

**STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH
DRINKING WATER SECTION
STORAGE TANK PROJECT APPLICATION**

Instructions

This application is provided in the interest of facilitating the approval process for storage tank projects, and must be submitted to the Department of Public Health (DPH) along with a General Application Form. A document entitled "Storage Tank Design and Construction Guidelines" is available on the DPH's web site <http://www.ct.gov/dph/publicdrinkingwater> for use as a reference in the design of a storage tank and identifies applicable Regulations of Connecticut State Agencies (RCSA) or Connecticut General Statutes (CGS). Supporting information as identified with an asterisk (*) in this application will need to be provided. Specific and applicable RCSA or CGS will be stated within brackets []. If the project overall has multiple components other than a storage tank (i.e. wells, treatment, pumps, etc.), additional applications may need to be completed. Check off all items that apply.

Section A. General Information

PWS Name: _____
PWSID #: CT _____

Please provide the contact information of the primary person who can answer technical questions regarding this project:

Name: _____
Title: _____
Company: _____
Address: _____

Phone Number: _____
Fax Number: _____
E-mail Address: _____

Section B. Type of Tank(s)

- | | |
|--|--|
| <input type="checkbox"/> Standpipe (atmospheric) | <input type="checkbox"/> Hydropneumatic/Pressure |
| <input type="checkbox"/> Ground Level (atmospheric) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Buried/Bulkheaded (atmospheric) | |
| <input type="checkbox"/> Elevated (atmospheric) | |

Section C. Plans and Specifications

* 1. For any buried or partially buried tank, atmospheric or hydropneumatic, a scaled site plan needs to be submitted to the DPH identifying: that there are no buried subsurface sewage disposal system components or sanitary sewers within a 50 feet of the proposed tank; and that there are no watercourses, storm drains or other sources of pollution (i.e. fuel tanks/lines, drywells, etc.) within a 25 feet of the proposed tank. [RCSA Section 19-13-B102(f)(5)(B)] If the tank(s) is not to be buried nor partially buried, check off: Not Applicable (NA)

* 2. Scaled project plan sheet(s) or accurate construction drawing(s)/schematic(s) of the proposed storage tank(s) and its location relative to applicable existing facility components or proposed new system components needs to be submitted to the DPH. As a minimum and as applicable, the following components should be shown and labeled: storage tank, vent(s), overflow, access hatches and/or manways, drain pipe, water level indicating means, inlet and outlet pipes, valves, sample tap, etc. Detailed drawings for an atmospheric tank's vent, overflow and hatches should be provided.

3. Copy of contract specifications and/or manufacturers' specifications/cut sheets for major project components identified for this project (i.e. tank, hatch, vent, etc.), should also be submitted.

4. A tank must be located above the level of a 100 year flood. [RCSA Section 19-13-B102(d)(1)(A)]
* Verification must be provided (FEMA map or other).

Section D. Sizing/Volumes and Materials

1. Atmospheric Tank(s) and Clearwells Tank Dimensions (feet)
No. of tanks: _____ Cylindrical: _____
Gross volume (gal./tank): _____ Diameter: _____
Useable volume (gal./tank): _____ Length/Height: _____
Material of tank: welded steel; bolted steel Rectangular: _____
 fiberglass; polyethylene; concrete; Length: _____
 other: _____ Width: _____
Identify pump type to supply/operate in conjunction with Height:: _____
tank:
 well(s) booster pump(s) VFD
* Calculations used for sizing of tank(s) should be provided.

2. Hydropneumatic/Pressure Tank(s) Material of tank: steel; fiberglass;
No. of tanks: _____ other: _____
Gross volume (gal./tank): _____ Identify pump type to supply/operate in conjunction with
Type: std./conventional bladder/diaphragm tank:
 well(s) booster pump(s) VFD
Flow rate (gpm) used for sizing of tank(s): _____
* Calculations used for sizing of tank(s) should be provided.

Section D. Sizing/Volumes and Materials (continued)**3. Interior Paint or Lining**

The DPH accepts the use of an interior paint or lining which is certified to ANSI/NSF Standard 61. ANSI/NSF Standard 61 is a national industry standard pertaining to the certification of drinking water system components. There are third party accredited testing laboratories including, but not limited to, NSF (www.nsf.org), UL (www.ul.com), and WQA (www.wqa.org) which certify drinking water system components to ANSI/NSF Standard 61. Glass fused steel or polyethylene atmospheric tanks or bladder/diaphragm pressure tanks, polyethylene or other type tanks may be certified under a different standard.

Name of product used for interior surface paint/lining: _____

Manufacturer: _____

* Provide a copy of the ANSI/NSF Standard certification/listing for the proposed paint/lining to be used on the interior of the tank(s) or for the tank.

Section E. Hydropneumatic Tank(s) Components/Appurtenances

Check off any of the following items that exist or will be provided in conjunction with the tank(s):

- | | |
|--|--|
| <input type="checkbox"/> Pressure gauge | <input type="checkbox"/> Drain/blowoff for each tank |
| <input type="checkbox"/> Pressure relief valve | <input type="checkbox"/> Inlet pipe and outlet pipe: <input type="checkbox"/> common; <input type="checkbox"/> separate; |
| <input type="checkbox"/> Pressure switch | <input type="checkbox"/> with isolation valve(s) |

Proposed pressure settings for operation of well(s) or booster pump discharging to pressure tank: Valves/controls for automatic addition of air

Air compressor for adding air; oil-less

Start/on (psi): _____ Water level sight tube

Stop/off (psi): _____

Section F. Atmospheric Tank(s) Components/Appurtenances

Check off any of the following items that exist or will be provided in conjunction with the tank(s):

- Vent(s) [RCSA Section 19-13-B102(f)(5)(A)]:

Type of vent(s): dome; inverted J-shaped; mushroom; No. of vents: _____

protected and screened; mesh size of screen: _____

- Overflow [RCSA Section 19-13-B102(f)(5)(A)]:

protected and screened and mesh size of screen: _____

tight fitting flap valve; duck-bill elastomeric check valve; air-gapped above grade or above a receiving structure, and if not, describe: _____

- Access hatches and manways [RCSA Section 19-13-B102(f)(5)(A)]:

hatch in top of tank, hatch opening has raised curb frame and overlapping cover preventing precipitation from entering into the tank, hatch frame/cover has continuous gasket, lock provided;

in top of tank, circular with gasket and bolted cover; in face of tank; in sideshell

- Tank drain: discharge location/outlet structure: _____

- Footing drain: discharge location: _____

- Emergency fill pipe: with locked cap or equivalent

- Inlet pipe and outlet pipe: common or separate; with isolation valves

- Sample tap(s), smooth nose and free of obstructions; and locations inlet pipe; outlet pipe

Section F. Atmospheric Tank(s) Components/Appurtenances (continued)	
<input type="checkbox"/> Access ladder: <input type="checkbox"/> with security protection, description: <hr/>	
<input type="checkbox"/> Internal mixing/circulation system: type: <hr/>	
<input type="checkbox"/> Perimeter fencing; <input type="checkbox"/> Locked access gate	
Section G. Operating Water Level Equipment/Controls and Alarms (atmospheric tanks)	
Check off any of the following items that exist or will be provided in conjunction with the tank(s): <input type="checkbox"/> Water level measuring: <input type="checkbox"/> translucent sidewall gal. incremented; <input type="checkbox"/> pressure gauge; <input type="checkbox"/> sight tube; <input type="checkbox"/> pressure sensor <input type="checkbox"/> Water level monitoring/recording: <input type="checkbox"/> chart recorder; <input type="checkbox"/> SCADA; <input type="checkbox"/> Alarms (identify feet from bottom of tank): <input type="checkbox"/> low water level: _____ <input type="checkbox"/> high water level: _____ <input type="checkbox"/> Alarm type: <input type="checkbox"/> audio <input type="checkbox"/> light <input type="checkbox"/> dialer <input type="checkbox"/> SCADA Other controls associated with water level in tank:: <input type="checkbox"/> well activation <input type="checkbox"/> booster pump shut-off on low tank level Proposed tank operating levels (feet from bottom): The high level identified below should correspond to the useable volume identified in Section D.1. low _____ high _____ overflow _____	
Section H. Contact Time (CT)	
* If the tank is to be used whole or in part to achieve a required "CT" using chlorine, ozone or other disinfectant chemical in accordance with Section 19-13-B102(e)(7)(M) of the RCSA, surface water treatment technique in accordance with Section 19-13-B102(j)(3) of the RCSA, or 4-log inactivation of viruses in accordance with the Ground Water Rule (GWR), an applicant must provide calculations used to assess CT. For a system which uses groundwater sources [well(s)] and chlorine as a disinfectant, please refer to the DPH document GUIDELINES FOR DETERMINING DISINFECTION "CT" WHEN USING CHLORINE FOR DISINFECTION OF GROUNDWATER SOURCES OF SUPPLY and a separate DISINFECTION "CT" APPLICATION FOR A GROUNDWATER USING CHLORINE FOR DISINFECTION. For CT requirements for surface water treatment facilities, refer to Federal guidelines.	
Section I. Disinfection/Testing	
A tank must be effectively disinfected prior to placing into service. [Section 19-13-B47 of RCSA] Method of disinfection to be implemented: _____ Tests must be conducted on a sample from the water stored in tank after disinfection and prior to placing the tank into service for chlorine residual, total coliform, physical parameters and organic chemicals (aka VOCs).	
Section J. Certification	
This application must be signed by the PWS administrative official, his/her authorized representative, or certified operator of the PWS. I hereby certify that I have examined the information contained in this application as submitted to the DPH and have determined it to be accurate to the best of my knowledge:	
Signature:	Date Signed:
Name (Print):	Telephone #:
Title and Relationship to PWS:	