



Information Guide

Onsite Waste Water Disposal Systems and Water Supplies in Vermont

- The State of Vermont now requires a Wastewater System & Potable Water Supply (WW) permit be issued before water supplies, springs or drilled wells and wastewater disposal or septic systems can be installed, modified or replaced. A WW permit is also needed when subdividing land, constructing or changing the use of a building.
- DG's team of Licensed Designers and Professional Engineers have up to 22 years of experience designing and permitting onsite waste water disposal systems throughout Vermont. With this extensive background, we are sure we can usher your project through Vermont's permitting process promptly and professionally.
- By working closely with the Vermont Department of Environmental Conservation, our design team stays informed and certified on the latest technologies that have been approved for use in Vermont. The careful selection of the "right" disposal option for each building site can save thousands of dollars during construction and result in an environmental sound solution to the challenge of onsite waste water disposal. We routinely design using traditional, tried and true technologies too, realizing "new" is not "always" better.

What steps are involved in obtaining a WW permit?

Project Overview & Fieldwork Phase

- Initial overview discussion of the project to identify your objectives.
- Research existing data. This might include permits, surveys, deeds, soil maps, topographic maps, aerial photos, wetlands inventory, and hazardous materials sites.

- Visit the site to identify existing features and locations of proposed development. These would include property lines, neighboring water supplies and leachfields, brooks, ponds, ledge outcroppings, steep slopes, roads and utilities. We would have the client provide input on the proposed house, drive and property line locations. Other work to be completed onsite includes:
 - Evaluating the native soils in 6 foot deep test pits (4 – 16 needed per lot) to determine the suitability for primary and reserve leachfield locations. These test pits are usually dug by an excavation contractor hired by the client.
 - Perform percolation tests to calculate the final size of the leachfield.
 - Measure the house site, well site and leachfield areas.
 - Install bench marks as reference points to allow accurate layout during the construction phase.

Calculations & Design Phase

- Analyze soils data and percolation test results to determine best option for onsite wastewater disposal for the site.
- Based on the number of bedrooms in the proposed home, calculate the sizes of the various septic system components.
- Calculate how the proposed use of the site could influence the existing seasonal high water table and incorporate that information into the design.

Drafting & Permitting Phase

- Prepare a topographic site plan showing all of the pertinent existing and proposed features.
- Delineate a well isolation shield and show it on the site plan.
- Prepare a detail sheet showing waste water disposal system construction details.
- Indicate site location on USGS map.
- Type up the soils data and design criteria.
- Complete the Vermont WW application form.

- Submit the WW application and supporting documentation to the State Department of Environmental Conservation for review and approval.

Estimated Fees

- The fee for the initial site investigation through the evaluation of the test pit soils data (excluding excavation costs) is \$800.00
- The remaining field work can usually be completed for \$1,000.00
- The calculation & design phase is estimated at \$750.00
- The drafting and permitting phase is estimated at \$750.00
- A \$100.00 project feasibility payment is required to begin work on a project. This \$100.00 will be incorporated into the project retainer and credited to the final invoice when the work on the project is completed. The \$100.00 is part of the \$800.00 project overview and initial site investigation fee listed above, not an additional charge.
- Work completed on the project will be billed monthly.
- The prices outlined above are per lot or house site. These are estimates based on average or typical site conditions. Remote or heavily wooded sites may cost more, and multiple sites being tested and permitted concurrently usually can be completed at a lower per lot rate.
- General consulting work will be billed on a time and expense basis.
- Rush service is often available at 1.5 times the normal rate.

The application fee for the State's review of the WW permits, \$210.00 for a three bedroom, \$245.00 for a four bedroom home, is to be paid by the applicant and is not included in these fees.

If Municipal Water and Sewer service is available the permit process is streamlined but a permit is still required.

DG can also assist you with information required by some Town Planning Commissions or Zoning Boards.

We also have a strong background working on larger land development and subdivision projects that will be reviewed under Act 250. Please contact DG for additional information on these services.

DG can also provide the required inspections and certification during the construction phase of your project. This might include; Review of the plans with contractor, Flag out leach field location, Inspect all components to ensure proper installation, Take "as-built" measurements, Prepare and send certification of installation to the State. The charges for these services typically run about \$750 and are not included in the design fees listed above.

For more information please call **Dufresne Group** at (802) 479-3698.