



# Model Documents



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

### **Model Municipal Ordinance to Designate Municipal Aquifer Protection Agency**

[MONTH] [YEAR]

**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.*

# 12 | Model Documents

## 12.1 | Model Municipal Ordinance to Designate Agency (continued)

- (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]

---

<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.*

# 12 | Model Documents

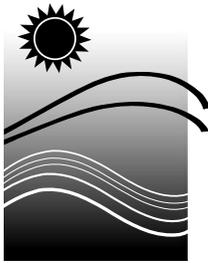
## 12.2 | Model Municipal Regulations (continued)



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

### **Model Municipal Aquifer Protection Area Regulations**

[MONTH] [YEAR]



Connecticut Department of

**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

---

### **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

---

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**

---



---

### 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

---



---

#### TABLE OF CONTENTS

| SECTION |  | PAGE |
|---------|--|------|
| 1       | Title and Authority  | 2    |
| 2       | Definitions  | 3    |
| 3       | Delineation of Aquifer Protection Area Boundaries                | 8    |
| 4       | Prohibited and Regulated Activities                              | 10   |
| 5       | Activities Regulated by the State                                | 12   |
| 6       | Application for an Exemption from Prohibition or Regulation      | 12   |
| 7       | General Registration, Permit Application and Transfer Procedures | 12   |
| 8       | Registration Requirements  | 13   |
| 9       | Permit Requirements  | 16   |
| 10      | Public Hearings Regarding Permit Applications                    | 19   |
| 11      | Bond and Insurance Relevant to Permit Applications               | 20   |
| 12      | Best Management Practices  | 20   |
| 13      | Other State, Federal and Local Laws                              | 22   |
| 14      | Enforcement  | 22   |
| 15      | Amendments   | 24   |
| 16      | Appeals  | 24   |
| 17      | Conflict and Severance   | 24   |
| 18      | Application and Registration Fees                                | 24   |
| 19      | Effective Date of Regulations                                    | 26   |

### 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

# 12 | Model Documents

## 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;

# 12 | Model Documents

## 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,

# 12 | Model Documents

## 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

# 12 | Model Documents

## 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

# 12 | Model Documents

## 12.2 | Model Municipal Regulations (continued)

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 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:

# 12 | Model Documents

## 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,

# 12 | Model Documents

## 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

# 12 | Model Documents

## 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;

# 12 | Model Documents

## 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:

# 12 | Model Documents

## 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**

---

### **Reference Document for Model Municipal Regulations Aquifer Protection Areas**

October 1, 2007  
Revised October 1, 2010

---

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

# 12 | Model Documents

## 12.3 | Reference Document for Model Municipal Regulations (continued)

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:

---

---

---

Identify the spill coordinator who will be advised immediately of all spills, regardless of quantity:

---

---

---

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 860-424-3023.)

---

---

---

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:

---

---

---

---

MMP10

# 12 | Model Documents

## 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 860-424-3023 for any questions about proper disposal of hazardous or regulated wastes.)

---

---

---

---

---

---

---

Indicate how spill response kit(s) will be kept up to date and fully stocked at all times: \_\_\_\_\_

---

---

---

---

---

---

---

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): \_\_\_\_\_

---

---

---

Maintain hazardous waste manifests: \_\_\_\_\_

---

---

---

Ensure materials and waste containers are properly labeled: \_\_\_\_\_

---

---

---

Mark purchase date on materials: \_\_\_\_\_

---

---

---

Control access to materials that are hazardous: \_\_\_\_\_

---

---

---

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

# 12 | Model Documents

## 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

SMP3

# 12 | Model Documents

## 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

SMP7

# 12 | Model Documents

## 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).

SMP8

# **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**

Printed on recycled paper

### **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.

# 12 | Model Documents

## 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**

Printed on recycled paper

### 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:**

---

---

---

---

---

---

---

---

---

---

**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**

Printed on recycled paper

### 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     |
|                        | <hr/> |
|                        | 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     |
|                        | <hr/> |
|                        | 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     |
|                        | <hr/> |
|                        | 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     |
|                        | <hr/> |
|                        | 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       |