



Land Use Inventory

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

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

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

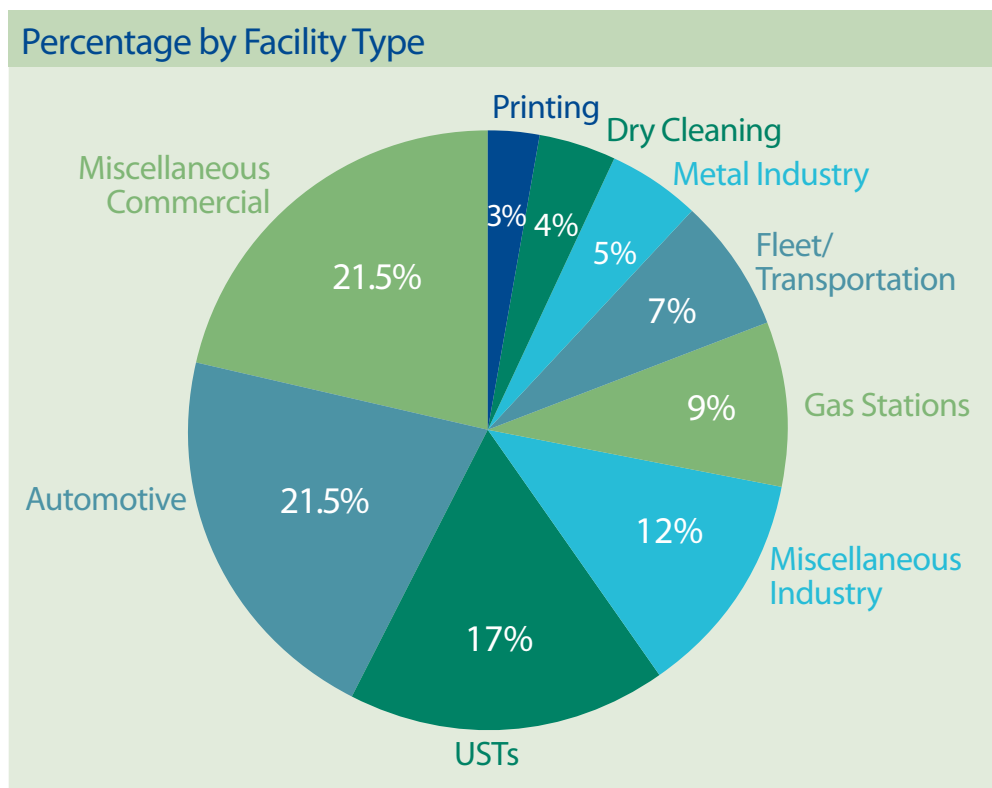
2.1 | Inventory Guidelines

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

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

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

Source: CT DEP 2002.



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

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

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

2.2 | Completing or Updating the Inventory

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

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

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

2.3 | Inspecting Potentially Regulated Facilities

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

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

Registered Facilities

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



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2.4 | Table of Potentially Regulated Businesses and Facilities

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

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

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

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

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

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2.5 | Table of APA Regulated Land Use Activities

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

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

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

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

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

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

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

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

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

Aquifer Protection Area Inventory Form

Well Field Name _____ APA ID _____

Facility Name _____

Facility Address _____

Regulated Activity Type _____

Regulated Activity Code _____

Municipal Sewer or Septic (circle one)

Owner of Property (Name and Address) _____

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

GPS Coordinates: _____

Comments: _____

Download this document at www.ct.gov/deep/aquiferprotection

2.7 | Sample Inventory Table

Aquifer Protection Area Inventory Table

ID	Facility Name	Facility Address	Owner	Owner's Address	Potentially Regulated Activity	Code(s)	Municipal Sewer?	Status (Active/Inactive)	GPS-E	GPS-N	Comments