activity intended to carry out the policies of section 22a-354g. No person shall conduct any regulated activity within an Aquifer Protection Area which requires zoning or subdivision approval without first having obtained a valid certificate of zoning or subdivision approval, special permit, special exception or variance, or other documentation establishing that the proposal complies with the zoning or subdivision requirements adopted by the municipality pursuant to chapters 124 to 126, inclusive, or any special act. The Agency may suspend or revoke a permit if it finds, after giving notice to the permittee of the facts or conduct which warrants the intended action and after a hearing at which the permittee is given an opportunity to show compliance with the requirements for retention of the permit, that the applicant has not complied with the conditions or limitations set forth in the permit or has exceeded the scope of the work as set forth in the application. The Agency shall send to any affected water company a copy of the notice at least ten days before the hearing by certified mail, return receipt requested. Any affected water company may, through a representative, appear and be heard at any such hearing. The applicant or permittee shall be notified of the Agency's decision by certified mail, return receipt requested, within fifteen days of the date of the decision, and the Agency shall cause notice of its order in issuance, denial, revocation or suspension of a permit to be published in a newspaper having a general circulation in the municipality in which the Aquifer Protection Area is located.
- (e) The Aquifer Protection Agency may require a filing fee to be deposited with the Agency. The amount of such fee shall be sufficient to cover the reasonable cost of reviewing and acting on applications and petitions, including, but not limited to, the costs of certified mailings, publications of notices and decisions, and monitoring compliance with permit conditions, regulations adopted pursuant to sections 19a-37, 22-6c, 22a-354c, 22a-354e, 22a-354g to 22a-354bb, inclusive, 25-32d, 25-33h, 25-33n and subsection (a) of section 25-84, or Agency orders.

# 13 | Statutes and Regulations

## 13.1 | State Statutes 22a-354a to 354bb (continued)

- (f) Any regulations adopted by an Agency under this section shall not be effective unless the Commissioner of Energy and Environmental Protection determines that such regulations are reasonably related to the purpose of groundwater protection and not inconsistent with the regulations adopted pursuant to section 22a-354i. A regulation adopted by a municipality shall not be deemed inconsistent if such regulation establishes a greater level of protection. The Commissioner shall provide written notification to the Agency of approval or the reasons such regulations cannot be approved within sixty days of receipt by the Commissioner of the regulations adopted by the Agency.
- (g) (1) Notwithstanding any other provision of the general statutes, the Commissioner shall have sole authority to grant, deny, limit or modify, in accordance with regulations adopted by him, a permit for any regulated activity in an Aquifer Protection Area proposed by (A) any person to whom the Commissioner has issued an individual permit under the national pollutant discharge elimination system of the federal Clean Water Act (33 USC 1251 et seq.) or under the state pollutant discharge elimination system 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 (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. 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 days after receipt by the Commissioner of the application for such permit, whichever occurs first. The Commissioner shall provide prompt notice of receipt of an application to the municipal Aquifer Protection Agency.
- (2) If the Commissioner requires the submission of a registration or other document under regulations adopted pursuant to section 22a-354i, such submission shall be made to the Commissioner by any person to whom the Commissioner has issued an individual permit under the national pollutant discharge elimination system of the federal Clean Water Act, or an individual permit under the state pollutant discharge elimination system pursuant to section 22a-430, or by any person to whom the Commissioner has issued a permit under the provisions of the federal Resource Conservation and Recovery Act for a treatment, storage or disposal facility, or any public service company, as defined in section 16-1, providing gas, electric, pipeline, water or telephone service, or a large quantity generator, as defined in regulations adopted by the Commissioner under section 22a-449, or any state department, Agency or instrumentality, except any local or regional board of education. (P.A. 89-305, S. 9, 32; P.A. 90-275, S. 8, 9; P.A. 92-162, S. 8, 25; P.A. 97-124, S. 6, 16.)

History: P.A. 90-275 in Subsec. (e) required the amount of the filing fee to be sufficient to cover costs of monitoring compliance with regulations; P.A. 92-162 added Subsec. (g) re: authority of Commissioner re: permits for state agencies for regulated activities in an Aquifer Protection Area; P.A. 97-124 amended Subsec. (g) by designating existing provisions as Subdiv. (1) and adding new Subparas. (A) to (C), inclusive, providing that the Commissioner shall have the authority to issue permits under this section to utilities and certain other companies, and by adding new Subdiv. (2) re: submission of registration or other document, effective June 6, 1997.

### Sec. 22a-354q. Appeals.

- (a) The Commissioner of Energy and Environmental Protection or any person aggrieved by any regulation, order, decision or action made pursuant to sections 22a-354o to 22a-354t, inclusive, or section 14 of public act 89-305\* by the Commissioner or municipality, within fifteen days after publication of such regulation, order, decision or action may appeal to the Superior Court for the judicial district where the land affected is located, and if located in more than one judicial district, to said court in any such judicial district, except if such appeal is from a contested case, as defined in section 4-166, such appeal shall be in accordance with the provisions of section 4-183 and venue shall be in the judicial district where the land affected is located, and if located in more than one judicial district, to the court in any such judicial district. Such appeal shall be made returnable to said court in the same manner as that prescribed for civil actions brought to said court. Notice of such appeal shall be served upon the Aquifer Protection Agency and the Commissioner. The Commissioner may appear as a party to any action brought by any other person within thirty days from the date such appeal is returned to the court. The appeal shall state the reasons upon which it is predicated and shall not stay proceedings on the regulation, order, decision or action, but the court may, on application and after notice, grant a restraining order. Such appeal shall have precedence in the order of trial.

# 13 | Statutes and Regulations

## 13.1 | State Statutes 22a-354a to 354bb (continued)

- (b) The court, upon the motion of the person who applied for such order, decision or action, shall make such person a party defendant in the appeal. Such defendant may, at any time after the return date of such appeal, make a motion to dismiss the appeal. At the hearing on such motion to dismiss, each appellant shall have the burden of proving his standing to bring the appeal. The court may, upon the record, grant or deny the motion. The court's order on such motion shall be a final judgment for the purpose of the appeal as to each such defendant. No appeal may be taken from any such order except within seven days of the entry of such order.
- (c) No appeal taken under subsection (a) of this section shall be withdrawn and no settlement between the parties to any such appeal shall be effective unless and until a hearing has been held before the Superior Court and such court has approved such proposed withdrawal or settlement. (P.A. 89-305, S. 10, 32.)

### **Sec. 22a-354r. Findings on appeal. Setting aside or modifying action. Authority to purchase land.**

- (a) If upon appeal pursuant to section 22a-354q, the court finds that the action appealed from constitutes the equivalent of a taking without compensation, it shall set aside the action or it may modify the action so that it does not constitute a taking. In both instances, the court shall remand the order to the Aquifer Protection Agency for action not inconsistent with its decision.
- (b) To carry out the purposes of sections 22a-354o to 22a-354t, inclusive, or section 14 of public act 89-305\*, a municipality may at any time purchase land or an interest in land in fee simple or other acceptable title, or subject to acceptable restrictions or exceptions, and enter into covenants and agreements with landowners. (P.A. 89-305, S. 11, 32.)

### **Sec. 22a-354s. Penalty. Court orders.**

- (a) If the Aquifer Protection Agency or its duly authorized agent finds that any person is conducting or maintaining any activity, facility or condition which violates any provision of sections 22a-354o to 22a-354t, inclusive, or section 14 of public act 89-305\*, or any regulation or permit adopted or issued thereunder, the Agency or its duly authorized agent may issue a written order by certified mail, return receipt requested, to such person conducting such activity or maintaining such facility or condition to cease such activity immediately or to correct such facility or condition. The Agency shall send a copy of such order to any affected water company by certified mail, return receipt requested. Within ten days of the issuance of such order, the Agency shall hold a hearing to provide the person an opportunity to be heard and show cause why the order should not remain in effect. Any affected water company may testify at the hearing. The Agency shall consider the facts presented at the hearing and, within ten days of the completion of the hearing, notify the person by certified mail, return receipt requested, that the original order remains in effect, that a revised order is in effect, or that the order has been withdrawn. The original order shall be effective upon issuance and shall remain in effect until the Agency affirms, revises or withdraws the order. The issuance of an order pursuant to this section shall not delay or bar an action pursuant to subsection (b) of this section. The Commissioner may issue orders pursuant to sections 22a-6 to 22a-7, inclusive, concerning an activity, facility or condition which is in violation of said sections 22a-354o to 22a-354t, inclusive, or section 14 of public act 89-305\* if the municipality in which such activity, facility or condition is located has failed to enforce its aquifer protection regulations.
- (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.
- (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. (P.A. 89-305, S. 12, 32.)

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## 13.1 | State Statutes 22a-354a to 354bb (continued)

### **Sec. 22a-354t. Revocation of municipal authority to regulate Aquifer Protection Areas.**

- (a) The Commissioner of Energy and Environmental Protection may revoke the authority of a municipality to regulate Aquifer Protection Areas pursuant to sections 22a-354o to 22a-354s, inclusive, this section or section 14 of public act 89-305\*, upon determination after a hearing that such municipality has, over a period of time, consistently failed to perform its duties under said sections. Prior to the hearing on revocation, the Commissioner shall send a notice to the Aquifer Protection Agency, by certified mail, return receipt requested, asking such Agency to show cause, within thirty days, why such authority should not be revoked. A copy of the show cause notice shall be sent to the Chief Executive Officer of the municipality that authorized the Agency and to any water company owning or operating a public water supply well within such municipality. Such water company may, through a representative, appear and be heard at any such hearing. The Commissioner shall send a notice to the Aquifer Protection Agency, by certified mail, return receipt requested, stating the reasons for the revocation and the circumstances for reinstatement. Any municipality aggrieved by a decision of the Commissioner under this section to revoke its authority under said sections 22a-354o to 22a-354s, inclusive, this section and section 14 of public act 89-305\*, may appeal therefrom in accordance with the provisions of section 4-183. The Commissioner shall have jurisdiction over aquifers in any municipality whose authority to regulate such aquifers has been revoked. Any costs incurred by the state in reviewing applications to conduct an activity within an Aquifer Protection Area for such municipality shall be paid by the municipality. Any fees that would have been paid to such municipality if such authority had been retained shall be paid to the state.
- (b) The Commissioner shall cause to be published notice of the revocation or reinstatement of the authority of a municipality to regulate aquifers in a newspaper of general circulation in the area of such municipality.
- (c) The Commissioner shall adopt regulations in accordance with the provisions of chapter 54 establishing standards for the revocation and reinstatement of municipal authority to regulate aquifers pursuant to section 22a-354o. (P.A. 89-305, S. 13, 32.)

### **Sec. 22a-354u. Incentive program for public recognition of users of land within Aquifer Protection Areas who implement innovative approaches to groundwater protection.**

The Commissioner of Energy and Environmental Protection shall develop an incentive program to provide public recognition of users of land located within Aquifer Protection Areas who demonstrate successful and committed efforts to protect drinking water supplies by implementing innovative approaches to groundwater protection. Such program shall also promote groundwater protection through education of members of businesses and industry and the public. (P.A. 89-305, S. 15, 32.)

### **Sec. 22a-354v. Technical training classes for members and staff of municipal Aquifer Protection Agencies.**

The Commissioner of Energy and Environmental Protection shall formulate courses in technical training for members and staff of municipal Aquifer Protection Agencies. Such courses shall provide instruction in the regulations developed pursuant to section 22a-354i, potential options for monitoring and enforcement, and technical requirements for site plan review. The Commissioner may designate any organization or educational institution to provide such instruction. (P.A. 89-305, S. 16, 32.)

### **Sec. 22a-354w. Guidelines for acquisition of lands surrounding public water supply well fields.**

The Commissioner of Energy and Environmental Protection, in consultation with the Commissioner of Public Health and the chairperson of the Public Utilities Control Authority, shall prepare guidelines for acquisition of lands surrounding existing or proposed public water supply well fields. In preparing such guidelines, the Commissioner shall consider economic implications for mandating land acquisition including, but not limited to, the effect on land values and the ability of small water companies to absorb the cost of acquisition. (P.A. 89-305, S. 17, 32; P.A. 93-381, S. 9, 39; P.A. 95-257, S. 12, 21, 58; P.A. 96-180, S. 79, 166.)

History: P.A. 93-381 replaced Commissioner of Health Services with Commissioner of Public Health and Addiction Services, effective July 1, 1993; P.A. 95-257 replaced Commissioner and Department of Public Health and Addiction Services with Commissioner and Department of Public Health, effective July 1, 1995; P.A. 96-180 changed "Department of Public Utilities Control" to "Public Utilities Control Authority," effective June 3, 1996.

### **Sec. 22a-354x. Duties of the Commissioner. Technical, coordinating and research services. Supervision. Annual report.**

- (a) The Commissioner of Energy and Environmental Protection, in consultation with the Commissioner of Public Health and water companies, shall provide, within available appropriations, technical, coordinating and research services to promote the effective administration of sections 19a-37, 22-6c, 22a-354c, 22a-354e, 22a-354g to 22a-354bb, inclusive, 25-32d, 25-33h and 25-33n and subsection (a) of section 25-84 at the federal, state and local levels.

# 13 | Statutes and Regulations

## 13.1 | State Statutes 22a-354a to 354bb (continued)

- (b) The Commissioner shall have the overall responsibility for general supervision of the implementation of sections 19a-37, 22-6c, 22a-354c, 22a-354e, 22a-354g to 22a-354bb, inclusive, 25-32d, 25-33h and 25-33n, and subsection (a) of section 25-84 and shall monitor and evaluate the activities of federal and state agencies and the activities of municipalities to assure continuing, effective, coordinated and consistent administration of the requirements and purposes of said sections.
- (c) The Commissioner shall prepare and submit to the General Assembly and the Governor, on or before December first of each year, a written report summarizing the activities of the department concerning the development and implementation of sections 19a-37, 22-6c, 22a-354c, 22a-354e, 22a-354g to 22a-354bb, inclusive, 25-32d, 25-33h and 25-33n and subsection (a) of section 25-84 during the previous year. Such report shall include, but not be limited to: (1) The department's accomplishments and actions in achieving the goals and policies of said sections including, but not limited to, coordination with other state, regional, federal and municipal programs established to achieve the purposes of said sections; (2) recommendations for any statutory or regulatory amendments necessary to achieve such purposes; (3) a summary of municipal and federal programs and actions which affect Aquifer Protection Areas; (4) recommendations for any programs or plans to achieve such purposes; (5) any aspects of the program or said sections which are proving difficult to accomplish, suggested reasons for such difficulties and proposed solutions to such difficulties; (6) a summary of the expenditure of federal and state funds under said sections; and (7) a request for an appropriation of funds necessary to match federal funds and provide continuing financial support for the program. Such report shall comply with the provisions of section 46a-78. On and after October 1, 1996, the report shall be submitted to the Governor, to the joint standing committees of the General Assembly having cognizance of matters relating to appropriations and budgets of state agencies and relating to the environment and, upon request, to any member of the General Assembly. A summary of the report shall be submitted to each member of the General Assembly if the summary is two pages or less, and a notification of the report shall be submitted to each member if the summary is more than two pages. Submission shall be made by mailing the report, summary or notification to the legislative address of each member of the committee or the General Assembly, as applicable. (P.A. 89-305, S. 18, 32; P.A. 93-381, S. 9, 39; P.A. 95-257, S. 12, 21, 58; P.A. 96-251, S. 11.)

History: P.A. 93-381 replaced Commissioner of Health Services with Commissioner of Public Health and Addiction Services, effective July 1, 1993; P.A. 95-257 replaced Commissioner and Department of Public Health and Addiction Services with Commissioner and Department of Public Health, effective July 1, 1995; P.A. 96-251 amended Subsec. (c) by requiring that on and after October 1, 1996, the report also be submitted to Governor and appropriations and environment committees, and to legislators upon request, and by adding provisions re: submission of report summaries to legislators.

### **Sec. 22a-354y. Preparation of municipal assistance program by water companies.**

Each water company serving ten thousand or more customers with wells in stratified drift aquifers shall prepare a municipal assistance program, which includes recommendations for site plan reviews, evaluation of risks and advice on procedures for dealing with hazardous waste spills in aquifers. Such program shall be made available to any municipality in which wells owned by the water company are located. (P.A. 89-305, S. 19, 32.)

### **Sec. 22a-354z. Mapping by water companies of areas of contribution and recharge areas for existing and potential stratified drift wells.**

- (a) Not later than three years after the adoption by the Commissioner of Energy and Environmental Protection of a model municipal aquifer protection ordinance under section 22a-354l, each public or private water company serving at least one thousand persons but not more than ten thousand persons shall map areas of contribution and recharge areas at Level A for each existing stratified drift well located within its water supply area.
- (b) Each public or private water supply company serving at least one thousand but not more than ten thousand persons shall map areas of contribution and recharge areas for all of the potential wells located in stratified drift aquifers identified as future sources of water supply in accordance with the plan submitted pursuant to section 25-33h at Level B, not more than two years after approval of the plan, and at Level A, not more than five years after approval.
- (c) For the purpose of this section, any community water system which is part of an existing water company but which is not physically connected to such existing water company shall be considered a separate water company for purposes of determining the number of persons served by the existing water company's system and any of its separate systems. (P.A. 89-305, S. 23, 32; P.A. 91-386, S. 2; May Sp. Sess. P.A. 92-11, S. 64, 70; P.A. 93-337, S. 2.)

# 13 | Statutes and Regulations

## 13.1 | State Statutes 22a-354a to 354bb (continued)

History: P.A. 91-386 added a new Subsec. (c) to specify how water companies shall be classified for purposes of determining their responsibilities under this section; May Sp. Sess. P.A. 92-11 amended Subsec. (a) by changing date for aquifer mapping from July 1, 1995, to January 1, 1996; P.A. 93-337 amended Subsec. (a) to change deadline for mapping from January 1, 1996, to three years after adoption by Commissioner of model ordinance under Sec. 22a-354l.

### **Sec. 22a-354aa. Strategic groundwater monitoring program in Aquifer Protection Areas.**

The Commissioner of Energy and Environmental Protection, in consultation with the Commissioner of Public Health, water companies, and business and industry shall develop a strategic groundwater monitoring plan to be implemented in Aquifer Protection Areas not more than one year after completion of Level A mapping pursuant to sections 22a-354b to 22a-354d, inclusive. (P.A. 89-305, S. 25, 32; P.A. 93-381, S. 9, 39; P.A. 95-257, S. 12, 21, 58.)

History: P.A. 93-381 replaced Commissioner of Health Services with Commissioner of Public Health and Addiction Services, effective July 1, 1993; P.A. 95-257 replaced Commissioner and Department of Public Health and Addiction Services with Commissioner and Department of Public Health, effective July 1, 1995.

### **Sec. 22a-354bb. Inventory of agricultural land uses overlaying mapped well fields.**

Not more than two months after approval by the Commissioner of Energy and Environmental Protection of mapping at Level B pursuant to section 22a-354d, the Commissioner, in consultation with the Commissioner of Agriculture, the Cooperative Extension Service at the University of Connecticut, and any other person or Agency the Commissioner of Energy and Environmental Protection deems necessary, shall inventory agricultural land uses overlaying the mapped area. Such inventory shall include, but not be limited to, the type and size of any agricultural operation and existing farm resource management practices. Any such inventory shall be completed not more than four months after commencement and shall be made available to technical teams established pursuant to subsection (b) of section 22a-354k. (P.A. 89-305, S. 30, 32.)

\* Note: Section 14 of public act 89-305 is special in nature and therefore has not been codified but remains in full force and effect according to its terms.

# 13 | Statutes and Regulations

## 13.2 | Summary of State Land Use Regulations

### Aquifer Protection Area Land Use Controls Summary

#### (APA Regulations Section 22a-354i-1 through 10)

The Aquifer Protection Area Land Use Regulations apply only to regulated activities located within the final Level A mapping boundary of a protected aquifer. Aquifer Protection Areas are designated around well fields in stratified drifts used by water systems serving over 1,000 people. The protected area encompasses the area of contribution and recharge area of the well field.

This regulation: (1) establishes a procedure for municipal adoption of Aquifer Protection Area boundaries; (2) identifies regulated activities, which are prohibited in Aquifer Protection Areas unless they are registered or permitted; (3) establishes an exemption process for regulated activities using hazardous materials which, if released, do not pose a threat to the drinking water supply; (4) establishes a registration process for existing regulated activities that allow for transfer of a registration; (5) establishes a permit process that allows a registered regulated activity to add a new regulated activity if certain requirements are met; and (6) establishes best management practices for registered and permitted regulated activities.

Regulated activities are defined in section 22a-354i-1 of the regulation. In general, regulated activities include businesses that use hazardous materials such as RCRA hazardous wastes, hazardous substances regulated under CERCLA, pesticides, and petroleum products. Examples of regulated activities include some manufacturing industries, chemical wholesale storage industries, gasoline stations, auto and engine service stations, dry cleaners, and furniture strippers. Installation of new underground storage tanks for storage or transmission of oil or petroleum or hazardous materials is prohibited, with allowances for replacement of existing tanks.

**Please Note:** (i) The Commissioner of Energy and Environmental Protection is required to prepare a Model Municipal Ordinance to be used by municipal Aquifer Protection Agencies in adopting regulations. The Model Ordinance will contain the regulation as well as administrative procedures. (ii) Under section 22a-354p of the CT General Statutes, the Commissioner will be the regulating authority for registration and permits for regulated activities conducted by other state agencies, any person to whom the Commissioner has issued an individual NPDES permit, SPDES permit, RCRA TSD permit, or any public service company or Large Quantity Generator, and the Municipal Aquifer Protection Agency will be the regulating authority for all regulated activities. (iii) Municipal Aquifer Protection Agencies are authorized by section 22a-354(e) of the General Statutes to require filing fees to be deposited with the Agency. The amount of the fee shall be sufficient to cover the reasonable cost of reviewing and acting on applications and petitions, including, but not limited to, the costs of certified mailings, publications of notices and decisions, and monitoring compliance with permit conditions and regulations.

**Special Note:** The land use regulation is just one part of the whole Aquifer Protection Act in the General Statutes. Sections 22a-354a through 22a-354bb of the General Statutes include, among other things, procedures for municipal administration including creation of an Agency, adoption of local regulations, appeals, and penalties. Also included are well field mapping requirements, strategic monitoring requirements for Aquifer Protection Areas, and a requirement to inventory agricultural activities in Aquifer Protection Areas and to regulate those agricultural activities.

### Outline of the Aquifer Protection Land Use Regulation

#### (Section 22a-354i-1 through 10) (Revised February 2004)

##### Section 22a-354i-1. Definitions

This section contains the legal definitions used in the regulation. These definitions should be studied carefully since they are a precise statement of the meaning of words and phrases in the regulation. Some particularly important definitions include: Aquifer Protection Area, facility, hazardous material, Level A mapping boundary, registered regulated activity, and regulated activity.

##### Section 22a-354i-2. Delineation of Aquifer Protection Area Boundaries

Requires the municipality to delineate the boundaries of all Aquifer Protection Areas on their municipal zoning maps, or inland wetland maps in the instance when a zoning map is not available, within 120 days of being notified by the Commissioner that a Level A mapping boundary is located in their town.

##### Section 22a-354i-3. Adoption of Municipal Regulations; Commissioner's Approval

Requires a municipality to adopt an aquifer protection regulation within 6 months of notification from the Commissioner that a Level A mapping boundary is located in the town. The municipal regulation must be approved by the Commissioner. If the Commissioner disapproves the regulation, the municipality is given 90 days to adopt and submit a revision. If a municipality wishes to amend a regulation, they must get approval from the Commissioner.

# 13 | Statutes and Regulations

## 13.2 | Summary of State Land Use Regulations (continued)

### **Section 22a-354i-4. Extension of Aquifer Protection Area Boundaries for Administrative Purposes; Approval**

Provides an opportunity for a Municipal Aquifer Protection Agency to request an extension of Aquifer Protection Area boundaries to coincide with the nearest property line or topographic feature to simplify administration of the program. These extensions cannot be made without the written approval of the Commissioner. Municipalities then have 60 days after receiving notice from the Commissioner to delineate such an extension on their mapping.

### **Section 22a-354i-5. Prohibited and Regulated Activities**

This section establishes that regulated activities are prohibited in Aquifer Protection Areas unless registered or permitted, and identifies threshold volumes and some minor activities that are excluded from regulation, such as activities conducted at a residence without compensation, and certain activities using only lubricating oils.

### **Section 22a-354i-6. Application for an Exemption from Prohibition or Regulation**

Provides criteria for applicants to apply for an exemption from prohibition or regulation. Applicants for the exemption must demonstrate to the Commissioner that any hazardous material released into the ground from the facility or business would not render the groundwater unsuitable for drinking without treatment. A period of 60 days is provided for the Municipal Agency, any affected water company, or the Department of Public Health to submit written comments on the application for an exemption. The Commissioner will consider the comments and provide a written reason for rejecting any of the comments submitted.

### **Section 22a-354i-7. Registration of Existing Regulated Activities**

Requires existing regulated activities to submit a registration to the Municipal Aquifer Protection Agency and the Commissioner within 180 days after the adoption of a municipal aquifer protection ordinance. The registration will be processed by the Commissioner or Municipal Agency, as appropriate: Registrations for regulated activities conducted by other state agencies, any person to whom the Commissioner has issued an individual NPDES permit, SPDES permit, RCRA TSDf permit, or any public service company or Large Quantity Generator shall be processed by the Commissioner. Registrations for all other regulated activities will be processed by the Municipal Aquifer Protection Agency. The registration form will request basic information regarding the name and location of the facility, the regulated activities conducted at the facility, and a certification that the regulated activities are conducted in accordance with specified best management practices. The Commissioner or the municipal Aquifer Protection Agency may reject incomplete registrations. If the registration is rejected, the registrant will be notified of what additional information is needed and the date of resubmission. The registration for an existing regulated activity may be transferred to a new owner who intends to continue the existing regulated activity. Registrations must be renewed every five years.

### **Section 22a-354i-8. Permit Requirements**

A permit is required to add a regulated activity to a facility where a registered regulated activity occurs. The information requirements, permit process, criteria for issuing a permit, and provisions of the permit are detailed in section 8. Permits are issued for a ten-year period, after which time they must be renewed. Provisions are included for modifying and transferring a permit.

### **Section 22a-354i-9. Best Management Practices for Regulated Activities**

Basic best management practices for registered and permitted regulated activities are detailed in section 9. These include the following: specifications for storage of hazardous materials (which are consistent with environmental regulations already in place for the storage of hazardous materials); a prohibition on installation of new underground storage tanks for hazardous materials (although an allowance is made for replacing existing underground storage tanks with a larger tank under certain conditions); a conditional prohibition on wastewater infiltration devices; and a requirement to develop, implement and maintain a Materials Management Plan. A stormwater management plan may be required for registered regulated activities at the discretion of the regulating authority (section 7(d)), and must be developed as part of any permit application (Section 8(c)).

### **Section 22a-354i-10. Other State, Federal and Local Laws**

Section 10 states that these land use regulations do not relieve any person of any other obligations under federal, state, or local law.

# 13 | Statutes and Regulations

## 13.3 | State Land Use Regulations

### Aquifer Protection Areas – Land Use Controls

**SECTION 1.** The Regulations of Connecticut State Agencies are amended by adding sections 22a-354i-1 to 22a-354i-10, inclusive, as follows:

**(NEW) Sections 22a-354i-1 to 22a-354i-10.**

Regulations for Delineation of Aquifer Protection Areas on Municipal Maps, Best Management Practices, and Prohibition of Regulated Activities within Such Areas

**Section 22a-354i-1. Definitions**

For the purpose of sections 22a-354i-1 to 22a-354i-10, inclusive, of the Regulations of Connecticut State Agencies, the following definitions apply:

- (1) "Affected water company" means "affected water company" as defined in section 22a-354h of the Connecticut General Statutes;
- (2) "Applicant" means, as appropriate in context, a person who applies for an exemption under section 22a-354i-6 of the Regulations of Connecticut State Agencies, or a permit under section 22a-354i-8 of the Regulations of Connecticut State Agencies;
- (3) "Application" means, as appropriate in context, an application for an exemption under section 22a-354i-6 of the Regulations of Connecticut State Agencies, or an application for a permit under section 22a-354i-8 of the Regulations of Connecticut State Agencies;
- (4) "Aquifer Protection Area" means "Aquifer Protection Area" as defined in section 22a-354h of the Connecticut General Statutes and any extension of such area approved by the Commissioner pursuant to section 22a-354i-4 of the Regulations of Connecticut State Agencies;
- (5) "Area of contribution" means "area of contribution" as defined in section 22a-354h of the Connecticut General Statutes and as mapped in accordance with section 22a-354b-1 of the Regulations of Connecticut State Agencies;
- (6) "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;
- (7) "Certified Hazardous Materials Manager" means a hazardous materials manager certified by the Institute of Hazardous Materials Managers 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;
- (8) "Commissioner" means the Commissioner of Environmental Protection, or his or her agent;
- (9) "Domestic sewage" means "domestic sewage" as defined in section 22a-430-3(a) of the Regulations of Connecticut State Agencies;
- (10) "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 including contiguous land owned, leased, or for which there is an option to purchase by that person;
- (11) "Floor drain" means any opening in a floor or surface, which opening or surface receives materials spilled or deposited thereon;
- (12) "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 section 22a-449(c)-101 of the Regulations of Connecticut State Agencies, (C) any pesticide as defined in section 22a-47 of the Connecticut General Statutes, or (D) any oil or petroleum as defined in section 22a-448 of the Connecticut General Statutes;
- (13) "Hazardous waste" means "hazardous waste" as defined in section 22a-449(c)-101 of the Regulations of Connecticut State Agencies;

# 13 | Statutes and Regulations

## 13.3 | State Land Use Regulations (continued)

- (14) "Industrial laundry" means a facility for washing clothes, cloth or other fabric used in industrial operations;
- (15) "Infiltration device" means any discharge device installed below or above the ground surface, which device is designed to discharge liquid to the ground;
- (16) "Inland wetland map" means a map pursuant to section 22a-42a of the Connecticut General Statutes;
- (17) "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 and Registrar Accreditation Board;
- (18) "Level A mapping boundary" means the lines as shown on Level A maps approved or prepared by the Commissioner pursuant to sections 22a-354c, 22a-354d or 22a-354z of the Connecticut General Statutes encompassing the area of contribution and recharge areas;
- (19) "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;
- (20) "Municipal Aquifer Protection Agency" means the board or commission authorized by the municipality under section 22a-354o of the Connecticut General Statutes;
- (21) "Municipality" means "municipality" as defined in section 22a-354h of the Connecticut General Statutes;
- (22) "Owner" means the owner or lessee of the facility in question;
- (23) "Deicing chemical" means sodium chloride, calcium chloride, or calcium magnesium acetate;
- (24) "Person" means any individual, firm, partnership, association, syndicate, company, trust, corporation, limited liability company, municipality, Agency, political or administrative subdivision of the state, federal agencies as permitted by law, or other legal entity of any kind;
- (25) "Pollution" means "pollution" as defined in section 22a-423 of the Connecticut General Statutes;
- (26) "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;
- (27) "Professional engineer" means a professional engineer licensed in accordance with chapter 391 of the Connecticut General Statutes, 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;
- (28) "Publicly owned treatment works" means "publicly owned treatment works" as defined in section 22a-430-3 of the Regulations of Connecticut State Agencies;
- (29) "Public service company" means "public service company" as defined in section 16-1 of the Connecticut General Statutes;
- (30) "Public supply well" means "public supply well" as defined in section 19-13-B51b of the Regulations of Connecticut State Agencies;
- (31) "Recharge area" means "recharge area" as defined in section 22a-354h of the Connecticut General Statutes and as mapped in accordance with section 22a-354b-1 of the Regulations of Connecticut State Agencies;
- (32) "Registered regulated activity" means a regulated activity that has been registered in accordance with section 22a-354i-7 of the Regulations of Connecticut State Agencies, and is conducted at the facility identified in such registration;
- (33) "Registrant" means a person who or which has submitted a registration for a regulated activity in accordance with section 22a-354i-7 of the Regulations of Connecticut State Agencies;
- (34) "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 sections 22a-354i-5(c) and 22a-354i-6 of the Regulations of Connecticut State Agencies:

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## 13.3 | State Land Use Regulations (continued)

- (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 section 22a-354c or section 22a-354z of the Connecticut General Statutes, 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 issued by the Commissioner pursuant to section 22a-430 of the Connecticut General Statutes: (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, or (v) swimming pools,
- (G) car or truck washing, unless all wastewater 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 service which involves the cleaning of clothes or cloth contaminated by hazardous material, unless all wastewaters from such activity are lawfully 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 section 22a-174-22(a)(3) of the Regulations of Connecticut State Agencies, 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 sections 22a-449(c)-100 to 22a-449(c)-110, inclusive, of the Regulations of Connecticut State Agencies,
- (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,

# 13 | Statutes and Regulations

## 13.3 | State Land Use Regulations (continued)

- (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 under sections 22a-208(i) and 22a-454(e)(1) of the Connecticut General Statutes,
- (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 sections 22a-207b, 22a-208a, and 22a-208c of the Connecticut General Statutes, except for a potable water treatment sludge disposal area,
- (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;
- (35) "Release" means "release" as defined in section 22a-133k-1 of the Regulations of Connecticut State Agencies;
- (36) "State aquifer protection regulations" means sections 22a-354i-1 to 22a-354i-10, inclusive, of the Regulations of Connecticut State Agencies;
- (37) "Storage" means the holding or possession of any hazardous material;
- (38) "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;
- (39) "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;
- (40) "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;
- (41) "Vehicle" or "vehicles" means a "vessel" as defined by section 15-170 of the Connecticut General Statutes, and any vehicle propelled or drawn by any non-muscular power including, without limitation, an automobile, aircraft, all-terrain vehicle or snowmobile;
- (42) "Waters" means "waters" as defined in section 22a-423 of the Connecticut General Statutes;
- (43) "Well field" means "well field" as defined in section 22a-354h of the Connecticut General Statutes; and
- (44) "Zoning district map" means any map showing zoning districts prepared in accordance with maps adopted pursuant to section 8-3 of the Connecticut General Statutes.

### Section 22a-354i-2. Delineation of Aquifer Protection Area Boundaries

- (a) The municipal zoning, planning, or planning and zoning commission shall complete the following not later than one hundred twenty (120) days after being notified by the Commissioner that one or more Level A mapping boundaries are located entirely or partially within such municipality:
  - (1) Delineate such boundaries on the municipal zoning map adopted pursuant to section 8-3 of the Connecticut General Statutes, or on the municipal inland wetlands and watercourses map adopted pursuant to section 22a-42a of the Connecticut General Statutes if such zoning map does not exist;

# 13 | Statutes and Regulations

## 13.3 | State Land Use Regulations (continued)

- (2) designate such delineated areas as Aquifer Protection Areas; and
- (3) publish notice of such delineation in a newspaper having substantial circulation in the area of such delineation.
- (b) The notice required by subsection (a)(3) of this section shall include at least the following:
  - (1) A map or a detailed description of the subject Aquifer Protection Area; and
  - (2) the name, address, and telephone number of a representative of the municipal Aquifer Protection Agency who may be contacted for further information.
- (c) No later than one hundred twenty (120) days after receiving notification from the Commissioner that an Aquifer Protection Area boundary has been amended in accordance with section 22a-354b-1(i) or 22a-354b-1(j) of the Regulations of Connecticut State Agencies, each municipality affected by the amended boundary shall amend such municipal zoning district map or inland wetland map to reflect such amended boundary.

### Section 22a-354i-3. Adoption of Municipal Regulations; Commissioner's Approval

- (a) Not later than six (6) months after a municipality receives notice from the Commissioner that a Level A mapping boundary is located in such municipality, the municipal Aquifer Protection Agency thereof shall adopt regulations pursuant to section 22a-354p of the Connecticut General Statutes.
- (b) The Commissioner shall submit written notification of approval or disapproval of such regulations to the municipal Aquifer Protection Agency pursuant to section 22a-354p(f) of the Connecticut General Statutes. If the Commissioner disapproves a municipal regulation, the municipal Aquifer Protection Agency shall, not later than ninety (90) days after such disapproval, adopt and submit a revision that corrects and addresses the deficiencies identified by the Commissioner. The Commissioner shall consider such revised regulation in the same manner he considers a regulation submitted under this section.
- (c) Once a regulation becomes effective pursuant to section 22a-354p(f) of the Connecticut General Statutes, any amendments thereto shall only become effective when the Commissioner determines, in writing, that the amended regulation is reasonably related to groundwater protection and is not inconsistent with the state aquifer protection regulations.

### Section 22a-354i-4. Extension of Aquifer Protection Area Boundaries for Administrative Purposes; Approval

- (a) A municipal Aquifer Protection Agency may submit a written request to the Commissioner to extend an Aquifer Protection Area boundary adopted under section 22a-354i-2 of the Regulations of Connecticut State Agencies to coincide with the nearest property line, municipal boundary or topographic feature. Such proposed extension shall, at a minimum, fully encompass the Aquifer Protection Areas bounded by the approved Level A mapping but shall not exceed the distance necessary to clarify the location of the Aquifer Protection Area or to facilitate the administration of regulations pertaining thereto. An Aquifer Protection Area boundary may not be extended without prior written approval of the Commissioner.
- (b) Any request by a municipal Aquifer Protection Agency to the Commissioner for extension of an Aquifer Protection Area boundary under subsection (a) of this section shall include at least the following:
  - (1) A map to scale delineating (A) the Level A mapping boundary proposed to be extended within such municipality, and (B) the proposed extension of the Aquifer Protection Area boundary;
  - (2) a certification by the chairperson of the requesting municipal Aquifer Protection Agency that such Agency has provided notice of such request to all owners of property within the proposed extended Aquifer Protection Area and all affected water companies in accordance with the following:
    - (A) Such notice shall include at least the following:
      - (i) A map showing the Aquifer Protection Area boundaries and the proposed extension of such boundaries,
      - (ii) the name, address, and telephone number of a representative of the municipal Aquifer Protection Agency who may be contacted for further information, and
      - (iii) a statement that any person may, not later than thirty (30) days after said notification, submit to the municipal Aquifer Protection Agency written comments on such proposed boundary extension;

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## 13.3 | State Land Use Regulations (continued)

- (B) Such notice shall be effectuated by the following:
  - (i) Delivery of notice by certified mail to those individuals and entities identified in subdivision (2) of this subsection, or
  - (ii) the publication of a notice in a newspaper having substantial circulation in the affected area; and posting of notice near the proposed boundaries of the subject Aquifer Protection Area of at least four signs, each of which must be at least four square feet in size; and
  - (iii) a summary of all comments received by such Agency regarding the proposed extension and its response to each comment.
- (C) Not later than sixty (60) days after receiving the Commissioner's written approval of a request to extend an Aquifer Protection Area boundary, the requesting municipal Aquifer Protection Agency shall delineate such extended boundary on the municipal zoning district or inland wetland map identified in section 22a-354i-2 of the Regulations of Connecticut State Agencies and shall designate such delineated area as an Aquifer Protection Area.

### Section 22a-354i-5. Prohibited And Regulated Activities

- (a) All regulated activities are prohibited in Aquifer Protection Areas, except as specified in subsection (b) of this section.
- (b) The following regulated activities are not prohibited in Aquifer Protection Areas:
  - (1) A registered regulated activity which is conducted in compliance with section 22a-354i-9 of the Regulations of Connecticut State Agencies; and
  - (2) a regulated activity which has received a permit issued pursuant to section 22a-354i-8 of the Regulations of Connecticut State Agencies.
- (c) The following are not regulated activities:
  - (1) Any activity conducted at a residence without compensation;
  - (2) any activity involving the use or storage of no more than two and one-half (2.5) gallons of each type of hazardous material on-site at any one time, provided the total of all hazardous materials on-site does not exceed fifty-five (55) gallons at any one time;
  - (3) any agricultural activity regulated pursuant to section 22a-354m(d) of the Connecticut General Statutes;
  - (4) any activity, provided all the following conditions are satisfied:
    - (A) such activity takes place solely within an enclosed building in an area with an impermeable floor,
    - (B) such activity involves no more than 10% of the floor area in the building where the activity takes place,
    - (C) any hazardous material used in connection with activity is stored in such building at all times,
    - (D) all wastewaters generated by such activity are lawfully disposed through a connection to a publicly owned treatment works, and
    - (E) such activity does not involve (i) repair or maintenance of internal combustion engines including, without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above-ground storage of more than one hundred and ten (110) gallons of hazardous materials;
  - (5) any activity solely involving the use of lubricating oil, provided all the following conditions are satisfied:
    - (A) such activity does not involve cleaning of metals with chlorinated solvents at the facility,
    - (B) such activity takes place solely within an enclosed building in an area with an impermeable floor,
    - (C) any hazardous material used in connection with such activity is stored in such building at all times, and
    - (D) such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above-ground storage of more than 110 gallons of such lubricating oil and associated hazardous waste; and

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## 13.3 | State Land Use Regulations (continued)

- (6) any activity involving the dispensing of oil or petroleum from an above-ground storage tank or tanks with an aggregate volume of 2,000 gallons or less, provided all the following conditions are satisfied:
  - (A) such dispensing activity takes place solely on a paved surface which is covered by a roof,
  - (B) the above-ground storage tank (or tanks) is a double-walled tank with overfill alarms, and
  - (C) all associated piping is either above ground, or has secondary containment.

### Section 22a-354i-6. Application for an Exemption from Prohibition or Regulation

- (a) The Commissioner may, after the receipt of an application in accordance with the provisions of this section, exempt a regulated activity from the state aquifer protection regulations if he determines that such activity does not and will not pose a threat to any public supply well subject to regulation under section 22a-354c or 22a-354z of the Connecticut General Statutes. An exemption shall not be granted unless the owner of such activity clearly and convincingly demonstrates, and the Commissioner finds that, if any hazardous material is released into the ground from the subject regulated activity, treatment would not be required to render the groundwater suitable for drinking. Any exemption granted by the Commissioner shall be in writing, shall explicitly state the findings upon which the exemption was granted, and shall provide for the terms of such exemption.
- (b) An applicant for an exemption under subsection (a) of this section shall submit an application therefor to the Commissioner on a form prescribed by him, and shall concurrently submit a copy of such application to the municipal Aquifer Protection Agency, any affected water company and the Commissioner of Public Health. The application shall include at least the following:
  - (1) A map showing the location of the subject regulated activity plotted on a 1:24,000 scale United States Geological Survey topographic quadrangle base;
  - (2) a description of the purpose and nature of the subject regulated activity, and any associated processes;
  - (3) a description of the chemical composition of the hazardous material and means of disposal of any waste, including wastewater, generated or to be generated in connection with the subject regulated activity;
  - (4) a map showing the location of all points of any wastewater discharged or to be discharged to waters of the state, plotted on a 1:24,000 scale United States Geological Survey topographic quadrangle base, and if the discharge points are of a density such that they may not be clearly shown at the scale of 1:24,000, an enlargement of that area showing the discharge points shall be provided;
  - (5) a written demonstration that any hazardous material released into the ground from the subject regulated activity would not render the groundwater unsuitable for drinking without treatment;
  - (6) any other information that the Commissioner reasonably deems necessary to determine whether the subject regulated activity poses or may pose a threat to the groundwater; and
  - (7) the following certification by the applicant and a certified hazardous materials manager or a professional engineer signed after satisfying the statements set forth in the following certification:

“I have personally examined and am familiar with the information submitted in this exemption application and all attachments, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under section 53a-157b of the Connecticut General Statutes and any other applicable law.”
- (c) A municipal Aquifer Protection Agency, any affected water company or the Commissioner of Public Health may, not later than sixty (60) days after receiving a copy of an application for exemption under this section, submit to the Commissioner written comments on such application. The Commissioner shall give due consideration to any such comments.
- (d) The Commissioner shall send a notice by certified mail to the applicant of his approval or denial of an exemption application and a copy of the notice to the Commissioner of the Department of Public Health, the affected water company and the municipal Aquifer Protection Agency.

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## 13.3 | State Land Use Regulations (continued)

- (e) If the Commissioner denies an application for an exemption for a regulated activity, such regulated activity is prohibited unless such activity can be registered pursuant to section 22a-354i-7 of the Regulations of Connecticut State Agencies. Any such registration shall be made not later than thirty (30) days after receipt of the Commissioner's written disapproval of the exemption. The Commissioner shall send notice of said disapproval by certified mail.

### Section 22a-354i-7. Registration of Regulated Activities

- (a) The Commissioner shall process registrations for those regulated activities specified in section 22a-54p(g) of the Connecticut General Statutes. The municipal Aquifer Protection Agency shall process registrations for all other regulated activities.
- (b) Any person engaged in a regulated activity which substantially commenced, or was in active operation within the past five (5) years, or with respect to which a municipal building permit was issued, either (A) before the effective date of the state aquifer protection regulations, or (B) before the date an applicable Aquifer Protection Area is designated on a municipal zoning district map or inland wetland map, whichever occurs later, shall register the activity on a form prescribed by the Commissioner in accordance with this section unless such person has pending an application for an exemption pursuant to section 22a-354i-6 of the Regulations of Connecticut State Agencies.
  - (1) If the regulated activity is specified in section 22a-354p(g) of the Connecticut General Statutes, the person engaged in such activity shall submit a registration to the Commissioner not later than one hundred eighty (180) days, unless otherwise authorized in writing by the Commissioner, after adoption of regulations pursuant to section 22a-354p of the Connecticut General Statutes; or the designation of the Aquifer Protection Area pursuant to section 22a-354i-2 of the Regulations of Connecticut State Agencies, whichever occurs later. Said person shall simultaneously file a copy of the registration with the municipal Aquifer Protection Agency, Commissioner of Public Health and the affected water company.
  - (2) If the regulated activity is not specified in section 22a-354p(g) of the Connecticut General Statutes, the person engaged in such activity shall submit a registration to the municipal Aquifer Protection Agency not later than one hundred eighty (180) days, unless otherwise authorized in writing by the Commissioner, after adoption of regulations pursuant to section 22a-354p of the Connecticut General Statutes; or the designation of the Aquifer Protection Area pursuant to section 22a-354i-2 of the Regulations of Connecticut State Agencies; whichever occurs later. Said person shall simultaneously file a copy of the registration with the Commissioner, Commissioner of Public Health and the affected water company.
- (c) A registration shall include the following:
  - (1) The name, business telephone number, street address and mailing address of the:
    - (A) Registrant; if the registrant is a corporation or limited partnership, the full name of the facility and such corporation or limited partnership as registered with the Connecticut Secretary of State, and any officer or governing or managing body of any partnership, association, firm or corporation,
    - (B) owner of such facility if different than the registrant, and
    - (C) manager or operator overseeing the operations of such facility;
  - (2) the location of such facility, using street address or other appropriate method of location, and a map showing the property boundaries of the facility on a 1:24,000 scale United States Geological Survey topographic quadrangle base;
  - (3) an identification of the regulated activity or activities conducted at the facility, as described in section 22a-354i-1(34) of the Regulations of Connecticut State Agencies, which regulated activity or activities shall consist of any regulated activity which substantially commenced, was in active operation, or with respect to which a municipal building permit was issued within the past five years; and
  - (4) a certification by the registrant that the subject regulated activity is in compliance with the best management practices set forth in section 22a-354i-9(a) of the Regulations of Connecticut State Agencies, as follows, signed after satisfying the statements set forth in the following certification:

# 13 | Statutes and Regulations

## 13.3 | State Land Use Regulations (continued)

"I have personally examined and am familiar with the information submitted in this registration and all attachments, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in this document or certification may be punishable as a criminal offense under section 53a-157b of the Connecticut General Statutes and any other applicable law."

- (d) When deemed necessary to protect a public supply well subject to regulation under section 22a-354c or section 22a-354z of the Connecticut General Statutes, the Commissioner or the municipal Aquifer Protection Agency, as appropriate, may:
  - (1) require, by written notice, any registrant to submit for review and written approval a Stormwater Management Plan in accordance with section 22a-354i-9(b) of the Regulations of Connecticut State Agencies; if so required, the Stormwater Management Plan shall be implemented immediately upon its approval; or
  - (2) require, by written notice, any registrant to submit for review and written approval the Materials Management Plan prepared in accordance with 22a-354i-9(a)(5) of the Regulations of Connecticut State Agencies; if so required, the Materials Management Plan shall be implemented immediately upon its approval.
- (e) General provisions in the issuance of all registrations are as follows:
  - (1) The Commissioner or municipal Aquifer Protection Agency, as appropriate, has relied in whole or in part on information provided by the registrant and if such information subsequently proves to be false, deceptive, incomplete or inaccurate, the registration may be modified, suspended or revoked;
  - (2) all registrations issued by the Commissioner or municipal Aquifer Protection Agency, as appropriate, are subject to and do not derogate any present or future rights or powers of the Commissioner, municipal Aquifer Protection Agency, or municipality, and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the subject land or activity;
  - (3) a complete registration shall expire five (5) years from the date of receipt of such registration by the Commissioner or municipal Aquifer Protection Agency, as appropriate; and
  - (4) the registrant shall apply to the Commissioner or municipal Aquifer Protection Agency, as appropriate, to renew the registration on a form prescribed by the Commissioner for a facility prior to expiration of such registration. If a registered regulated activity is out of business or inactive when registration renewal is required, a five (5) year allowance shall be in effect from the date the registration expires. If the registrant has not applied to renew the registration within five (5) years of the date the registration expires, the facility is no longer eligible for registration.
- (f) If a regulated activity which is eligible for registration in accordance with subsection (b) of this section fails to be registered or if the registrant of an active registered activity fails to apply for renewal prior to expiration, the Commissioner or municipal Aquifer Protection Agency, as appropriate, may accept a late registration at their discretion, subject to the limitations in subsection (e)(4) of this section.
- (g) The registrant may apply to transfer the registration for a facility. Such application for transfer shall be made to the Commissioner or municipal Aquifer Protection Agency, as appropriate.
  - (1) A registration for regulated activities specified in section 22a-354p(g) of the Connecticut General Statutes may be transferred by the Commissioner. Such transfer shall be executed in conformance with sections 22a-6o and 22a-6m of the Connecticut General Statutes using a form prescribed by the Commissioner.
  - (2) A registration for regulated activities not specified in section 22a-354p(g) of the Connecticut General Statutes may be transferred by the municipal Aquifer Protection Agency. Such transfer shall be executed using a form prescribed by the Commissioner and submitted to the municipal Aquifer Protection Agency.
- (h) If the Commissioner, or the municipal Aquifer Protection Agency, as appropriate, determines that a registration submitted in accordance with subsection (b), (e) or (f) of this section is incomplete, the Commissioner or the municipal Aquifer Protection Agency shall reject the registration and notify the registrant of what additional information is needed and the date by which it must be submitted. If the registration submitted in accordance with subsection (b), (e) or (f) of this section is determined

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## 13.3 | State Land Use Regulations (continued)

to be complete and the regulated activity is eligible for registration, the Commissioner or municipal Aquifer Protection Agency, as appropriate, shall send written notification of such registration to the registrant. Such registration shall be determined to be complete and eligible if the registrant has not otherwise received a notice of rejection or notice that the regulated activity is not eligible for registration from the Commissioner, or the municipal Aquifer Protection Agency, as appropriate, not later than one hundred eighty (180) days after the date the registration is received by the Commissioner or municipal Aquifer Protection Agency, as appropriate.

### Section 22a-354i-8. Permit Requirements

- (a) Any person may apply for a permit to add a regulated activity to a facility where a registered regulated activity occurs.
- (b) The Commissioner shall process permit applications for those regulated activities specified in section 22a-354p(g) of the Connecticut General Statutes. The municipal Aquifer Protection Agency shall process permit applications for all other regulated activities.
- (c) An application for a permit shall be made on a form prescribed by the Commissioner. Simultaneously with filing an application, the applicant shall send a copy of the application to the Commissioner or municipal Aquifer Protection Agency, as appropriate, the Commissioner of Public Health and the affected water company. An application shall include the following information:
  - (1) The information as required for a registration under section 22a-354i-7(c) of the Regulations of Connecticut State Agencies shall be provided for the proposed regulated activity;
  - (2) a confirmation and commitment that all regulated activities at the facility shall:
    - (A) be and remain in compliance with section 22a-354i-9(a) of the Regulations of Connecticut State Agencies,
    - (B) not increase the number of underground storage tanks used for storage of hazardous materials, and
    - (C) be in and remain in compliance with all local, state, and federal environmental laws;
  - (3) a Materials Management Plan prepared in accordance with section 22a-354i-9(a)(5) of the Regulations of Connecticut State Agencies;
  - (4) a Stormwater Management Plan in accordance with section 22a-354i-9(b) of the Regulations of Connecticut State Agencies;
  - (5) the following environmental compliance information with respect to environmental violations which occurred at the facility where the regulated activities are conducted, within the five years immediately preceding the date of the application:
    - (A) any criminal conviction involving a violation of any environmental protection law,
    - (B) any civil penalty imposed in any state or federal judicial proceeding, or any penalty exceeding five thousand dollars imposed in any administrative proceeding, and
    - (C) any judicial or administrative orders issued regarding any such violation together with the dates, case or docket numbers, or other information which identifies the proceeding. For any such proceeding initiated by the state or federal government, the Commissioner, or municipal Aquifer Protection Agency as appropriate, may require submission of a copy of any official document associated with the proceeding, the final judgment or order;
  - (6) for regulated activities specified in section 22a-354p(g) of the Connecticut General Statutes, the compliance information required by subdivision (5) of this subsection is in addition to any information that the Commissioner may require pursuant to section 22a-6m of the Connecticut General Statutes;
  - (7) any additional information deemed necessary by the Commissioner or municipal aquifer protection Agency as appropriate, regarding potential threats to the groundwater and proposed safeguards; and
  - (8) the following certification signed by the applicant and the individual responsible for preparing the application, after satisfying the statements set forth in the certification:

# 13 | Statutes and Regulations

## 13.3 | State Land Use Regulations (continued)

"I have personally examined and am familiar with the information submitted in this document and all attachments, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under section 53a-157b of the Connecticut General Statutes and any other applicable law."

- (d) A municipal Aquifer Protection Agency, the Commissioner, any affected water company or the Commissioner of Public Health may, not later than sixty (60) days after receiving a copy of an application for a permit under this section, submit to the Commissioner or municipal Aquifer Protection Agency, as appropriate, written comments on such application. The Commissioner or municipal Aquifer Protection Agency, as appropriate, shall give due consideration to any such comments, and shall provide a copy of the decision to the Commissioner or municipal Aquifer Protection Agency, as appropriate, the affected water company and the Commissioner of Public Health.
- (e) The Commissioner or municipal Aquifer Protection Agency, as appropriate, shall not issue a permit unless a complete application has been received and the applicant demonstrates, to the Commissioner's or municipal Aquifer Protection Agency's satisfaction, as appropriate, that all applicable requirements of this section have been satisfied and all of the following standards and criteria have been met:
  - (1) The proposed regulated activity shall take place at a facility where a registered regulated activity occurs;
  - (2) the proposed regulated activity shall not increase the number or storage capacity of underground storage tanks used for hazardous materials except for the replacement of an existing underground storage tank in accordance with section 22a-354i-9(a)(3) of the Regulations of Connecticut State Agencies;
  - (3) the Materials Management Plan and Stormwater Management Plan have been satisfactorily prepared in accordance with sections 22a-354i-9(a)(5) and 22a-354i-9(b), respectively, of the Regulations of Connecticut State Agencies;
  - (4) the applicant has submitted a confirmation and commitment that all regulated activities shall be and remain in compliance with all local, state and federal environmental laws in accordance with subsection (c)(2)(C) of this section;
  - (5) the applicant's compliance record shall not indicate (A) that any noncompliance resulted from indifference to or disregard for the legal requirements, (B) an unwillingness or inability to devote the resources necessary to comply and remain in compliance, or (C) that instances of noncompliance have led to serious environmental harm, harm to human health or safety, or a substantial risk of such harm;
  - (6) the proposed regulated activity shall be conducted in accordance with section 22a-354i-9 of the Regulations of Connecticut State Agencies;
  - (7) the registered regulated activity is being conducted in accordance with section 22a-354i-9 of the Regulations of Connecticut State Agencies; and
  - (8) the certification required under subsection (c)(8) of this section has been signed by the applicant and the individual responsible for preparing the application.
- (f) The Commissioner or municipal Aquifer Protection Agency, as appropriate, may impose reasonable conditions or limitations on any permit issued under this section to assure protection of the groundwater including, but not limited to, the following:
  - (1) Best management practices in addition to those set forth in section 22a-354i-9 of the Regulations of Connecticut State Agencies; and
  - (2) groundwater monitoring.
- (g) General provisions in the issuance of all permits are as follows:
  - (1) The Commissioner or municipal Aquifer Protection Agency, as appropriate, has relied in whole or in part on information provided by the applicant, and if such information subsequently proves to be false, deceptive, incomplete or inaccurate, the permit may be modified, suspended or revoked;
  - (2) all permits issued by the Commissioner or municipal Aquifer Protection Agency, as appropriate, are subject to and do not derogate any present or future rights or powers of the Commissioner, municipal Aquifer Protection Agency, or

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## 13.3 | State Land Use Regulations (continued)

municipality, and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the subject land or activity; and

- (3) the permit shall expire ten (10) years from the date of issuance of such permit by the Commissioner or municipal Aquifer Protection Agency, as appropriate.
- (4) A person shall apply to the Commissioner or municipal Aquifer Protection Agency, as appropriate, to renew the permit on a form prescribed by the Commissioner prior to expiration of such permit. Such renewal shall be granted upon request by the Commissioner or municipal Aquifer Protection Agency, as appropriate, 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 shall be submitted and reviewed in accordance with the provisions of this section of the Regulations of Connecticut State Agencies.
- (h) A person may request a modification of a permit from the Commissioner or municipal Aquifer Protection Agency, as appropriate. Such request shall be on a form prescribed by the Commissioner, and shall include the facts and reasons supporting the request. The Commissioner or municipal Aquifer Protection Agency, as appropriate, may require the applicant to submit a new application for a permit or renewal in lieu of a modification request.
- (i) A person may apply to transfer the permit for a facility. Such application for transfer shall be made to the Commissioner or municipal Aquifer Protection Agency, as appropriate.
  - (1) A permit for regulated activities specified in section 22a-35p(g) of the Connecticut General Statutes may be transferred by the Commissioner. Such transfer shall be executed in conformance with sections 22a-6o and 22a-6m of the Connecticut General Statutes using a form prescribed by the Commissioner.
  - (2) A permit for regulated activities not specified in section 22a-35p(g) of the Connecticut General Statutes may be transferred by the municipal Aquifer Protection Agency. Such transfer shall be executed using a form prescribed by the Commissioner and submitted to the municipal Aquifer Protection Agency.

### Section 22a-354i-9. Best Management Practices for Regulated Activities

- (a) Every regulated activity shall be conducted in accordance with the following:
  - (1) Hazardous materials may be stored above ground within an Aquifer Protection Area only in accordance with the following conditions:
    - (A) hazardous material shall be stored in a building or under a roof that minimizes stormwater entry to the hazardous material storage area, except that a roof is not required for a bulk storage facility as defined in section 22a-354i-1(6) of the Regulations of Connecticut State Agencies,
    - (B) floors within a building or under a roof where hazardous material may be stored shall be constructed or treated to protect the surface of the floor from deterioration due to spillage of any such material,
    - (C) a structure which may be used for storage or transfer of hazardous material shall be protected from stormwater run-on and groundwater intrusion,
    - (D) hazardous material shall be stored within an impermeable containment area which is capable of containing at least the volume of the largest container of such hazardous material present in such area, or 10% of the total volume of all such containers in such area, whichever is larger, without overflow of released hazardous material from the containment area,
    - (E) hazardous material shall not be stored with other hazardous materials that are incompatible and may create a hazard of fire, explosion or generation of toxic substances,
    - (F) hazardous material shall be stored only in a container that has been certified by a state or federal Agency or the American Society of Testing Materials as suitable for the transport or storage of such material,
    - (G) hazardous material shall be stored only in an area that is secured against unauthorized entry by the public, and

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## 13.3 | State Land Use Regulations (continued)

- (H) the requirements of this subdivision are intended to supplement, and not to supersede, any other applicable requirements of federal, state, or local law, including applicable requirements of the Resource Conservation and Recovery Act of 1976, as amended;
- (2) no person shall increase the number of underground storage tanks used to store hazardous materials;
  - (3) an underground storage tank used to store hazardous materials shall not be replaced with a larger tank unless (A) there is no more than a 25% increase in volume of the larger replacement tank, and (B) the larger replacement tank is a double-walled tank with coaxial piping, both meeting new installation component standards pursuant to 22a-449(d)-1(e) and 22a-449(d)-102 of the Regulations of Connecticut State Agencies, and with interstitial monitoring;
  - (4) no person shall use, maintain or install floor drains, dry wells or other infiltration devices or appurtenances which allow the release of wastewaters to the ground, unless such release is permitted by the Commissioner in accordance with sections 22a-430 or 22a-430b of the Connecticut General Statutes; and
  - (5) a Materials Management Plan shall be developed and implemented in accordance with the following:
    - (A) a Materials Management Plan shall contain, at a minimum, the following information with respect to the subject regulated activity:
      - (i) a pollution prevention assessment consisting of a detailed evaluation of alternatives to the use of hazardous materials, or processes and practices that would reduce or eliminate the use of hazardous materials, and implementation of such alternatives where possible and feasible,
      - (ii) a description of any operations or practices which may pose a threat of pollution to the aquifer, which shall include the following:
        - (a) a process flow diagram identifying where hazardous materials are stored, disposed and used, and where hazardous wastes are generated and subsequently stored and disposed,
        - (b) an inventory of all hazardous materials which are likely to be or will be manufactured, produced, stored, utilized or otherwise handled, and
        - (c) a description of waste, including wastewater generated, and a description of how such wastes are handled, stored and disposed,
      - (iii) the name, street address, mailing address, title and telephone number of the individual(s) responsible for implementing the Materials Management Plan and the individual(s) who should be contacted in an emergency,
      - (iv) a recordkeeping system to account for the types, quantities, and disposition of hazardous materials which are manufactured, produced, utilized, stored or otherwise handled, or which are discharged or emitted; such recordkeeping system shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal Aquifer Protection Agency, and
      - (v) an emergency response plan for responding to a release of hazardous materials. Such plan shall describe how each such release could result in pollution to the underlying aquifer and shall set forth the methods used or to be used to prevent and abate any such a release;
    - (B) when a Materials Management Plan is required under either section 22a-354i-7(d) or 22a-354i-8(c), such Materials Management Plan shall be completed and certified by a professional engineer or a certified hazardous materials manager, or, if the facility where the regulated activity is conducted has received and maintained an ISO 14001 environmental management system certification, then the registrant may complete and certify the Materials Management Plan; and
    - (C) the Materials Management Plan shall be maintained at the subject facility and shall be made available thereat for inspection during normal business hours by the Commissioner and the municipal Aquifer Protection Agency.

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## 13.3 | State Land Use Regulations (continued)

- (b) the development and implementation of a Stormwater Management Plan shall be required for regulated activities in accordance with sections 22a-354i-7(d) and 22a-354i-8(c) of the Regulations of Connecticut State Agencies, as follows:
  - (1) a Stormwater Management Plan shall assure that stormwater runoff generated by the subject regulated activity is
    - (i) managed in a manner so as to prevent pollution of groundwater, and
    - (ii) shall comply with all of the requirements for the General Permit of the Discharge of Stormwater associated with a Commercial Activity issued pursuant to section 22a-430b of the Connecticut General Statutes; and
  - (2) upon approval by the Commissioner or the municipal Aquifer Protection Agency, as appropriate, the Stormwater Management Plan shall be enforceable by the Commissioner or such Agency, as appropriate.

### **Section 22a-354i-10. Other State, Federal and Local Laws**

Nothing in any exemption issued under section 22a-354i-6 of the Regulations of Connecticut State Agencies, any registration submitted under section 22a-354i-7 of the Regulations of Connecticut State Agencies, or any regulated activity permitted under section 22a-354i-8 of the Regulations of Connecticut State Agencies shall relieve any person of any other obligations under any local, state, or federal law.

### **Statement of Purpose**

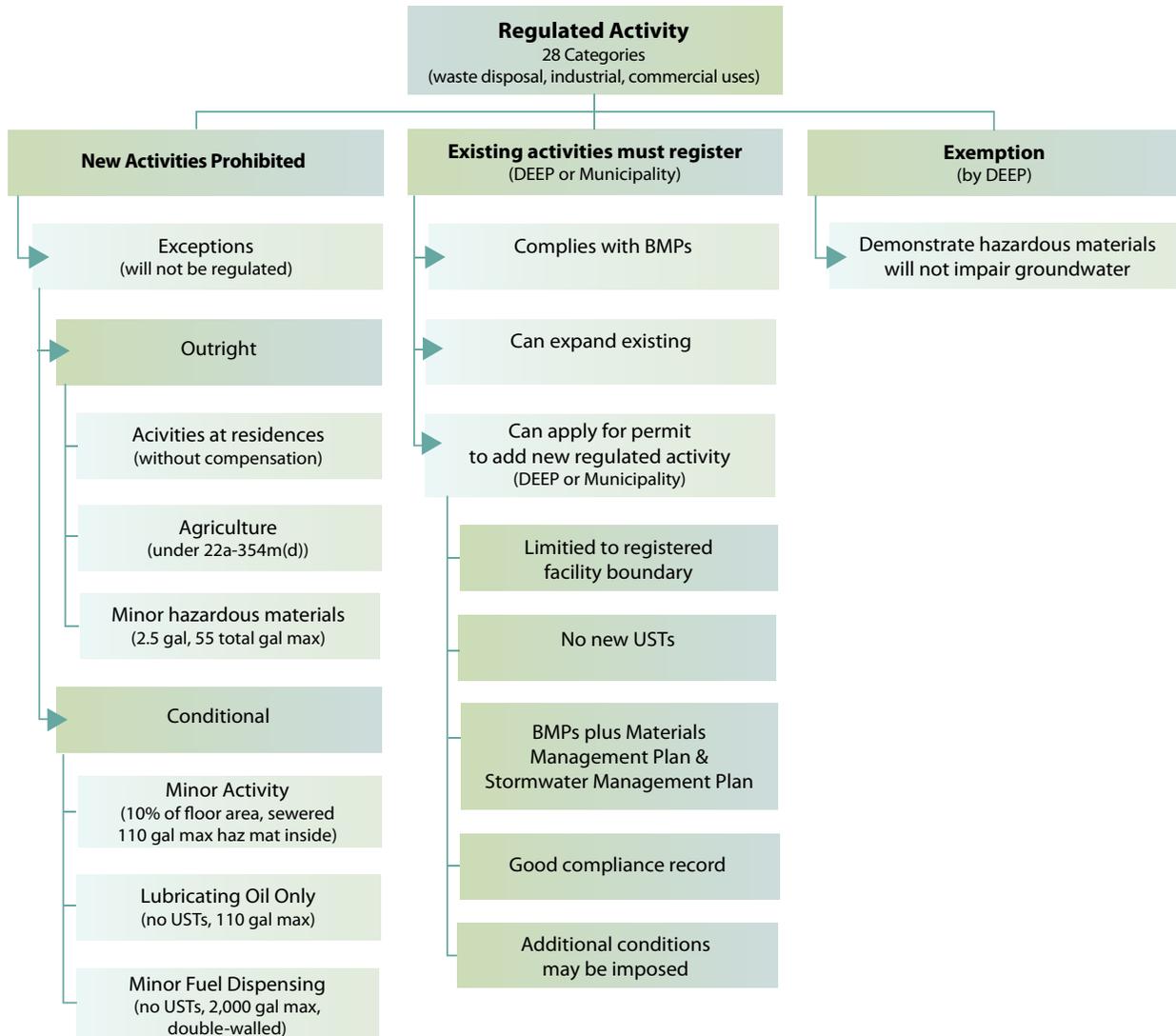
To establish Aquifer Protection Areas and prohibitions of regulated activities proposed to be located entirely or in part within Aquifer Protection Areas, to establish best management practices for regulated activities, provide a permit process for adding regulated activities to a facility where a registered regulated activity occurs, and provide for an application process for exempting certain regulated activities from regulation in an Aquifer Protection Area in cases where the Commissioner determines that such regulated activity does not pose a threat to the groundwater.

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## 13.4 | State Land Use Regulations Flow Chart

### Aquifer Protection Area Land Use Regulations

Section 22a-354i-1 through 10 of the RCSA





APPENDICES

# Appendices

# 14 | Appendices

## 14.1 Table of Regulated Land Uses<sup>1</sup>

REGULATED ACTIVITY	INCLUSIONS/ EXCEPTIONS	TYPICAL LAND USE <sup>2</sup>	ACTIVITY (A)/ CHEMICAL (C) OF CONCERN
<b>Underground Storage or Transmission of Oil, Petroleum or Hazardous Material</b> RCSA Sec. 22a-354i-1(34)(A)	Includes all except: 1. Activities preempted by federal law (pipelines, etc.) 2. An underground storage tank that contains #2 fuel oil and is located more than 500 feet from an APA well 3. 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	Gas station, automotive or fleet garage, misc. businesses	A Tank, pipeline or joint leaks or breaks C Liquid fuel, hazardous material
<b>Oil or Petroleum Dispensing</b> RCSA Sec. 22a-354i-1(34)(B)	Includes all retail, wholesale or fleet use except above-ground storage of <2,000 gallons, subject to conditions – see RCSA Sec. 22a-354i 5(c)(6)	Gas station, automotive or fleet garage, fuel oil dealers, misc. businesses	A Leaks, drips, tank ruptures C Hydrocarbons, benzene and other contaminants
<b>Wholesale Hazardous Materials</b> RCSA Sec. 22a-354i-1(34)(C)	Includes all on-site storage of hazardous materials for the purpose of wholesale sale	Chemical warehouses, bulk storage facility, tank farm	Large volumes of various materials and products handled, stored and distributed that might contaminate groundwater as a result of accidents, poor management practices, flooding or fires. Solvents, organic and inorganic chemicals, and hydrocarbon contamination threats
<b>Vehicle Repair or Maintenance</b> RCSA Sec. 22a-354i-1(34)(D)	Includes all 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	Auto service, car dealers, auto body repair, aircraft repair, boat or marine dealer repair, fleet or municipal garage, marine, recreational, motorcycle dealer, construction equipment repair or rental, tractor and lawn mower repair, and related uses	A Fuel storage, use and storage of oils, paints, thinners, various solvents, brake and transmission fluids C Hydrocarbons, solvents, benzene
<b>Salvage Operations</b> RCSA Sec. 22a-354i-1(34)(E)	Includes all salvage operations of metal or vehicle parts	Junkyards, salvage yards	A Fuel storage, use and storage of oils, paints, thinners, various solvents, brake and transmission fluids C Hydrocarbons, solvents, benzene

<sup>1</sup> Please note that the intent of this table is to provide guidance, therefore the language of the regulation is simplified for ease of use. See Regulations of Connecticut State Agencies (RCSA) Sec. 22a-354i-1 for specific language.

<sup>2</sup> This is not an exhaustive list of land uses, just examples of the types of land use to clarify categories.

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## 14.1 Table of Regulated Land Uses (continued)

REGULATED ACTIVITY	INCLUSIONS/ EXCEPTIONS	TYPICAL LAND USE	ACTIVITY (A)/ CHEMICAL(C) OF CONCERN
<b>Non-Domestic Wastewater Discharges to Ground</b> RCSA Sec. 22a-354i-1(34)(F)	Includes all except: 1. domestic sewage 2. stormwater (see BMPs) 3. the following if they have a DEEP discharge permit: (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, or (v) swimming pools	Miscellaneous industrial businesses or commercial service facilities	A Discharge of non-biodegradable waste to groundwater  C Persistent organic and inorganic compounds
<b>Chemical Production</b> RCSA Sec. 22a-354i-1(34)(H)	Includes all production or refining of chemicals, including hazardous materials or asphalt	Chemical, petroleum, asphalt, pesticide manufacturers	A Storage, use & production of chemicals, equipment cleaning and maintenance, hazardous waste generation  C Organic and inorganic chemicals
<b>Clothes or Cloth Cleaning Service</b> RCSA Sec. 22a-354i-1(34)(I)	Includes clothes or cloth cleaning services which involves the use, storage or disposal of hazardous materials, including dry-cleaning solvents	Dry cleaners	Dry cleaning solvents, storage, use and disposal. Industrial strength cleaning solvents/ agents
<b>Power Generation</b> RCSA Sec. 22a-354i-1(34)(K)	Includes all generation of electrical power by means of fossil fuels except generation:  1. by an emergency engine (as defined in Sec. 22a-174-22(a)(3) of the RCSA)  2. by means of natural gas or propane	Power plants	Risks associated with fuels storage/use, large quantities of waste generation, machine shops, equipment maintenance
<b>Electrical, Electronics Production</b> RCSA Sec. 22a-354i-1(34)(L)	Includes 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	Electrical equipment or electronics manufacturer	A Storage and use of hazardous material, hazardous waste generation, equipment cleaning and maintenance, machine shops  C Heavy metals, chlorinated solvents, strong acids and alkalis, paint and thinner wastes and waste oils

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## 14.1 Table of Regulated Land Uses (continued)

REGULATED ACTIVITY	INCLUSIONS/ EXCEPTIONS	TYPICAL LAND USE	ACTIVITY(A)/ CHEMICAL(C) OF CONCERN
<b>Furniture Stripping</b> RCSA Sec. 22a-354i-1(34)(N)	Includes furniture stripping operations which involve the use, storage or disposal of hazardous materials	Furniture strippers	<p>A General use of cleaning solvents, hazardous materials</p> <p>C Chlorinated solvents</p>
<b>Hazardous Waste Storage, Treatment or Disposal Facility</b> RCSA Sec. 22a-354i-1(34)(P)	Includes all storage, treatment or disposal of hazardous waste subject to a permit under Sec. 22a-449(c)-100 to Sec. 22a-449(c)-110, inclusive, of the RCSA	Hazardous waste storage, treatment or disposal facility	<p>A Spills, leaks, and possible leachate from storage and processing of wastes</p> <p>C Various potential organic and inorganic contaminants</p>
<b>Pest Control Services</b> RCSA Sec. 22a-354i-1(34)(R)	Includes pest control services which involve storage, mixing or loading of pesticides or other hazardous materials	Lawn care, pest control services	<p>A Storage and mixing of chemicals, equipment cleaning, equipment fueling and maintenance</p> <p>C Various pesticides</p>
<b>Production or Fabrication of Metal</b> RCSA Sec. 22a-354i-1(34)(T)	Includes 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	Metal foundry, finisher, machine shop, fabricator, plater	<p>A Storage and use of hazardous material, hazardous waste generation, equipment cleaning and maintenance, machine shops</p> <p>C Heavy metals, chlorinated solvents, strong acids and alkalis, waste oils, phenols, PCBs, Cyanides</p>
<b>Printing</b> RCSA Sec. 22a-354i-1(34)(U)	Includes printing, plate making, lithography, photoengraving, or gravure, which involves the use, storage or disposal of hazardous materials	Printer or publisher	<p>A Storage and use of ink chemicals, equipment cleaning, engraving</p> <p>C Chlorinated solvents, phenols, hydrocarbon compounds</p>
<b>Waste Recycling Facility</b> RCSA Sec. 22a-354i-1(34)(V)	Includes accumulation or storage of waste oil, antifreeze or spent lead-acid batteries which are subject to a general permit issued under § 22a-208(i) and 22a-454(e)(1) of the CGS	Recycling facility, collection or transfer station	<p>A Released leachate generation from waste collection and storage</p> <p>C Numerous chemical constituents</p>
<b>Rubber or Resin Production</b> RCSA Sec. 22a-354i-1(34)(W)	Includes production of rubber, resin cements, elastomers or plastic, which involves the use, storage or disposal of hazardous materials	Rubber, resin, elastomer or plastic manufacturer	<p>A Raw material storage, process hazardous waste generation, machine shops</p> <p>C Waste oils, solvents, phenols, strong organic and inorganic wastes</p>

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14.1 Table of Regulated Land Uses (continued)

REGULATED ACTIVITY	INCLUSIONS/ EXCEPTIONS	TYPICAL LAND USE	ACTIVITY(A)/ CHEMICAL(C) OF CONCERN
<b>Storage of Deicing Chemicals</b> RCSA Sec. 22a-354i-1(34)(X)	Includes all unless storage takes place within a weather-tight waterproof structure for the purpose of retail sale or for the purpose of deicing parking areas or access roads to parking areas	Salt storage facility, fleet state or municipal garage	A Stockpiling of road salt for deicing of roads and parking areas C Sodium chloride, de-caking agents
<b>Solid Waste Facility</b> RCSA Sec. 22a-354i-1(34)(Y)	Includes 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 § 22a-207b, 22a-208a, and § 22a-208c of the CGS except a potable water treatment sludge disposal area	Solid waste facilities, landfill, transfer station, composting facilities, processing centers	A Spills, leaks, and leachate from storage, processing and disposal of wastes C Various potential organic and inorganic contaminants
<b>Textiles Production</b> RCSA Sec. 22a-354i-1(34)(Z)	Includes dyeing, coating or printing of textiles, or tanning or finishing of leather, which activity involves the use, storage or disposal of hazardous materials	Textile manufacturer, tannery	A Storage and use of hazardous materials, equipment cleaning, and hazardous wastes C Strong acids and alkalis, dyes, solvents, metals and hydrocarbons
<b>Reconstituted Wood Production, Wood Treatment</b> RCSA Sec. 22a-354i-1(34)(AA)	Includes production of wood veneer, plywood, reconstituted wood or pressure-treated wood, which involves the use, storage or disposal of hazardous materials	Reconstituted wood manufacturing, wood treatment	A Chemical treatment of wood, chemical storage C Creosotes, tars, trichlorophenol, pentachlorophenol, metals, solvents, oils
<b>Pulp Production</b> RCSA Sec. 22a-354i-1(34)(BB)	Includes pulp production processes that involve bleaching	Pulp, paper, cardboard manufacturer	A Storage and use of hazardous and nonhazardous materials, large quantities of waste generation C Toxic organic and inorganic chemicals metals, chlorinated hydrocarbons

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## 14.1 Table of Regulated Land Uses (continued)

The following are Regulated Activities unless all wastewater from such activity is lawfully disposed of through a public sewer.

REGULATED ACTIVITY	INCLUSIONS/EXCEPTIONS	TYPICAL LAND USE
<b>Car or Truck Washing</b> RCSA Sec. 22a-354i-1(34)(G)	Includes all	Car and truck washes, possibly vehicle sales or service
<b>Industrial Laundry Service</b> RCSA Sec. 22a-354i-1(34)(J)	Includes industrial laundry service which involves the cleaning of clothes or cloth contaminated by hazardous material (but does not use dry-cleaning solvents for cleaning; dry cleaners are regulated under RCSA Sec. 22a-354i-1(34)(I))	Industrial laundries
<b>Embalming or Crematory Services</b> RCSA Sec. 22a-354i-1(34)(M)	Includes embalming or crematory services which involve the use, storage or disposal of hazardous materials	Funeral homes, crematories
<b>Furniture Finishing</b> RCSA Sec. 22a-354i-1(34)(O)	Includes furniture finishing operations which involve the use, storage or disposal of hazardous materials (but not stripping; furniture stripping is regulated under RCSA Sec. 22a-354i-1(34)(N))	Furniture manufacturer or repair
<b>Biological or Chemical Testing</b> RCSA Sec. 22a-354i-1(34)(Q)	Includes biological or chemical testing, analysis or research which involves the use, storage or disposal of hazardous material except on-site testing of a public supply well by a water utility	Biological or chemical laboratories
<b>Photographic Finishing</b> RCSA Sec. 22a-354i-1(34)(S)	Includes photographic finishing which involves the use, storage or disposal of hazardous materials	Photographic finishing laboratories

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## 14.1 Table of Regulated Land Uses (continued)

Non-Regulated, Conditional Exceptions		
ACTIVITY	CONDITIONS	POTENTIAL EXAMPLES
<p><b>Any regulated activity provided all the following conditions are satisfied</b></p> <p><b>RCSA Sec. 22a-354i-5(c)(4)</b></p>	<ol style="list-style-type: none"> <li>1. such activity does not involve cleaning of metals with chlorinated solvents at the facility</li> <li>2. such activity takes place solely within an enclosed building in an area with an impermeable floor</li> <li>3. any hazardous material used in connection with such activity is stored in such building at all times, and</li> <li>4. such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above-ground storage of more than one hundred and ten (110) gallons of such lubricating oil and associated hazardous waste</li> </ol>	<p>Shop with machinery that requires lubrication to run, but does not handle hazardous materials in process.</p>
<p><b>Any regulated activity solely involving the use of lubricating oil provided all the following conditions are satisfied</b></p> <p><b>RCSA Sec. 22a-354i-5(e)(5)</b></p>	<ol style="list-style-type: none"> <li>1. such activity does not involve cleaning of metals with chlorinated solvents at the facility</li> <li>2. such activity takes place solely within an enclosed building in an area with an impermeable floor</li> <li>3. any hazardous material used in connection with such activity is stored in such building at all times, and</li> <li>4. such activity does not involve (i) repair or maintenance of internal combustion engines, including without limitation, vehicles, or equipment associated with such vehicles, (ii) underground storage of any hazardous material, or (iii) above-ground storage of more than 110 gallons of such lubricating oil and associated hazardous waste</li> </ol>	<p>Shop with machinery that requires lubrication to run, but does not handle hazardous materials in process.</p>
<p><b>Any regulated activity involving the dispensing of oil or petroleum from an above-ground storage tank(s) with an aggregate volume of 2,000 gal. or less, provided all the following conditions are satisfied</b></p> <p><b>RCSA Sec. 22a-354i-5(c)(6)</b></p>	<ol style="list-style-type: none"> <li>1. such dispensing activity takes place solely on a paved surface which is covered by a roof</li> <li>2. the above-ground storage tank (or tanks) is a double-walled tank with overfill alarms, and</li> <li>3. all associated piping is either above ground, or has secondary containment</li> </ol>	<p>Small fleet facility</p>

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## 14.1 Table of Regulated Land Uses (continued)

Non-Regulated Exceptions		
ACTIVITY	CONDITIONS	POTENTIAL EXAMPLES
<b>Residential</b> RCSA Sec. 22a-354i-5(c)(1)	Any regulated activity conducted at a residence without compensation	Home maintenance of vehicles, home hobbies
<b>Minor Hazardous Material Use</b> RCSA Sec. 22a-354i-5(c)(2)	Any regulated activity involving the use or storage of no more than two and one-half (2.5) gallons of each type of hazardous material on-site at any one time, provided the total of all hazardous materials on-site does not exceed fifty-five (55) gallons at any one time	Small research and development businesses, misc. retail, schools and other small institutions
<b>Agriculture</b> RCSA Sec. 22a-354i-5(c)(3)	Any agricultural activity regulated pursuant to § 22a-354m(d) of the Connecticut General Statutes (agriculture whose annual gross sales are \$2,500.00 or more)	Farming, dairying, forestry, raising or harvesting livestock (including horses, bees, poultry, fur-bearing animals and wildlife, oysters, clams, mussels, other shellfish and fish), fruits, vegetables, plants, mushrooms, maple sugar/syrup, lumber

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## 14.2 Principal Groundwater Contaminants Table

Principal Groundwater Contaminants				
CONTAMINANT (with examples)	SOURCES	ENVIRONMENTAL FATE	HEALTH EFFECTS	TREATMENT OPTIONS
<b>Solvents</b> <ul style="list-style-type: none"> <li>• naphthalene</li> <li>• toluene</li> <li>• benzene</li> <li>• tetrachloroethylene</li> <li>• trichloroethane</li> <li>• vinyl chloride</li> </ul>	<ul style="list-style-type: none"> <li>• industry</li> <li>• vehicle maintenance</li> <li>• metal parts cleaning, degreasing</li> <li>• dry cleaning</li> <li>• furniture finishing</li> <li>• printing</li> <li>• gasoline additives</li> <li>• cleaning products</li> <li>• improper disposal in septic systems</li> <li>• septic tank cleaners</li> </ul>	<b>Surface:</b> volatilize readily  <b>Soil:</b> resist biodegradation; breakdown products may be toxic  <b>Groundwater:</b> very mobile and persistent; some are denser than water and move downward to bedrock	Vinyl chloride and benzene are known human carcinogens; some others, especially chlorinated solvents, are suspected carcinogens; can cause a range of other health effects, including central nervous system effects, irritation of respiratory and gastrointestinal systems	Evaporation by aeration (public supplies); carbon filtration
<b>Petroleum Products</b> <ul style="list-style-type: none"> <li>• gasoline</li> <li>• motor oil</li> <li>• fuel oil</li> </ul>	<ul style="list-style-type: none"> <li>• vehicle maintenance</li> <li>• automobile service stations</li> <li>• heating fuel tanks</li> <li>• industrial machinery</li> </ul>	<b>Surface:</b> light oils, gasoline volatilize readily  <b>Soil:</b> low solubility, may persist in pore spaces and be leached into groundwater by precipitation for long period  <b>Groundwater:</b> gasoline and light oils float on water table; heavy oils less mobile; move down to bedrock	Petroleum products can produce a variety of toxic effects, including central nervous system damage, irritation of respiratory and gastrointestinal systems; benzene, a gasoline additive, causes leukemia in humans	Same as solvents
<b>Pesticides</b> <ul style="list-style-type: none"> <li>• chlorinated hydrocarbons (chlordane, EDB)</li> <li>• carbamates (Aldicarb)</li> <li>• organophosphates (Malathion)</li> </ul>	<ul style="list-style-type: none"> <li>• agriculture</li> <li>• lawn applications</li> <li>• pesticide manufacture, storage</li> </ul>	<b>Highly variable:</b> chlorinated hydrocarbons tend to be very persistent, highly susceptible to leaching, and produce toxic breakdown products; other pesticides may be degraded to inert forms or bound to soil particles	Wide range of toxicity to humans; many pesticides are highly toxic, cause central nervous system damage, or are suspected carcinogens	Some can be removed by carbon filtration or aeration
<b>Nitrates</b>	<ul style="list-style-type: none"> <li>• agriculture (fertilizers and manures)</li> <li>• lawn care</li> <li>• septic systems</li> <li>• sewage treatment and collection systems</li> </ul>	<b>Soil:</b> highly soluble, very mobile; can be taken up by growing plants  <b>Groundwater:</b> very mobile and persistent	Nitrates react with blood hemoglobin, impairing ability to transport oxygen; infants can be fatally affected at relatively low concentrations.	Reverse osmosis (small quantities)

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## 14.2 Principal Groundwater Contaminants Table (continued)

Principal Groundwater Contaminants				
CONTAMINANT (with examples)	SOURCES	ENVIRONMENTAL FATE	HEALTH EFFECTS	TREATMENT OPTIONS
<b>Biological Pollutants</b> <ul style="list-style-type: none"> <li>• bacteria</li> <li>• viruses</li> <li>• parasites</li> </ul>	<ul style="list-style-type: none"> <li>• septic and sewage systems</li> <li>• agriculture (manures)</li> </ul>	<b>Soil:</b> bacteria and parasites readily removed by soil filtration	Bacteria cause gastrointestinal diseases (cholera, typhoid, enteritis, hepatitis); viral disease from groundwater uncommon, but no good lab tests available	Disinfection by boiling, chlorination or other methods
<b>Salt (sodium chloride)</b>	<ul style="list-style-type: none"> <li>• road salt storage application</li> <li>• home water-softener backwash</li> <li>• saltwater intrusion (near coast)</li> </ul>	<b>Soil:</b> very soluble, highly mobile  <b>Groundwater:</b> mobile and persistent	Excessive sodium intake has been linked with high blood pressure and hypertension	Reverse osmosis (small quantities)
<b>Metals</b> <ul style="list-style-type: none"> <li>• lead</li> <li>• chromium</li> <li>• silver</li> <li>• mercury</li> <li>• aluminum</li> <li>• iron</li> <li>• manganese</li> </ul>	<ul style="list-style-type: none"> <li>• metal finishing and metal working industries</li> <li>• photo and X-ray processing</li> <li>• printing, painting</li> <li>• automobile radiator and body shops</li> </ul>	<b>Soil and Groundwater:</b> metals readily removed by reactions with soil particles under neutral to basic conditions, but soluble and mobile in acidic waters	Some heavy metals (e.g., lead, chromium) are highly toxic, cause developmental and nervous system effects; iron, manganese low in toxicity	pH adjustment to neutralize water and filtration of precipitate
<b>Acids/Bases</b>	<ul style="list-style-type: none"> <li>• industry</li> <li>• photo processing</li> <li>• printing</li> <li>• painting</li> <li>• automobile radiator and body shops</li> </ul>	<b>Soil and Groundwater:</b> mobile and persistent except in presence of natural pH buffers (e.g., limestone)	Acids and bases are rarely a significant health hazard in themselves, but they affect the solubility of toxic metals	pH adjustment

## 14.3 | Inspection Guidelines

This section is intended to serve as a guide for conducting inspections of land use activities within aquifer protection areas to identify conditions that may negatively impact the quality of groundwater. This document can be used by both water utility personnel and APA Agency staff in accordance with the municipal Aquifer Protection Area Regulations.

Aquifer inspection is one part of a multi-faceted approach for the protection of groundwater used for public drinking water supplies. Other important components include site plan and application reviews, water quality monitoring, and cooperative land use planning and education efforts with water utilities, municipal officials and state agencies.

### Purpose

Inspections are performed to identify existing and potential conditions that could impact the quality of groundwater. This is accomplished by determining if facilities are in compliance with Aquifer Protection Areas, and other environmental regulations, and suggesting best management practices and/or procedural changes in order to mitigate potential risks to the aquifer. In addition, aquifer inspections educate and increase the awareness level of property owners on water quality issues and other environmental regulations. Property owners can become an asset in source protection through education on pollution prevention and water quality concerns.

### Procedure

Inspections may be initiated as a result of one of the following:

- a. Review of the land use inventory of the aquifer protection area to determine potential regulated activities
- b. As part of a routine inspection program
- c. Response to a complaint
- d. Review of an application

#### 1. Routine Inspections

An inspection program targets high-risk sites, such as automotive service stations, fuel or chemical storage sites and industrial properties, and should concentrate on those sites closest to the wellfield. Prioritizing inspection sites will allow for the wisest use of limited resources. A general "windshield" survey of the aquifer should be conducted at least on an annual basis. Two people together will allow the passenger to view aquifer maps, identify boundaries, and observe changes or developments on properties.

The process for performing inspections should include the following:

- **Identification of site within APA** – Determine sites located within the Aquifer Protection Area. A general

survey of the aquifer should be conducted at least on an annual basis.

- **Site File Review** – Review of existing APA, planning, and zoning files on the site to be inspected. In addition, this could include Department of Energy and Environmental Protection (DEEP) files, the local or regional health department, and local water utility files.
- **Review of on-site activities** – Viewing the activities that occur on the property and the processes involved in those activities will allow the inspector to ask appropriate and pertinent questions and evaluate the answers to those questions. Generic background information on industrial activity can be obtained from trade journals and DEEP publications such as "Best Management Practices for the Protection of Groundwater," DEEP, 1992. "The 1989 Aquifer Protection Task Force Report Land Use/Activities of Concern" also lists land uses and the activity or chemicals of concern to groundwater.
- **Inspections** – The local aquifer protection agent, health/zoning department should consider contacting the water utility or water department to request their assistance in inspecting a facility. This would improve the inspection by having people with different areas of expertise present and would add an additional set of eyes to observe site conditions.
- **Educational Materials** – Obtain pamphlets and brochures concerning septic system maintenance, proper hazardous waste disposal, environmentally friendly cleaners/pesticides, and general information concerning aquifers and groundwater. These materials should be distributed during the inspection.

Inspectors should be familiar with statutes and guidelines that apply to aquifer protection, including the Aquifer Protection Area Regulations, state and local environmental regulations concerning underground storage tanks, floor drain and wastewater discharges, chemical handling and disposal, and the Public Health Code.

Local police departments should be informed of routine inspections within a given area. Canvassing a neighborhood may lead residents to report suspicious activities to the police. Proper identification and prior contact with the police department will alleviate potential negative interactions with local departments.

## 14.3 Inspection Guidelines (continued)

### 2. Complaint Inspections

Inspections conducted in response to complaints should follow the same procedures as regular inspections, including location of site within APA, review of files, and contact with other interested agencies.

Cooperation of the property or business owner is necessary in order to perform an investigation of a complaint. The inspector responding to a complaint may find himself in an antagonistic situation. A calm and professional approach in a potentially hostile environment is necessary. Complaint inspections should be performed with two inspectors, one acting as the spokesperson and one as an observer/witness.

If access onto a property is denied, politely leave without aggravating the business or property owner. This refusal should be documented in writing, and followed-up with a written request to inspect the property. Copies of the letter should be mailed to the property owner (if different), DEEP, Department of Public Health (DPH), and the local health department. Make a follow-up phone call to determine if an alternate inspection time can be arranged; if not, request assistance from the local health department. If an imminent contamination problem is known or suspected on the property, also seek assistance from DEEP. Municipal APA regulations may include provisions for inspecting properties where access was denied and the site is subject to a registration or permit.

#### Documentation/Follow-up

Observations made during the inspection should be recorded on an inspection form. (See the Aquifer Protection Inspection Report found in the Forms and Applications section of this manual. This will assist in evaluating the risks of the site to the aquifer. Documentation of existing conditions with photographs may be very helpful in the event that formal action is taken. Photographs should be labeled with the location, date, time, a brief description, and the signature of the inspector. This will assist regulatory agencies by allowing them to examine the problem prior to conducting a site visit.

Many water quality concerns can be remediated by the business or property owner without the need for regulatory intervention. Outdoor storage of liquid chemicals can be moved inside. An outdoor storage tank can be equipped with secondary containment.

Environmental concerns that cannot be corrected through Best Management Practices (BMPs) or procedural changes, such as failing septic systems, floor drains with unknown discharges, leaking tanks and chemical spills, need to be brought to the attention of a regulatory agency. Depending upon the type of environmental problem, regulatory agencies such as the

DEEP, local Aquifer Protection Agency, local health department, planning and zoning and inland wetlands commissions may need to be notified. Property/business owners should be informed as to who will be notified in the event that a water quality concern is noted on the property.

Every effort should be made to keep the owner informed as to what steps are to be taken after an inspection. Telephone calls to an Agency should be followed by letters, with copies going to the owner. Contact these agencies periodically to determine the status of these violations.

#### Recordkeeping

A file should be maintained for each site inspected. This will reduce the need to repeatedly collect background information and, over time, will give a historical account of the site. The site file should contain a written account of inspections, background information on the site, and correspondence concerning the site.

Information obtained during an inspection should include:

#### 1. Site Background Information

- Names, addresses and phone numbers of business owner, property owner and contact person for inspections
- Address of inspection site
- Inspector's name and date of the inspection

#### 2. Facility Information

- Type of business and activities that occur on-site
- Information on water supply, sewage disposal, type of heating fuel, and the number and locations of buildings
- A hand-drawn location map to assist in identifying locations of buildings, storage areas, water supply wells, septic system leaching fields, underground storage tanks, etc.

#### 3. Chemical Handling

- Types and amounts of chemicals stored on-site, storage and transfer areas, types of waste streams and disposal methods
- Age, size, location and contents of underground and above-ground tanks and distribution lines

#### 4. Drainage Information

- Location and discharge points for floor drains, sumps, sump sinks and other wastewater sources should be identified
- Stormwater management system, including discharge points, catch basins and drywells, should be examined

## 14.3 Inspection Guidelines (continued)

### Review Elements

Aquifer inspections of industrial and commercial facilities have several common elements. These elements can contribute to the degradation of water quality. They should be evaluated to determine if they are, or could possibly cause, a water quality problem.

The following elements should be reviewed during an aquifer inspection:

#### A. Heating Source

If oil is used, determine whether the tank is stored above or below the ground. The age, size, type and location of the oil tank and distribution lines should be identified.

##### 1. Above-ground Storage Tanks

Tanks stored above ground outside should have secondary containment designed to contain 110 percent of the volume of the tank. The storage area should be within a structure or roofed to prevent rain water from collecting in the containment area. Tanks in basements should be situated on an impervious floor. A basement sump pump can be an avenue for oil to enter the environment in the event of a leak. Oil should be prevented from entering a sump or floor drain by means of a berm around the tank. Tanks should have level indicators and overflow protection.

##### 2. Underground Storage Tanks

Nonresidential underground tanks for on-site heating or intermittent stationary power production, with a capacity of 2,100 gallons or more, must be registered with the DEEP and must comply with all technical standards and testing requirements in the registration regulations (§ 22a-449(d)-(1) of the Connecticut General Statutes). In addition, all underground tanks of any size, containing petroleum liquids other than those used for on-site heating or intermittent stationary power production (e.g., waste oil, oil for resale, and gasoline), must be registered with the DEEP and must also comply with all technical standards testing and inventory requirements. Refer to the DEEP's manual regarding nonresidential underground storage tank regulations for further information; or contact the DEEP's Underground Storage Tank Program. Also check for compliance with any applicable local and federal regulations for underground storage of fuel, oil and chemicals. Underground storage tanks for #2 fuel oil located greater than 500 feet from the well field are not regulated under the Aquifer Protection Area regulations.

### B. Drainage Systems

#### 1. Interior

Determine if floor drains are present and, if so, note their discharge point. Discharges other than to the sanitary sewer or holding tank are illegal. Domestic wastes from bathroom and kitchen floor drains are allowed per the Public Health Code. Note any violations. In many cases, e.g., vehicle maintenance areas, floor drain discharges to the sanitary sewer require a DEEP General Permit and pretreatment in a 1,000-gallon oil and grit separating tank prior to discharge.

Holding tanks may, in some cases, also be regulated under State DEEP Underground Petroleum Storage Tank Regulations.

#### 2. Exterior

Inquire as to the drainage discharge points for swimming pool backwash water and water softeners, if present. It is illegal to discharge these wastes into septic systems.

Contact the DEEP for further information and guidelines on swimming pool wastewaters. Examine stormwater catch basins for their discharge points and evidence of illegal disposal. Stormwater discharge to drywells or leaching structures should be examined and limited to clean water, such as from roofs. Stormwater contact with materials and wastes should be prevented. Stormwater discharge, including overland flow, swales, open channels, basins, roofs and parking lots, should discharge to the land surface.

### C. Chemical Handling and Storage

Inquire as to the facility's hazardous waste generator status. Hazardous wastes need to be manifested when transported to a disposal site. Material and wastes should be stored within secondary containment. Note any signs of leakage or spills. Stormwater contact should be prevented. Recommend that spill containment equipment be stored on-site and that employees be trained to deploy it. Check nearby catch basins, streams, etc. for signs of illegal discharges such as oil slicks, and hydrocarbon and septic or chemical odors.

### D. Outside Observations

Look at general conditions of the property, and note conditions of refuse storage and outdoor work areas. Certain outdoor activities, such as minor maintenance, may be of little concern on paved soils, but inappropriate on unpaved soil. On-site equipment, such as steam cleaners or power washers, should not be used outdoors on a regular basis and can pose a water quality threat to the aquifer.

## 14.3 Inspection Guidelines (continued)

### E. General Survey

A general survey is an overall inspection of the aquifer. It consists of a drive-by “windshield survey” of the entire aquifer protection zone to identify changes in land use or other activities, water courses, aquifer boundaries, and vacant or non-developed lots susceptible to dumping.

#### 1. Dumping

Check dirt and logging roads or vacant lots for illegal dumping, abandoned motor vehicles and parts, fuel or waste drums, and other debris.

#### 2. Water Bodies

Note the existence of nearby ponds or watercourses, and inspect for possible impacts from activities occurring on the inspected property. Problems noted on streams and ponds can be indicators of problems upland.

#### 3. Erosion and Sedimentation

Look for signs of erosion and sedimentation that may be affecting nearby watercourses or drainage systems. Although not an aquifer issue, work with the property owner, local inland wetlands and zoning agencies, and the Natural Resource Conservation Service to see that any problems are corrected. Inspect control measures for proper maintenance. Note any violations.

#### 4. Stormwater

The basic stormwater principles for Aquifer Protection Areas are to prevent inadvertent pollution discharges/releases to the ground, while encouraging recharge of stormwater where it does not endanger groundwater quality. Prevent illicit discharges to stormwater, including fuel/chemical pollution releases to the ground. Provide necessary pavement in stormwater “hot spots” or areas where potential pollutant release to the ground is high including: storage and loading areas, fueling areas, intense parking areas and roadways. Minimize impervious coverage and disconnect large impervious areas with natural or landscaped areas. Direct paved surface runoff to above-ground type land treatment structures – sheetflow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins. ( See 14.4.1 BMPs for Stormwater Management.)

#### 5. Construction/Development Property

Significant storage of fuel and maintenance chemical fluids for excavation vehicles and equipment (as well as any other hazardous materials) should be off-site

(out of the Aquifer Protection Area). If necessary, movable fuel storage tanks should be stored on an impervious surface. If possible, they should be stored in a secured area. Spill response equipment should be available on-site for spills and leaks.

### 6. Septic Systems

Chemicals should not be disposed of via the septic system. Chemicals can pollute groundwaters and inhibit the biological breakdown of wastes and, thus, negatively affect the normal operation of the system. Hazardous waste should be stored and disposed of properly, and household hazardous waste may be disposed of at collection centers. Local health authorities should be notified of any improperly functioning septic system.

Agricultural Property is currently not regulated under the Aquifer Protection Agency until DEEP develops regulations; however, this land use is regulated by DEEP under their wastewater and pesticide programs.

Concerns include USTs, fertilizer/pesticide use, manure storage, exposed soils, silage.

#### 1. Animals

If livestock (horses, cows, etc.) are present, determine proximity to watercourses, wetlands and the well field; and determine whether the method of manure storage and disposal or erosion could impact these resources, thus reducing the ability of a wetland to remove pollutants from runoff or releasing pollutants to the aquifer through stormwater or storage.

#### 2. Fertilizers/Pesticides

Inspect storage and mixing areas of pesticides and fertilizers, especially at farms, nurseries and orchards. Storage and mixing areas should be impervious, with no floor drains, covered (preferably indoors), and secure. Recommend that paved areas and storm drains be avoided when applying fertilizers and pesticides, and that buffer strips be left in between the application area and wetlands, watercourses and the well field.

Note: Most agricultural operations will be regulated under the Aquifer Protection Agency Farm Resource Management Plan Regulations when adopted, and will be administered by the state and federal agricultural agencies.

### 14.4.1 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

#### Controlling Stormwater from Parking Lots in Aquifer Protection Areas

- 1 Do not use direct infiltration structures (galleries, drywells, trenches), as these do not allow for attenuation of salt or other soluble compounds that may be contained in parking lot runoff.
- 2 Non-structural measures to dissipate and treat runoff are encouraged, including sheetflow from uncurbed pavement and vegetated swales/basins. These provide an opportunity for volatilization of volatile organic compounds to the extent possible before the stormwater can infiltrate into the ground.
- 3 If a stormwater collection system must be installed, it should discharge to an above-ground outlet point (swales, detention/retention basins or surface waters).
  - (a) Any catch basins installed should have deep sumps to trap sediments and hoods to trap oil and grease.
  - (b) If more than 1 acre of pavement drains to a common discharge point, a gross particle separator should also be installed. Advanced designs for gross particle separators have been developed, such as Vortech, Downstream Defender and Stormceptor, which the Department believes are very effective in retaining medium to coarse grained sediments as well as floatables. The last type of separator is designed to treat runoff from areas up to approximately 1 acre in size, while the former two can be sized to accommodate flow from larger areas. It is recommended that the appropriate variety of this or similar type of unit with a cyclonic design be installed in conjunction with each outfall, depending on the size of the drainage area.
- 4 Provisions should be made for the periodic maintenance that will be required to ensure continued effectiveness of these control measures.

**For more information regarding the design of stormwater collection systems, contact DEEP Permitting Enforcement & Remediation Division at 860-424-3850.**

### 14.4.2 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

## Disposal of Snow Accumulations from Roadways and Parking Lots

### Purpose

These guidelines have been developed to clarify DEEP recommendations to state and municipal officials, and others, regarding the removal and disposal of snow accumulations from roadways and parking lots. For purposes of these guidelines, snow accumulations refers to snow banks and snow piles that are removed by front-end loader or by loading on trucks for disposal. These guidelines do not apply to normal snowplowing operations that must, inevitably, discharge some snow into wetlands and watercourses.

### Problem

Current road maintenance activities include removal of snow accumulations from bridges, roads and parking areas for the purpose of providing more space for subsequent snowstorms and for ease of travel and parking. Sometimes this snow is moved by truck or with a front-end loader and deposited directly into surface waters of the state, including streams, wetlands and Long Island Sound. This practice is not recommended due to the presence of dirt, salt, litter and other debris, which are routinely mixed in with the accumulated snow.

Under normal conditions of snowmelt, the majority of these contaminants remain on or next to the paved surface or may be captured in stormwater catch basins. These contaminants can then be swept from streets and bridges or vacuumed from catch basin sumps. However, when accumulated snow is collected and dumped into surface waters, this mixture of snow, sand and debris may smother aquatic life in the bottom of streams and rivers and degrade the aesthetics of the surface water with silt plumes and litter. Large quantities of snow (and the sand and debris) may also cause blockage of storm drainage systems, resulting in increased chance for localized flooding.

### Recommended Management Practice

Snow accumulations removed from roadways, bridges, and parking lots should be placed in upland areas only, where sand and other debris will remain after snowmelt for later removal. Care must be exercised not to deposit snow in the following areas:

- freshwater or tidal wetlands or in areas immediately adjacent to such areas where sand and debris may be flushed during rainstorms;
- on top of storm drain catch basins;
- in storm drainage swales;
- on stream or river banks that slope toward the water, where sand and debris can get into the watercourse; and,
- in areas immediately adjacent (within at least 100 feet) of private or public drinking water well supplies (due to the possible presence of road salt).

### Implementation

The Department recognizes that there is a considerable need for flexibility in implementation of this policy. There is no intent to interfere with snow plowing operations. Where trucking and snow dumping operations are undertaken, the Department recommends these guidelines be followed.

**For more information, contact the Bureau of Water Protection and Land Reuse at 860-424-3020.**

### 14.4.3 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

## Road & Highway Construction/Reconstruction in Aquifer Protection Areas

### Introduction

A plan for road construction or reconstruction should have a siting and design assessment to avoid or mitigate potential impacts. A stormwater management plan considering both the quality and quantity of runoff should be developed. The plan should be described, at least on a conceptual level, in a CEPA or similar document.

Overall, a stormwater management plan shall consider measures to reduce or mitigate water quality impacts to the groundwater aquifer. While the emphasis should be to protect groundwater quality, the plan should also consider impacts to surface waters and runoff rates.

The DEEP Aquifer Protection Area regulations require stormwater management plans for all permits, and can also be required for registrations. The management plans shall assure that stormwater runoff is managed to prevent groundwater pollution and shall meet the requirements of the DEEP Commercial Stormwater General Permit, including:

- Facility information: primary activity
- Stormwater discharge information: number and type of conveyance
- Stormwater management measures: pollution prevention, pavement sweeping, outdoor storage and washing restriction, illicit discharges, spill control/response, and maintenance and inspection of stormwater structures.

The basic stormwater principles for Aquifer Protection Areas (and other groundwater drinking supply areas) are to prevent inadvertent pollution discharges or releases to the ground, while encouraging recharge of stormwater where it does not endanger groundwater quality.

### Management Measures Include:

- Prevent illicit discharges to stormwater, including fuel/chemical pollution releases to the ground.
- Provide necessary impervious pavement in high potential pollutant release areas. These “stormwater hot spots” include certain land use types or storage and loading areas, fueling areas, intensive parking areas and roadways.
- Direct paved surface runoff to above-ground-type land treatment structures – sheet flow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins. These provide an opportunity for volatilization, breakdown and attenuation of volatile organic compounds to the extent possible before the stormwater can infiltrate into the ground.
- Do not use direct subsurface recharge structures such as dry wells, galleries, or leaching trenches to directly infiltrate runoff, unless it is solely from clean areas such as rooftops or other clean surfaces. These structures do not adequately allow for attenuation of salts, solvents, fuels or other soluble compounds in groundwater that may be contained in runoff.
- Minimize pavement deicing chemicals; use an environmentally suitable substitute or alternative deicing agent such as calcium chloride or calcium magnesium.

### 14.4.3 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

#### Road & Highway Construction/Reconstruction in Aquifer Protection Areas (continued)

##### Road and Highway Aquifer Protection Provisions

- 1 Planning and siting of roads, stormwater outfalls and other drainage structures.
  - Avoid aquifer areas and consider alternative routes
  - Maintain minimum separation from the well field (200' minimum, 500' where possible)
- 2 Drainage system design criteria
  - Select stormwater management methods from the DEEP Stormwater Quality Manual based on treatment effectiveness and low groundwater pollution potential
  - Stormwater discharge points should outlet to above-ground land surface or basin type structures – sheetflow, swales, basin collection is encouraged where possible.
  - Catch basins, curbs or other collection may be used in the immediate wellhead area to divert and control runoff and spills away from wellhead.
  - Dry wells, galleries, leaching trenches or similar subsurface structures should not be used for stormwater disposal from roadways. Existing subsurface structures that have high potential to pollute groundwater should be removed or converted.
  - Critical discharge points should have a basin designed with a forebay (tight soil or lined) capable of containing a 8,000-10,000 gallon spill volume and 3-6 feet above water table, 4 feet above bedrock.
- 3 Deicing management areas should be established, including low salt use areas, alternative chemical or other methods.
- 4 Wellhead protection signs shall be posted in clear visibility of the highway at the Aquifer Protection Area entrance and exit points and at half-mile intervals.
- 5 Potential strategic groundwater monitoring may need to be considered in very critical areas or circumstances.
- 6 Temporary construction measures
  - Significant fuel, chemical or other hazardous materials storage and handling should be located outside well field area and Aquifer Protection Area if possible.
  - Any necessary temporary storage should be above ground, protected from rainfall, and on a impervious containment surface.
  - An emergency spill and response plan should be developed, including coordination with the water supplier.

**For more information, contact the Bureau of Water Protection and Land Reuse at 860-424-3020.**

### 14.4.4 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

#### Road Salt Storage

In order to prevent a salt storage facility from becoming a source of pollution, practice the following guidelines when siting a new salt storage facility.

##### Location of Salt Storage Areas

A salt storage facility should not be located in any of the following areas:

- Within a 100-year flood plain
- Within 250 feet of a well that is utilized for potable water
- Within an Aquifer Protection Area
- Where adjacent surface water bodies are tributary to public water supply reservoirs, unless it is not feasible to locate the facility in a less sensitive area
- In areas where the groundwater has been classified as GAA or GA, unless it is not feasible to locate the facility in a less sensitive area.

##### Storage and Handling:

- Salt should be stored on an impervious surface under a roof.
- Mixtures of salt and sand should also be stored on an impervious surface under a roof, or kept covered by a waterproof material such as polyethylene.
- For guidance on mixing salt and sand, consult the Snow and Ice Policy Manual (Connecticut Department of Transportation), as revised on an annual basis.

##### Stormwater Management:

- It is preferable to discharge stormwater runoff to surface waters rather than to groundwater resources that are host to potable water wells.
- Runoff to the facility from rainfall should be diverted around the facility by berms, swales, or drains.
- Obtain necessary general permits for stormwater discharges.

**For more information on salt storage, call 860-424-3020. For more information on general permits for stormwater discharges, call 860-424-3018.**

### 14.4.5 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

## Sand and Gravel Operations in Aquifer Protection Areas

### Issues and Concerns

Potential groundwater quality concerns associated with sand and gravel mining operations are mostly related to the accessory operations of the earth removal itself. Sand and gravel mining operations are not on the list of regulated activities under the State of Connecticut Department of Energy and Environmental Protection's (DEEP) Aquifer Protection Area (APA) Regulations. However, other activities that may be associated with sand and gravel mining are regulated activities under the APA regulations. Activities such as fuel dispensing, vehicle maintenance, underground storage tanks, and wastewater discharges are restricted in APAs. Other aquifer concerns may include unauthorized waste disposal, excavation close to or below the water table, and planned reuse of the site.

### Recommendations

For the protection of groundwater quality at sand and gravel mining operations in Aquifer Protection Areas, DEEP recommends the following:

- Storage of fuel and maintenance chemical fluids for excavation vehicles and equipment (as well as any other hazardous materials) should be off-site (out of the Aquifer Protection Area).
- Vehicle maintenance and refueling should be conducted outside the Aquifer Protection Area to the extent possible. If it is necessary to conduct equipment refueling or minor maintenance activities on-site, precautions should be taken to prevent and contain any potential chemical or fuel spillage. Refueling from mobile fuel trucks and minor or emergency vehicle maintenance should be on an impervious containment pad.
- A spill control plan should be in place and emergency containment materials should be available on-site.
- The site access should be adequately secured at all times to prohibit any unauthorized disposal of waste materials.

A vertical separating distance of 5 feet between the excavation and the seasonal high water table, and 10 feet between the excavation and the bedrock is recommended. This is a general guideline, based on the desire to maintain an unsaturated water quality protective zone above the aquifer, to help maintain natural hydrologic conditions, and to allow planned reuse of the site and future on-site needs for sewage disposal, if needed. These recommendations may vary based on specific soil characteristics and planned reuse of the site. If excavation is to occur below the above vertical separation guidance, it is recommended that a hydrogeologic assessment of the project be conducted. This assessment should be done by an engineer, soil scientist, geologist or hydrologist, and should further assess associated changes to pollutant renovation properties of the remaining soil layer and site hydrology.

Water quantity (versus water quality) effects are not directly regulated under the DEEP Aquifer Protection Area regulations (but may be regulated under DEEP authority, such as diversion regulations). A sand and gravel mining project, as with any proposed site development or construction project, can alter site hydrology positively or negatively, depending on the existing and proposed conditions. An assessment of the hydrologic changes to site should be done, especially when creation of a permanent water body or wetland area is proposed below the water table. Evaluation of pre-site and post-site conditions should be done, looking at changes to the water budget of site including runoff, infiltration, evapotranspiration, water storage, groundwater table and groundwater flow.

**For more information, contact the Bureau of Water Protection and Land Reuse at 860-424-3020.**

### 14.4.6 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

## Sewage Disposal and Groundwater Quality in Aquifer Protection Areas

### Introduction

On-site sewage disposal systems, normally conventional septic systems, are a commonly used method for disposing of domestic wastewaters in suburban and rural areas. Many residential, commercial and some industrial facilities use septic systems for domestic waste disposal. When properly located, designed, constructed, used and maintained, septic systems provide a very effective, sustainable and efficient way to treat domestic sewage and protect water quality. They also help maintain groundwater recharge. The primary disadvantages of on-site systems are that proper land conditions are necessary, and the system does require some care and maintenance.

### Discussion

#### Water Quality

Historically, most problems with septic systems were the result of hydraulic overloading of a site (too much sewage volume for the site or poor site hydraulic conditions), and most failures from this resulted in surface water, as opposed to groundwater, quality impacts. Groundwater quality impacts are more commonly the result of misuse of the system by illicitly discharging non-domestic wastewaters, industrial wastewaters, or hazardous wastes or chemicals, which are not well-treated by soil. Groundwater quality concerns related to on-site drinking wells were also historically the result of very old development areas, where minimum health code siting and separation requirements were not met for wells and septic systems. Modern health and environmental regulations, and strict administration of them, has helped eliminate many of these concerns. Although land area or lot size is an important factor, the “character” of the lot (soils, geology, hydrologic conditions) is what primarily determines a site capacity for sewage disposal.

### Regulation

Regulation of on-site sewage disposal systems is carried out on the local or state level, depending on the type and size of the system. Community septic systems and large (5,000 GPD) systems require a State DEEP Discharge Permit. The DEEP permit requires a site-specific hydraulic and pollution renovation analysis, as well as water quality monitoring. The limiting pollutant of concern from domestic sewage usually is nitrate (from both an environmental and health standpoint), so usually the site pollutant renovation analysis is targeted to ensure that this pollutant is addressed. The permit process may also include the pretreatment of discharges prior to groundwater discharge to meet water quality standards.

During development of the DEEP Aquifer Protection Area (APA) Regulations (RCSA Sections 22a-354i-1 to 22a-354i-10) in 2000, issues related to the discharge of domestic sewage were reviewed, including the potential impacts, the existing regulatory system, and the advantages and disadvantages of sewerage Aquifer Protection Areas. After consideration, the APA regulations did not further regulate or restrict domestic sewage, but instead reinforced the existing regulatory controls, made exceptions for certain high-strength commercial wastewaters on public sewer, and prohibited non-domestic waste discharge (which is not allowed in any groundwater drinking supply areas statewide), and relies on the existing state and local sewage disposal permitting system.

### 14.4.6 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

#### Sewage Disposal and Groundwater Quality in Aquifer Protection Areas (continued)

Another issue related to sewage disposal and aquifer protection has been the use by some towns of a maximum gallon per acre per day requirement in local zoning regulations for aquifer protection purposes. In old aquifer reports from the late 1970s (the 208 program), a planning number of 360 gallons per acre per day was used. The number was a general overall planning number for aquifers and was not intended to be applied as a site-specific limit. The use of a maximum gallon per acre per day requirement is not recommended for site-specific use. If the local Agency chooses to continue to use a "gallon per acre per day" requirement in their local zoning regulations, it should further qualify any number as a planning number and, when exceeded, the applicant may be required to perform a sewage renovation analysis for the site.

##### **Public Sewer Service**

Public sewers can help protect groundwater quality by removing the wastewater discharge concerns, especially where high-volume or high-strength wastewaters are concerned. Public sewers are used to solve wastewater problems from historic high-density development with failing septic systems and to address sewage disposal needs for planned suburban and urban growth areas. However, sewers can have the secondary effect of increasing the type and density of land use, resulting in increases in non-point sources of pollution (such as stormwater runoff, chemical spills and leaks, waste handling, lawn care, and other miscellaneous land use related releases). In fact, the secondary effect of sewers can intensify the type and the density of land uses and non-point pollutants to the point that it may obscure any water quality improvements from the wastewater removal and further degrade groundwater quality. A 1993 US Geological Survey report, which studied the effects of land use on groundwater quality in unsewered and sewer areas in Connecticut, verified this concern. The report showed that in residential, commercial and industrial areas, the groundwater in sewer areas generally had poorer groundwater quality than in those areas not sewer. For this reason, sewer areas is not the primary solution, and any sewer plans need to be accompanied by careful land use planning and management. Sewers can also have a negative affect on groundwater recharge by exporting water out of the aquifer, and sewerline failure or leaky lines can potentially exfiltrate pollutants. It is general state policy to avoid new sewage collection systems in Aquifer Protection Areas, except when essential to solve existing area-wide problems, and to limit state funding to a level necessary to solve pollution problems associated with existing development and avoid further intensive development on the aquifer, and disapprove sewer plans that are excessively sized or that extend to areas where alternative measures are possible.

**For more information, contact the Bureau of Water Protection and Land Reuse at 860-424-3020.**

### 14.4.7 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

#### Storage (only) of Batteries in Aquifer Protection Areas

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##### Recommendations

- 1** Verify that the business is wholesale, not retail; if it is wholesale, then we would consider it a regulated activity under activity definition C – on-site storage of hazardous material for the purpose of wholesale sale.
- 2** Since it is just storage, transfer and delivery (no manufacturing, processing, acid filling, handling), the registration and MMP should be simple, with much of the information being not applicable.
- 3** Primary BMPs would be: a sound inside storage building area and floor, no floor drains, impervious transfer/loading dock area, and an emergency response plan, which they should already have in some manner per the fire marshal.

**For more information on storage of batteries, contact DEEP Solid Waste Recycling Program at 860-424-3374.**

### 14.4.8 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

## Temporary Construction and Reconstruction Operations in Aquifer Protection Areas

### Issues and Concerns

Potential groundwater quality concerns include stormwater, fuel, and other maintenance chemicals associated with vehicles, machinery, and equipment.

### Guidance/Recommendations

For the protection of groundwater quality at construction operations in Aquifer Protection Areas, DEEP recommends the following:

#### Temporary Construction Measures:

- Significant fuel, chemical or other hazardous materials storage and handling should be located outside well field area and Aquifer Protection Area if possible.
- Any necessary temporary storage should be above ground, protected from rainfall, and on an impervious containment surface.
- An emergency spill and response plan should be developed, including coordination with the water supplier.
- The site access should be adequately secured at all times to prohibit any unauthorized disposal of waste materials.

#### Stormwater Pollution Prevention Measures:

- Ways to minimize pollutant load (sand, salt, etc.) should be examined.
- Deicing management areas should be established, including low salt use areas, alternative chemical or sand methods.
- Wellhead protection signs shall be posted in clear visibility of the highway at the entrance and exit points of the Aquifer Protection Area and at half-mile intervals.

#### Drainage System Design Criteria:

- Select best management practices from the DEEP stormwater manual based on treatment effectiveness and low groundwater pollution potential.
- Sheetflow and swale collection is encouraged, where possible, outside of immediate well field area.
- Catch basins and curbs should be used in immediate wellhead area to divert and control runoff and spills away from wellhead.
- Dry wells or similar subsurface leaching structures should not be used for stormwater disposal from paved or other areas that have high potential to pollute groundwater; existing structures that have high potential to pollute groundwater should be removed or converted.
- Gross particle/oil separators (swirl concentrator type) may be used for pretreatment of consecutive catch basins. Deep catch basins (minimum 4' deep and tight construction, with baffles, may also be used).
- Stormwater discharge points shall outlet to above-ground land surface or basin type structures. Significant or critical discharge points should have a basin designed with a forebay (tight soil or lined) capable of containing an 8,000-10,000 gallon spill volume and 3-6 feet above water table, 4 feet above bedrock.
- Potential strategic groundwater monitoring should be considered.

### 14.4.9 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

## Turf Management for Golf Courses, Athletic Fields and Large Residential Housing Developments (Condominiums)

### Turf Management – Nutrient and Integrated Pest Management (IPM) Plans

Integrated Pest Management (IPM) is defined as the use of all available pest control techniques, including judicious use of pesticides, when warranted, to maintain a pest population at or below an acceptable level, while decreasing the use of pesticides. IPM includes the combined use of many techniques.

#### Some of these techniques include:

- Site scouting or monitoring
- Correct pest and damage identification
- Use of resistant turf cultivars and varieties
- Proper cultural practices (irrigation, mowing, soil aeration and thatch management)
- Soil and plant tissue testing
- Nutrient management
- Weather monitoring
- Physical controls
- Biological controls
- Identification of beneficial organisms
- Recordkeeping
- Equipment calibration and maintenance
- Good communication
- Precise timing and proper selection of pesticides

A nutrient management plan should also be developed that addresses the timing and placement of fertilizers based on seasonal demand or usage of specific turf species, landscape position and weather. Areas of seasonally high water tables should be flagged during typically wet periods in spring and fall. Special care should then be taken in the timing of applications to these areas, since they become surface runoff zones during storms.

A full discussion of IPM recommendations is beyond the scope of this fact sheet. Some specific BMPs related to water quality are listed on the following pages. For more information see “Integrated Pest Management for Golf Courses,” available through the EPA, “Model Integrated Pest Management Plan for Connecticut State Agencies, Ornamental and Turf,” available through CT DEEP, “Professional Guide for IPM in Turf for Massachusetts,” available through UMass, or “University of Connecticut Turfgrass Nutrient and Integrated Pest Management Guide for Turfgrass” (December 2001), available through UCONN.

**For more information contact the Bureau of Water Protection and Land Reuse at 860-424-3020.**

### 14.4.9 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

## Turf Management for Golf Courses, Athletic Fields and Large Residential Housing Developments (Condominiums) (continued)

### Specific BMPs for Turf Management

- Do not apply fertilizer to soggy areas until the water table is lowered enough for the turf to be able to absorb the nutrients. These areas are typically in converging and flatter areas in the landscape, which can be detected during wet periods such as late winter/early spring.
- Avoid spraying pesticides when the soil is saturated or when heavy rains are imminent, or under any other conditions where surface runoff may result.
- Establish pesticide-free zones around water bodies and near drinking water wells.
- Spray pesticides when the wind is calm. Be careful to avoid drifting of pesticides toward sensitive areas or water.
- Locate compost piles away from surface waters, wetlands and floodplains, and not on steep slopes. Store and maintain vehicles and equipment on covered, sealed, impervious areas.
- Fueling facilities should be located on concrete paved areas (not asphalt), in paved, roofed areas and equipped with spill containment and recovery facilities.
- Floor drains must be eliminated unless they drain to storage tanks.
- Equipment washing areas must drain to an oil/water separator, and from there, to a sanitary sewer or holding tank.
- Keep containment booms and absorbent materials on hand for the cleanup of spills.
- Employees should be familiar with the locations of all underground structures, such as storage tanks, septic fields and storm drains.
- Provide secondary containment for all hazardous materials, including liquid fertilizer storage areas.
- Store all hazardous materials in sealed, locked areas or buildings. Identify locations for these materials on the site plan. Register all materials with the fire marshal.
- Locate pesticide, fertilizer and hazardous material storage, mixing and loading areas at least 200 feet away from surface water resources or high water table areas and drinking water wells.
- Locate pesticide, fertilizer and hazardous material storage, mixing and loading areas in separate areas so that they cannot be confused with one another.
- Provide impervious surfaces in mixing areas.
- Dispose of hazardous materials in a manner consistent with the label and regulations.
- Buy fertilizers and pesticides in limited quantities and do not store large volumes of chemicals on-site.
- Minimize the use of underground fuel storage and eliminate chemical storage tanks in drinking water groundwater supply areas.
- Fueling should be carried out away from surface waters and drinking water wells. Fueling areas should be protected from surface runoff.

### 14.4.9 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

## Turf Management for Golf Courses, Athletic Fields and Large Residential Housing Developments (Condominiums) (continued)

### Spill Response

The goal of a spill response plan is to have a series of steps in place so employees can respond to an emergency spill safely and swiftly. The policy should be written, employees should be acquainted with it, and it should be posted in an easily accessible place. See example of a spill response plan.

### Specific BMPs for Hazardous Spill Response

- Develop plans to be followed in case chemical materials are spilled. Tailor the plans to the specific potential hazards posed by each chemical used on-site. The plan should identify all potential hazards, and include safe-handling measures and appropriate spill response procedures.
- Clearly identify the appropriate responding authorities – DEEP, state police, or local emergency response. Maintain a list of people to notify in the event of a spill, including drinking water suppliers, if the site is on a public water supply/water watershed.

### Water Quality Monitoring

There are a number of good reasons to set up a water quality monitoring program. Monitoring may help fulfill permit requirements, determine chemical applications and watering schedules, and assess the effectiveness of management techniques. Most important, a carefully designed and executed program ensures the early detection of water quality problems, making the problems easier to solve.

The program's design must not only take into account the various goals of the monitoring effort, but also reflect the extremely site-specific factors that affect the source, flow, destination and chemistry of the water, such as soil type, slope, drainage and vegetation. In most instances, qualified consulting services should be retained to assist in setting up and, in some cases, implementing the program.

### There are five basic elements in any water quality monitoring program:

1. Monitoring goal
2. Monitoring network
3. Sampling plan and procedures
4. Data management and evaluation
5. Plan for response if a problem is detected

### 14.4.9 BEST MANAGEMENT PRACTICE (BMP) RECOMMENDATIONS

## Turf Management for Golf Courses, Athletic Fields and Large Residential Housing Developments (Condominiums) (continued)

### Identifying the Water Quality Monitoring Goal

The first step in the development of a water quality monitoring program is to identify the monitoring goal. The purpose of the goal is to articulate and define what the monitoring program will be expected to accomplish. A well-defined goal focuses the monitoring effort, both in terms of the water quality parameters to be evaluated and the physical extent of the area to be monitored. Some potential monitoring goals would be to:

- Evaluate the effectiveness of an IPM program;
- Evaluate the frequency and timing of nutrient or pesticide applications;
- Determine baseline water quality;
- Detect any potential problems early to allow adjustment of practices before the impacts are significant;
- Monitor impact on particularly sensitive areas;
- Meet specific local or state regulatory requirements;
- Determine the extent and degree of a known problem; or monitor the effectiveness of remediation or mitigation of a known problem.

For more information, contact the Bureau of Water Protection and Land Reuse at 860-424-3020.



# Aquifer Protection Area Program Fact Sheet



### What is the purpose of the Aquifer Protection Program?

In Connecticut, over two million people rely, at least in part, on ground water for their drinking supply. Since the late 1970's, numerous public and private wells have been found to be contaminated by various pollutants from land use activities. Aquifers, geologic formations able to yield water to wells, cannot be considered naturally protected.

At particular risk are "stratified drift" (sand and gravel) aquifers supplying our larger public water supply wells. Despite current protection efforts many types of land uses continue to threaten ground water quality. To address this problem, Connecticut established the Aquifer Protection Area Program (C.G.S. 22a-354a et. sec.). The purpose of the program is to identify critical water supply aquifer areas and to protect them from pollution by managing land use.

### What is an Aquifer Protection Area?

Aquifer Protection Areas are being designated around all existing wells in stratified drift used by water systems serving over 1000 people. The "aquifer protection area" is the critical portion of the aquifer which provides water to the well (sometimes referred to as a "wellhead protection area"). 122 active well fields (wells or groups of wells) in the state will have protection areas around them. Activities which might contaminate ground water in these areas will be regulated.



### How are these areas identified?

Aquifer Protection Areas are identified by DEEP and mapped by water companies that own the wells. Water companies usually hire a ground water consultant to do the mapping which must follow DEEP regulations. DEEP must review and approve the mapping.

The Aquifer Protection Area includes the well field and areas of contribution and recharge. The size of the area can vary from tens of acres to hundreds of acres depending on the well yield and aquifer materials. Once mapped and approved the aquifer protection areas must be adopted by towns.

Aquifer Protection Areas have been identified in 79 towns. Additional protection areas may be designated for sites of future wells.

### How will the protected areas be regulated?

Aquifer protection responsibilities will be shared by the state, the municipality, and the water company.

**STATE** - In addition to overall program implementation, DEEP has or continues to:

- ◆ Established state land use control regulations and standards;
- ◆ Approve aquifer protection areas and local regulations;
- ◆ Oversee municipal aquifer protection agencies and provide training and technical assistance;
- ◆ Regulate facilities that hold discharge permits or RCRA permits, and state and federal facilities; and
- ◆ Provide for education about ground water protection.

**MUNICIPALITIES** – Responsibilities include the following:

- ◆ Authorize an existing board or agency to serve as the local Aquifer Protection Agency;
- ◆ Adopt local Aquifer Protection Area regulations consistent with state regulations;
- ◆ Delineate Aquifer Protection Areas on the town zoning map; and
- ◆ Regulate land use activity within the Aquifer protection Areas by registering existing regulated activities, issuing permits for new regulated activities and inspecting regulated facilities.

**WATER COMPANIES** – Besides mapping, the water companies continue to:

- ◆ Inspect Aquifer Protection Areas;
- ◆ Assist towns with their aquifer protection programs; and
- ◆ Plan for land acquisition around well fields.

### Did you know?

It only takes a small quantity of some substances to contaminate millions of gallons of groundwater. For instance, only a few ounces of perchloroethylene (a degreasing solvent often used to clean metal parts) can render millions of gallons of water unsafe to drink based on federal standards.

### How will businesses be affected?

Land uses and activities that can contaminate ground water quality will be regulated in protected areas. Generally, these are activities which use, store, handle or dispose of hazardous materials and other potential ground water contaminants. There are 28 regulated activities defined in the regulations. New land use activities of these types will be prohibited from locating in aquifer protection areas.

Businesses conducting regulated activities which are already in existence in aquifer protection areas need to register their land use activity and follow best management practices designed to minimize the possibility of a release. This may include implementing new procedures and/or installing new containment equipment. Registered businesses may expand their existing activities, and may apply for a permit to add new regulated activities to their facilities.

Many state and local government operations such as highway maintenance garages, road salt storage, airports, and waste disposal areas will be regulated. Workshops and laboratories in schools and other institutions will also have to follow best management practices.



### How will the general public be affected?

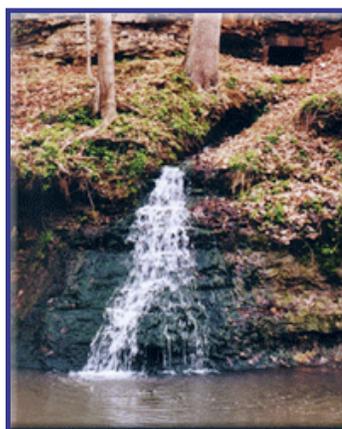
Homeowners may be affected by restrictions on home occupations that use hazardous materials. Residents in protected areas will be educated about the risk to ground water quality from pesticides and fertilizers, improper septic system use, and hazardous cleaning and maintenance materials such as paints, paint thinner and automotive fluids.

### The Rewards . . . .

Clean water is vital for our very survival. Until recently, people assumed that it would always be plentiful in Connecticut. The events of the past few decades have shown that ground water, like surface water, is increasingly at risk from our chemical-dependent society. The aquifer protection area program requires a major commitment from state and local government, business, water companies, and individual residents, but the reward of clean drinking water for now and the future is well worth the trouble.

### Where can I get more information?

The Connecticut Department of Energy and Environmental Protection  
 Bureau of Water Protection and Land Reuse  
 Aquifer Protection Area Program  
 79 Elm Street  
 Hartford, CT 06106-5127  
 (860) 424-3020  
[www.ct.gov/deep/aquiferprotection](http://www.ct.gov/deep/aquiferprotection)



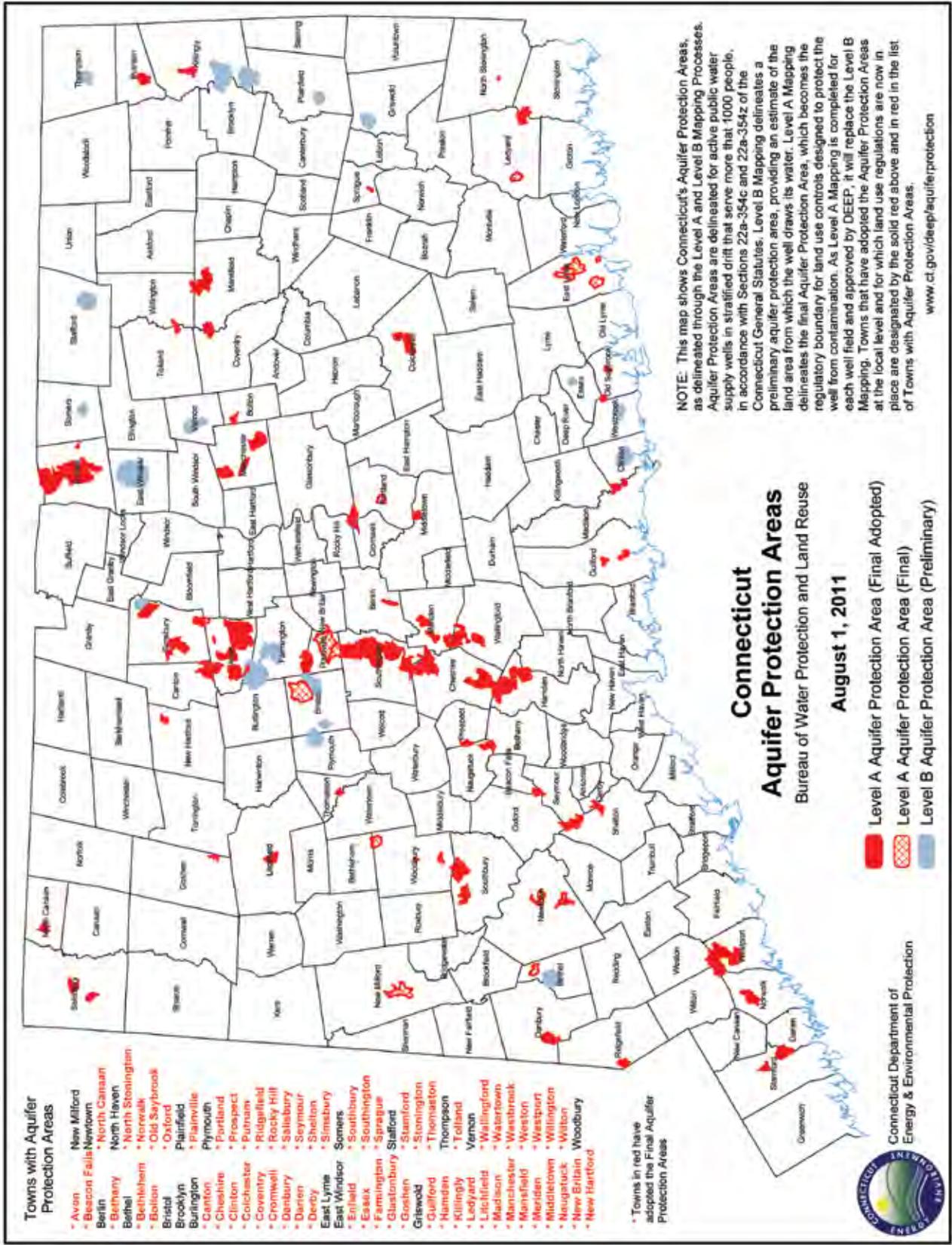
### Towns with Aquifer Protection Areas

Avon	Danbury	Madison	Plainfield	Stafford
Beacon Falls	Darien	Manchester	Plainville	Stamford
Berlin	Derby	Mansfield	Plymouth	Stonington
Bethany	East Lyme	Meriden	Portland	Thomaston
Bethel	East Windsor	Middletown	Prospect	Thompson
Bethlehem	Enfield	Naugatuck	Putnam	Tolland
Bolton	Essex	New Britain	Ridgefield	Vernon
Bristol	Farmington	New Hartford	Rocky Hill	Wallingford
Brooklyn	Glastonbury	New Milford	Salisbury	Watertown
Burlington	Goshen	Newtown	Seymour	Westbrook
Canton	Griswold	North Canaan	Shelton	Weston
Cheshire	Guilford	North Haven	Simsbury	Westport
Clinton	Hamden	Norwalk	Somers	Willington
Colchester	Killingly	North Stonington	Southbury	Wilton
Coventry	Ledyard	Old Saybrook	Southington	Woodbury
Cromwell	Litchfield	Oxford	Sprague	

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## 14.6 State Map of APAs

14.6 | State Map of APAs



# 14 | Appendices

## 14.7 | List of Websites for Aquifer Protection Agencies

Connecticut Department of Energy and Environmental Protection Websites	
Aquifer Protection	<a href="http://www.ct.gov/deep/aquiferprotection">www.ct.gov/deep/aquiferprotection</a>
Emergency Response and Spill Prevention	<a href="http://www.ct.gov/deep/spills">www.ct.gov/deep/spills</a>
Geographic Information Systems	<a href="http://www.ct.gov/deep/gis">www.ct.gov/deep/gis</a>
Geology	<a href="http://www.ct.gov/deep/geology">www.ct.gov/deep/geology</a>
Hazardous Waste	<a href="http://www.ct.gov/deep/hazardouswaste">www.ct.gov/deep/hazardouswaste</a>
Integrated Pest Management (IPM)	<a href="http://www.ct.gov/deep/ipm">www.ct.gov/deep/ipm</a>
Integrated Water Quality Report	<a href="http://www.ct.gov/deep/iwqr">www.ct.gov/deep/iwqr</a>
Laws & Regulations	<a href="http://www.ct.gov/deep/laws-regs">www.ct.gov/deep/laws-regs</a>
Nonpoint Source Pollution Program	<a href="http://www.ct.gov/deep/nps">www.ct.gov/deep/nps</a>
Pesticides	<a href="http://www.ct.gov/deep/pesticides">www.ct.gov/deep/pesticides</a>
Pollution Prevention	<a href="http://www.ct.gov/deep/p2">www.ct.gov/deep/p2</a>
Regulating Waste Storage, Treatment, Transportation & Disposal	<a href="http://www.ct.gov/deep/waste">www.ct.gov/deep/waste</a>
Remediation/Site Cleanup	<a href="http://www.ct.gov/deep/remediation">www.ct.gov/deep/remediation</a>
Solid Waste	<a href="http://www.ct.gov/deep/solidwaste">www.ct.gov/deep/solidwaste</a>
Stormwater Management	<a href="http://www.ct.gov/deep/stormwater">www.ct.gov/deep/stormwater</a>
Underground Storage Tanks	<a href="http://www.ct.gov/deep/ust">www.ct.gov/deep/ust</a>
Water Quality Standards and Classifications	<a href="http://www.ct.gov/deep/wqsc">www.ct.gov/deep/wqsc</a>
Watershed Management	<a href="http://www.ct.gov/deep/watershed">www.ct.gov/deep/watershed</a>
Wetlands	<a href="http://www.ct.gov/deep/wetlands">www.ct.gov/deep/wetlands</a>

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## 14.7 | List of Websites for Aquifer Protection Agencies (continued)

Other Connecticut State Agencies	
Connecticut Department of Public Health Drinking Water Unit	<a href="http://www.ct.gov/dph/publicdrinkingwater">www.ct.gov/dph/publicdrinkingwater</a>
The Connecticut Licensing Information Center website is an online resource tool that streamlines access to licensing and permitting information across state government.	<a href="http://www.ct-clic.com">www.ct-clic.com</a>
Commercial Recording Division Secretary of the State of Connecticut	<a href="http://www.concord-sots.ct.gov">www.concord-sots.ct.gov</a>
Federal Websites	
U.S. Geological Survey Water Resources	<a href="http://www.usgs.gov/water/">www.usgs.gov/water/</a>
U.S. EPA Ground Water and Drinking Water	<a href="http://water.epa.gov/drink/index.cfm">http://water.epa.gov/drink/index.cfm</a>
U.S. EPA website with information on nonpoint source pollution	<a href="http://epa.gov/nps/outreach.html">http://epa.gov/nps/outreach.html</a>
U.S. EPA website that contains information on stormwater	<a href="http://cfpub.epa.gov/npdes/stormwatermonth.cfm">http://cfpub.epa.gov/npdes/stormwatermonth.cfm</a>
U.S. EPA website with septic system information for homeowners	<a href="http://www.epa.gov/owm/septic">www.epa.gov/owm/septic</a>
Other Websites	
National Low Impact Development Clearinghouse	<a href="http://www.lid-stormwater.net/clearinghouse/home.htm">www.lid-stormwater.net/clearinghouse/home.htm</a>
The Groundwater Foundation	<a href="http://www.groundwater.org">www.groundwater.org</a>
The Ground Water Protection Council	<a href="http://www.gwpc.org/home/GWPC_Home.dwt">www.gwpc.org/home/GWPC_Home.dwt</a>

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## 14.8 | Contacts – Telephone Numbers

### Connecticut Department of Energy and Environmental Protection

<b>Aquifer Protection Area Program</b>	860-424-3020
General Number	860-424-3000
24-Hour Emergency Spill Reporting	860-424-3338
Oil and Chemical Spill Response Division	860-424-3377

### Bureau of Materials Management and Compliance Assurance

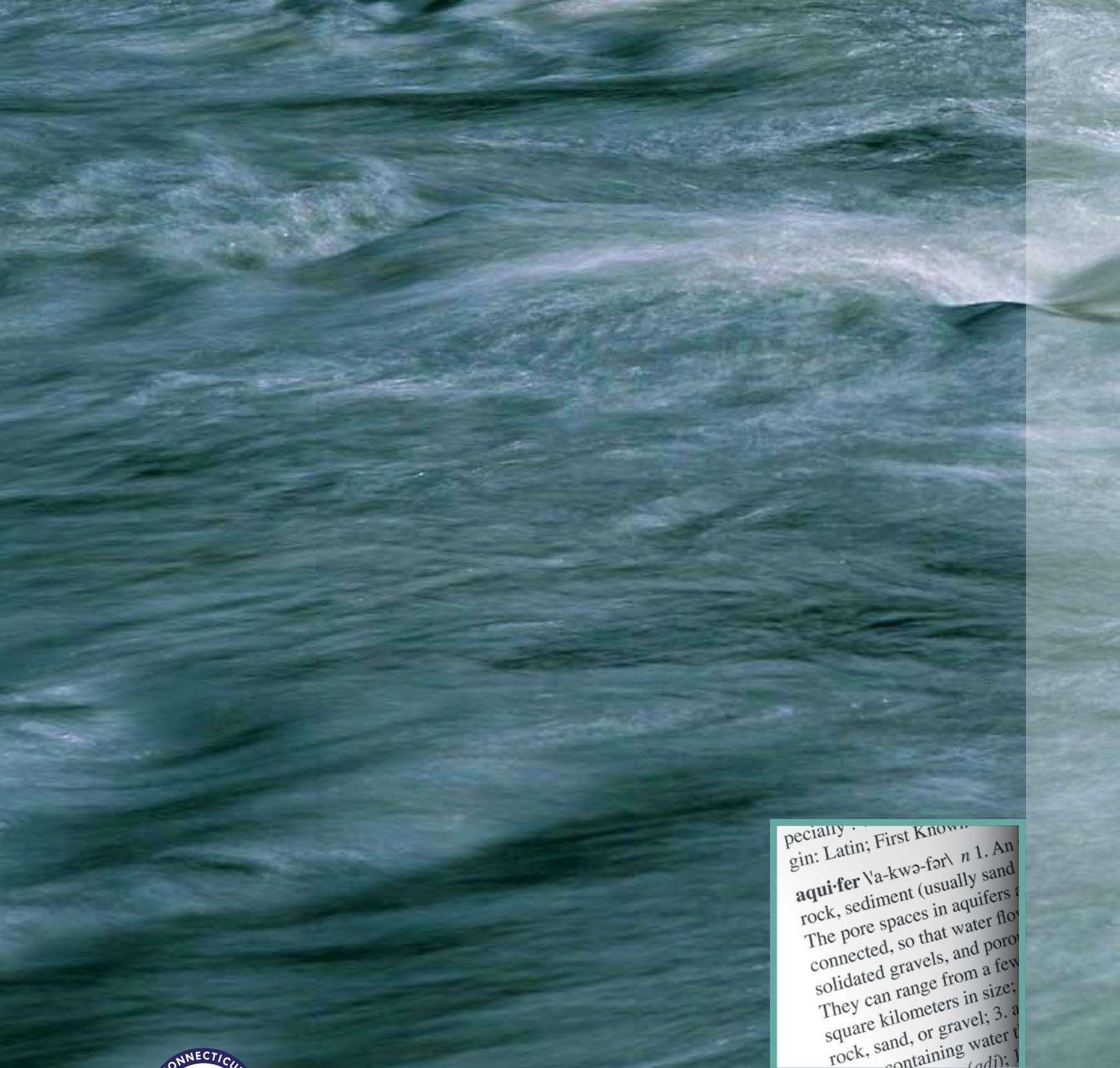
Hazardous Waste Compliance Assistance	860-424-4193
Office of Pollution Prevention	860-424-3297
Pesticide Program	860-424-3369
Solid Waste Recycling Program	860-424-3365
Underground Storage Tank Program	860-424-3374

### Bureau of Water Protection and Land Reuse

Planning and Standards Division	860-424-3020
Stormwater and Wastewater Discharge Program	860-424-3018
Remediation Program	860-424-3705

### Other Numbers

Connecticut Department of Public Health	
Public Drinking Water Systems	860-509-7333
National Response Center	860-424-8802



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

## 15 | Glossary of Terms

**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.

# 15 | Glossary of Terms

**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](http://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](http://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 (RCSA 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).

# 15 | Glossary of Terms

**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

## 15 | Glossary of Terms

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).

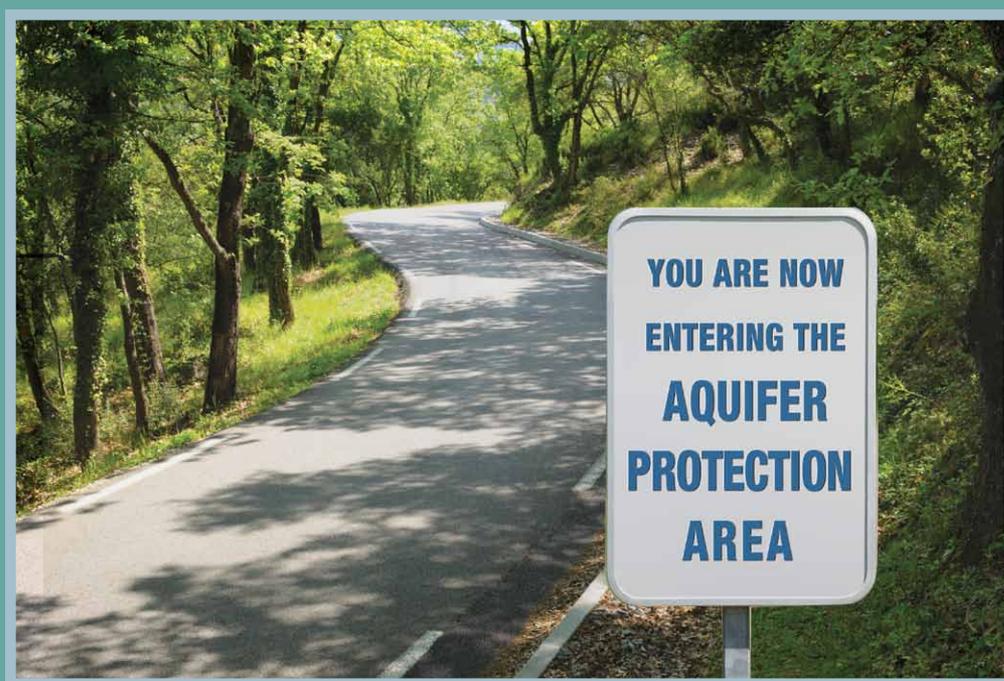
**Wellfield** means the immediate area surrounding a public drinking water supply well or group of wells.

**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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