



CHAUTAUQUA COUNTY  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
DIVISION OF PUBLIC HEALTH – ENVIRONMENTAL HEALTH UNIT

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GEORGE M. BORRELLO  
*County Executive*

CHRISTINE SCHUYLER  
*Director of Health & Human Services*  
*(Commissioner of Social Services/Public Health Director)*

RE: Private Onsite Wastewater Treatment System

Dear Homeowner/Contractor,

The Chautauqua County Environmental Health Unit has received your request for a permit to install an onsite wastewater treatment system (OWTS). The Sanitary Code of the Chautauqua County Health District requires a building lot of at least 40,000 square feet to keep water wells at least 50 feet from septic tanks and 100 feet from other wastewater treatment system components.

Please find the enclosed application for an OWTS permit and a packet of forms to assist you in preparing an OWTS design for your property. We suggest that you hire a contractor to perform percolation tests, design a system for your property, obtain the proper permit and install the system according to the plan. A list of contractors working in Chautauqua County is enclosed; these contractors are familiar with New York State Sewage regulations and the requirements of the Chautauqua County Environmental Health Unit.

Please complete the application, site plan, and percolation tests, record the information and return the entire form to our Mayville office for processing, accompanied by a check payable to the Chautauqua County Department of Finance.

**As of JANUARY 1, 2016 PERMIT FEES are as follows:**

Correction or replacement on an existing home	\$200
Newly constructed home (new OWTS)	\$200
Septic tank replacement permit	\$ 75
Distribution box replacement permit	\$ 75
OWTS Permit extension	\$ 30

Please contact our office to make an appointment for you or your contractor to meet with an inspector from this Department at the site. This conference is an important part of our permit process. Once issued OWTS permits are valid for one (1) year.

If you have any questions or comments regarding onsite wastewater treatment system permits, please contact our office at (716)753-4567.

Sincerely,

Environmental Health Unit  
Chautauqua County Department of Health and Human Services

Mailing Address: Chautauqua County Department of Health and Human Services  
Environmental Health Services  
7 North Erie St.  
Mayville, NY 14757

## PROCEDURE FLOW CHART for PRIVATE ONSITE WASTEWATER TREATMENT SYSTEM PERMIT

Responsibilities of Homeowner or Contractor	Responsibilities of CCDHHS - Environmental Health Unit	
1. Requests information and application forms from appropriate district office.	➔	Provides application information and necessary forms.
2. Completes all information including: <ul style="list-style-type: none"> <li>• Application</li> <li>• Site plan – exact location of site.</li> <li>• Completes percolation tests and records on chart.</li> <li>• Completes soil characteristic chart.</li> </ul>		
3. Meets at site with CCDHHS Environmental Health Unit representative. <b>Requests 24 hour advance notice.</b>	➔	Meets at site with contractor and homeowner.
4. Contractor or homeowner designs system on forms provided and returns completed application with \$200.00 fee to local district office.	➔	Reviews information/plans and issues permit; copies are sent to applicant, Town Code Enforcement Officer, and contractor.
5. Construction begins only after plans have been reviewed and approved (permit issued, or verbal approval given).		
6. Contractor requests final inspection with 24 hour notice. <b><u>All components</u></b> of the system must be complete at time of requested inspection.	➔	Makes final inspection and approves system or requires correction.
7. Contractor covers and grades system area.	➔	Sends approval letter and as built drawing (with precise dimensions and measurements of essential components) to applicant with copies to Town Code Enforcement Officer and contractor.

**ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) INSTALLATION / OPERATION PERMIT APPLICATION**

In applying for this permit, I understand the following:

- System design is dependent on factors including the number of bedrooms, facility use, and property specifics such as:
  - size and shape.
  - topography.
  - soil characteristics.
  - water table levels.
  - the ability to meet NYS required offset distances.
- The location of my well, surrounding wells, and OWTS components will be documented; the information may be used by the Environmental Health Unit for future developments on surrounding properties.
- All OWTSs have limitations. The life expectancy of an OWTS is dependent on use and maintenance but life expectancy may be extended by utilizing water conservation measures, installing water efficient appliances, and eliminating garbage disposal units and dishwashers. Groundwater, cooling water, and surface water from streets, foundations, and roofs must be excluded from the OWTS.
- Should my system fail I am responsible for notifying the Environmental Health Unit for a permit to make repairs so public health nuisances and hazards may be prevented.
- If I sell my property a water sewage survey must be completed in accordance with the Sanitary Code of the Chautauqua County Health District.

**Under the provisions of Article IV, Section 4 of the Sanitary Code of the Chautauqua County Health District, Application is made by:**

**Section:** \_\_\_\_\_ **Block:** \_\_\_\_\_ **Lot:** \_\_\_\_\_

# Bedrooms: \_\_\_\_\_ Town / Village: \_\_\_\_\_

Property Address: \_\_\_\_\_

**Reason:**  **NEW OWTS**     **CORRECTION**     **CORRECTION** due to Water Sewage Survey  
 **SEPTIC TANK REPLACEMENT ONLY**     **D-BOX REPLACEMENT ONLY**

I have read, understood, and agree to the above conditions under which my permit is to be issued. I agree to install and operate the OWTS in accordance with regulations set forth in the Sanitary Code of the Chautauqua County Health District. **I understand that OWTS construction must not occur prior to the issuance of a permit and that after installation the system shall not be put into service prior to inspection by the CCDHHS Environmental Health Unit.**

Homeowner Name Printed \_\_\_\_\_ Contractor Name Printed \_\_\_\_\_

Homeowner Signature \_\_\_\_\_ Contractor Signature \_\_\_\_\_

Mailing Address \_\_\_\_\_ Mailing Address \_\_\_\_\_

Phone Number \_\_\_\_\_ Phone Number \_\_\_\_\_

Email Address \_\_\_\_\_ Email Address \_\_\_\_\_

**\*\*\* CCDHHS OFFICE USE \*\*\***

**Date Rec'd** \_\_\_\_\_ **Fee** \_\_\_\_\_ **Receipt#** \_\_\_\_\_ **Check#** \_\_\_\_\_

**W.O. / PERMIT #** \_\_\_\_\_ **Date Issued** \_\_\_\_\_

Owner: \_\_\_\_\_ SBL: \_\_\_\_\_ Town/Village: \_\_\_\_\_

**Onsite Wastewater Treatment System (OWTS) Design Checklist**

Please provide a straight lined drawing using a template or straight edge showing the following information. ALL requested information that is applicable must be given in order to receive your permit. Failure to do so will result in the application being rejected and returned. A submitted application with payment is not a guarantee of a permit. No construction should start prior to a permit being issued. If there are any questions as to the status of the permit please contact this office prior to the start of construction. All critical components will be addressed in a detail box or labeled on the submitted plan.

- Property dimensions and property lines.
- Location of the dwelling.
- General slope of the lot.
- Water wells or drinking water supplies within 200 feet of the proposed OWTS.
- Any other lines that may interfere with system construction (i.e. gas lines, water lines, underground electric cable, etc.).
- Any rights of way or easements on the property so we do not place the OWTS on them.
- Proposed location of the OWTS including the location the discharge will drain.
- Location of clean outs.
- Slope of all pipe components in the system, including line from house to tank, tank to D-box and all distribution lines and drains.
- Septic tank brand, size and type of outlet filter.
- D-box location and type (i.e. concrete or plastic).
- Schedule 40 Pipe locations including Capped Vents, Capped Inspection Ports, House to Tank, Tank to D-box (minimum 10 feet).
- Components Dimensions (i.e. length and width of sand filter, final discharge, stone bed).
- Include a North Arrow.
- Locate any streams, ponds, lakes, gullies, etc.
- Property layout (buildings, roads, driveways, etc.)

Designed By: \_\_\_\_\_ Date: \_\_\_\_\_

**\*\*\* CCDHHS OFFICE USE \*\*\***

CCDHHS Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

Type of Permit: Type of Permit:  PSD  PSN  PA  PRIVY  SEPTIC TANK  DBOX

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

\_\_\_\_\_

\_\_\_\_\_

**Onsite Wastewater Treatment System (OWTS) Design / Plan Drawing**

This is a permanent record, please be neat. Provide all information listed below.

Owner \_\_\_\_\_ SBL \_\_\_\_\_ Contractor \_\_\_\_\_

Address \_\_\_\_\_ Town/Village \_\_\_\_\_

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***Deviation from permitted plans requires prior approval from ENV Health or permit may be voided.***

# Bedrooms \_\_\_\_\_ Size of system \_\_\_\_\_

SCH 40 House to tank (1/4"/ft) dist. \_\_\_\_\_

Tank to D-box (1/8"/ft) dist. \_\_\_\_\_

Sand Filter to final absorp.(1/16"/ft.) dist. \_\_\_\_\_

OWTS components to property line dist. \_\_\_\_\_

OWTS components to own well dist. \_\_\_\_\_

to neighbor's well dist. \_\_\_\_\_

Septic tank brand \_\_\_\_\_

Tank size(s): #1 \_\_\_\_\_ #2 \_\_\_\_\_

Outlet filter type \_\_\_\_\_

North arrow \_\_\_\_\_ Slope of land \_\_\_\_\_

**Date SITE INVESTIGATION Completed:** \_\_\_\_\_

**ENV Health Rep:** \_\_\_\_\_

Date \_\_\_\_\_ SBL \_\_\_\_\_ Test by \_\_\_\_\_

Weather / Comments \_\_\_\_\_

CCDHHS Rep \_\_\_\_\_ Date \_\_\_\_\_ Percolation Rate \_\_\_\_\_

**PERCOLATION TEST RESULTS**

#1 DEPTH =				#2 DEPTH =				#3 DEPTH =			
Start	Stop	Minute interval	Inches drop	Start	Stop	Minute interval	Inches drop	Start	Stop	Minute interval	Inches drop

#4 DEPTH =				#5 DEPTH =				#6 DEPTH =			
Start	Stop	Minute interval	Inches drop	Start	Stop	Minute interval	Inches drop	Start	Stop	Minute interval	Inches drop

**SOIL CHARACTERISTICS**

INSTRUCTIONS: Dig a 5 foot test hole in the middle of the proposed tile field area; side walls must be clearly visible to the full depth. Use the chart below to record any significant changes in soil characteristics and the depth where they occur.

- 6"--
- 12"--
- 18"--
- 24"--
- 30"--
- 36"--
- 42"--
- 48"--
- 54"--
- 60"--

Soil Character (color, texture, etc.)

TOPSOIL \_\_\_\_\_ inches \_\_\_\_\_

SUBSOIL \_\_\_\_\_ inches \_\_\_\_\_

GROUNDWATER at \_\_\_\_\_ inches

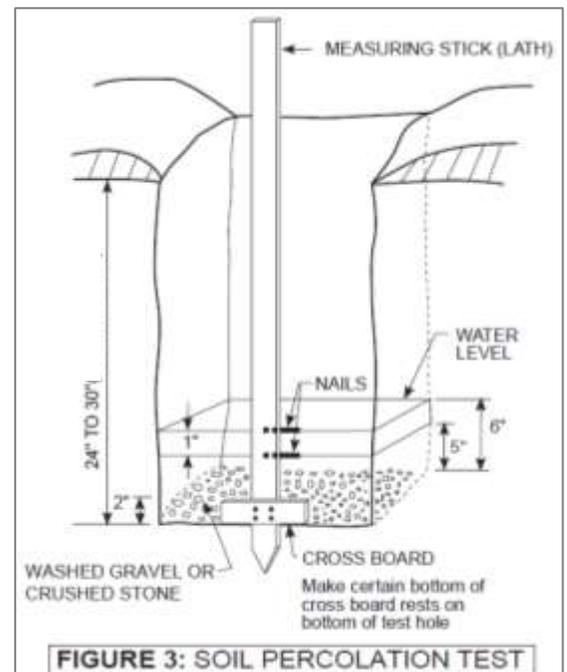
WATER SEEPED IN at \_\_\_\_\_ inches

## LOCATING AND PREPARING PERCOLATION TEST HOLES

1. Locate the proposed tile field area and stake out the probable corners. The tile field area must be located more than 100 feet from any water well and surface water.
2. The proposed tile field area should be divided into four quadrants with a percolation test performed in each quadrant. A minimum of four (4) test holes, 20 feet apart, are required in the proposed field area.
3. Tests should also be run downhill of the proposed field area. Two (2) tests should be performed 10 – 20 feet below the bottom edge of the tile field. Site and OWTS system specifics may require additional tests.
4. Dig a hole with vertical sides approximately 12 inches wide and 24 – 30 inches below grade or, if shallower or deeper OWTSs are planned, dig holes to the projected depth of the trenches. If dense clay, shale, or ground water is encountered, run tests at shallower depth and indicate depth on chart. A reputable OWTS contractor should be contacted for assistance.
5. Scrape the sides of holes and remove loose soil from the bottom. Place 2 inches of gravel or crushed stone in the bottom of holes.
6. **PRESOAK** and saturate the holes the day before the test is run by periodically filling the holes with water and allowing water to seep away. For safety, cover test holes with boards.

## RUNNING PERCOLATION TESTS

1. Carefully pour 6 inches of water into the hole and mark the time on the attached sheet.
2. Observe and record the time in minutes that it takes the water level to drop from 6 inches to 5 inches deep.
3. Add more water to bring the water depth back to 6 inches and repeat step #2.
4. A minimum of 5 tests are requested in each test hole. The process should reveal successive tests that show approximately equal lengths of time for the water depth to drop 1 inch. This time is the percolation rate.
5. For safety, cover test holes with boards. Do not backfill the test holes. A representative from CCDHHS will need to observe the holes in evaluating the OWTS design.



(Source: NYSDOH Residential Onsite Wastewater Treatment Systems Design Handbook p. 105)

## PERCOLATION TESTS RESULTS

After a percolation rate has been determined for each hole, consult the System Size Chart to determine the size of stones beds or trenches recommended for the standard OWTS. Use the slowest percolation rate observed. This department does not design private OWTSs. However **a field consultation with this department is required.** After completing the percolation tests and establishing the soil profile, send your application materials and the filing fee to the Mayville office. You will be contacted for a site investigation appointment.

## EVALUATING SOIL CHARACTERISTICS

A five (5) foot hole is required to evaluate soil characteristics. The hole should be dug in the middle of the proposed tile field area; the width must allow easy observation of side walls to the full depth. Use the "Soil Characteristics" charts to record significant changes in soil characteristics and the depth at which they occur along with the depth at which groundwater is observed.

**Standard Subsurface Tile Fields** are used on lots with good drainage and gentle slopes. See **Minimum Septic Tank Capacities** Table (next page) for tank size requirements. An outlet filter on the septic tank and a distribution box are required. Tile lines are 24" wide trenches of equal length with perforated pipe in washed stone. The trench is dug level, and the pipe is laid at 1/32 inch/foot drop.

**Required Length of Absorption Trench for Corrections (see Notes)**

Percolation Rate	2 Bedrooms		3 Bedrooms		4 Bedrooms		5 Bedrooms		6 Bedrooms	
	Low Flow	High Flow	Low Flow	High Flow	Low Flow	High Flow	Low Flow	High Flow	Low Flow	High Flow
1-5 Min./Inch	92	125	138	187	184	250	230	312	275	374
6-7 Min./Inch	110	150	165	225	220	300	275	375	330	450
8-10 Min./Inch	123	167	184	250	245	333	306	417	367	500
11-15 Min./Inch	138	188	207	281	275	375	344	469	413	563
16-20 Min./Inch	158	214	236	321	315	429	393	536	472	643
21-30 Min./Inch	184	250	275	375	367	500	459	625	550	750
31-45 Min./Inch	220	300	330	450	440	600	550	750	660	900
46-60 Min./Inch	245	333	367	500	489	667	612	833	734	1000*
				Dosing or alternate design required.						
				* Greater than 1,000 feet of trench requires Alternate Dosing.						

**Leaching Stone Beds** are used on lots with good percolating soils but are limited by topography or area. See **Minimum Septic Tank Capacities** Table next page for tank size requirements. An outlet filter on the septic tank, a distribution box, and equal length perforated pipes laid level on 12" of washed stone and connected at the ends are required. NYS Department of Health requires pressure dosing of a leaching stone bed system for new homes. New home construction requires pumping.

**Required Square Footage of Stone Beds (see Notes)**

Percolation Rate	2 Bedrooms		3 Bedrooms		4 Bedrooms		5 Bedrooms		6 Bedrooms	
	Low Flow	High Flow	Low Flow	High Flow	Low Flow	High Flow	Low Flow	High Flow	Low Flow	High Flow
1-5 Min./Inch	250	300	350	475	475	625	600	800	700	950
6-10 Min./Inch	325	425	475	650	650	850	800	1100	950	1300
11-15 Min./Inch	375	500	550	750	750	1000	925	1250	1100	1500
16-20 Min./Inch	400	550	600	800	800	1100	1000	1400	1200	1600
21-30 Min./Inch	500	650	750	1000	1000	1300	1225	1700	1500	2000
						Pressure manifold required.				
						Pumping will be required.				

**Sand Filter Systems** are used on lots with poor drainage, little topsoil, and clay subsoils. The lot should have at least 4' of slope throughout the system area. A two compartment 1500 gallon septic tank with an outlet filter is required. See **Minimum Septic Tank Capacities** Table at bottom of page for tank size requirements. Sand filter systems can have 2 tanks in series that meet the minimum capacity, but if tanks are used in series 2/3 of the total tank volume must be in the first tank (i.e. 1<sup>st</sup> = 1,000 gallon, 2<sup>nd</sup> = 500 gallon). A distribution box is required.

### SAND FILTER SIZE & CONSTRUCTION SPECIFICATIONS

STONE OVER SAND	APPROVED SAND	PEA-STONE UNDER SAND	STONE on BOTTOM
3/4 - 1 1/2 " Washed Stone 8" over sand	24" Approved Grade A Sand	1/8-1/4 " Stone 3" minimum	3/4 - 1 1/2 " Washed Stone

Bedrooms	Width (ft)	Length (ft)	Area (sq. feet)	Top Lines	Under Lines	Length of 2 foot wide Absorption Trench (ft)	Stone Bed (sq. feet)
two	12	25	300	4	1	80	200
three	12	35	420	4	1	120	300
four	12	45	540	4	1	160	400
four	15	36	540	5	2	160	400
five	12	55	660	4	1	200	500
five	15	44	660	5	2	200	500
six	15	52	780	5	2	250	600
six	20	39	780	6	2	250	600

### MINIMUM SEPTIC TANK CAPACITIES

Number of Bedrooms	Subsurface Systems	Sand Filters *
2 or 3	1000 Gallons	1500 Gallons
4	1250 Gallons	1500 Gallons
5	1500 Gallons	1500 Gallons
6	1750 Gallons	2000 Gallons

#### NOTES:

- Tank size requirements for more than six bedrooms shall be calculated by adding 250 gallons and seven square feet of surface area for each additional bedroom.
- A garbage grinder shall be considered equivalent to an additional bedroom for determining tank size.
- A hot tub / spa should be considered equivalent to an additional bedroom for determining tank size.