Sewage Disposal Onsite Septic Ratings (VT)

Orange County, Vermont

[These ratings are based on a review of criteria set forth in the Vermont 2002 Environmental Protection Rules]

On-site class	Map symbol	Soil map unit name
Ia	AgA	Agawam fine sandy loam, 0 to 3 percent slopes
Ia	AgB	Agawam fine sandy loam, 3 to 8 percent slopes
Ia	AgC	Agawam fine sandy loam, 8 to 15 percent slopes
Ib	AgD	Agawam fine sandy loam, 15 to 25 percent slopes
IIe	AgE	Agawam fine sandy loam, 25 to 50 percent slopes
IIIc	BeB	Belgrade silt loam, 0 to 8 percent slopes
IIId	BeC	Belgrade silt loam, 8 to 15 percent slopes
IIIe	BeD	Belgrade silt loam, 15 to 25 percent slopes
V	Bp	Pits, borrow
IIIc	BuB	Buckland stony loam, 3 to 8 percent slopes
IIId	BuC	Buckland stony loam, 8 to 15 percent slopes
IIIe	BuD	Buckland stony loam, 15 to 25 percent slopes
IIIe	BvC	Buckland very stony loam, 8 to 25 percent slopes
IVd	BwE	Buckland soils, 25 to 50 percent slopes
IVa	CaB	Cabot stony silt loam, 0 to 8 percent slopes
IIId	CaC	Cabot stony silt loam, 8 to 15 percent slopes
IIIe	CaD	Cabot stony silt loam, 15 to 25 percent slopes
IIId	CbB	Cabot very stony silt loam, 3 to 15 percent slopes
IIIe	CbD	Cabot very stony silt loam, 15 to 25 percent slopes
V	Cm	Pits, copper mine-Dumps, mine complex
Ic	CoB	Colrain stony fine sandy loam, 3 to 8 percent slopes
Ic	CoC	Colrain stony fine sandy loam, 8 to 15 percent slopes
Id	CoD	Colrain stony fine sandy loam, 15 to 25 percent slopes
Id	CsD	Colrain very stony fine sandy loam, 8 to 25 percent slopes
IIf	CsE	Colrain very stony fine sandy loam, 25 to 50 percent slopes
Id	CxD	Colrain extremely stony fine sandy loam, 8 to 25 percent slopes
IIf	CxE	Colrain extremely stony fine sandy loam, 25 to 50 percent slopes
V	Gp	Gravel pits
IIg	Ha	Hadley very fine sandy loam
IIa	HdB	Hartland silt loam, 0 to 8 percent slopes
IIa	HdC	Hartland silt loam, 8 to 15 percent slopes
IIb	HdD	Hartland silt loam, 15 to 25 percent slopes
IVd	HdE	Hartland silt loam, 25 to 50 percent slopes
IVa	Le	Limerick very fine sandy loam
Ia	MeA	Merrimac fine sandy loam, 0 to 3 percent slopes

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Ia	MeB	Merrimac fine sandy loam, 3 to 8 percent slopes
Ia	MeC	Merrimac fine sandy loam, 8 to 15 percent slopes
Ib	MeD	Merrimac fine sandy loam, 15 to 25 percent slopes
IIe	MeE	Merrimac fine sandy loam, 25 to 50 percent slopes
V	Ml	Udorthents
V	Mu	Muck
IIh	NnB	Ninigret fine sandy loam, 0 to 8 percent slopes
IIh	NnC	Ninigret fine sandy loam, 8 to 15 percent slopes
IVa	Pc	Peacham soils
IIc	PoC	Pomfret stony loamy fine sand, 8 to 15 percent slopes
IId	PoD	Pomfret stony loamy fine sand, 15 to 25 percent slopes
IId	PsD	Pomfret very stony loamy fine sand, 8 to 25 percent slopes
IVb	PtE	Pomfret soils, 25 to 50 percent slopes
V	Qu	Pits, quarry-Dumps, mine complex
IIIc	Ra	Raynham variant silt loam
IVc	Ro	Rock outcrop
IVa	Sa	Saco mucky silt loam
V	SLF	Dumps, sanitary landfill
IIh	SoB	Stowe stony fine sandy loam, 3 to 8 percent slopes
IIh	SoC	Stowe stony fine sandy loam, 8 to 15 percent slopes
IIIe	SoD	Stowe stony fine sandy loam, 15 to 25 percent slopes
IIIe	StD	Stowe very stony fine sandy loam, 8 to 25 percent slopes
IVd	SwE	Stowe soils, 25 to 50 percent slopes
IIc	TbB	Tunbridge-Woodstock rocky fine sandy loams, 3 to 8 percent slopes
IIc	TbC	Tunbridge-Woodstock rocky fine sandy loams, 8 to 15 percent slopes
IId	TbD	Tunbridge-Woodstock rocky fine sandy loams, 15 to 25 percent slopes
IId	TrD	Tunbridge-Woodstock very rocky fine sandy loams, 8 to 25 percent slopes
IVb	TwE	Tunbridge-Woodstock complex, 25 to 50 percent slopes
IIc	VeB	Vershire-Glover rocky loams, 3 to 8 percent slopes
IIc	VeC	Vershire-Glover rocky loams, 8 to 15 percent slopes
IId	VeD	Vershire-Glover rocky loams, 15 to 25 percent slopes
IId	VgD	Vershire-Glover-Rock outcrop complex, 8 to 25 percent slopes
IVb	VhE	Vershire-Glover complex, 25 to 50 percent slopes
V	W	Water
IVa	Wa	Walpole fine sandy loam
Ia	WnB	Windsor loamy fine sand, 0 to 8 percent slopes

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Orange County, Vermont

On-site class	Map symbol	Soil map unit name
Ib	WnD	Windsor loamy fine sand, 8 to 25 percent slopes
IIe	WnE	Windsor loamy fine sand, 25 to 50 percent slopes
IIIb	Wo	Winooski very fine sandy loam

Sewage Disposal Onsite Septic Ratings (VT)

This table indicates the suitability of the soils in the survey area for residential onsite waste disposal systems. The ratings in the table are based on the 2002 Vermont Environmental Protection Rules (Vermont Department of Environmental Conservation, Agency of Natural Resources). This rating system replaces that in the publication "Ancillary Soil Interpretation Ratings for On-site Sewage Disposal in Vermont," published in January 1997 by the Natural Resources Conservation Service.

Included in onsite waste disposal systems are absorption fields, also known as leach fields, or trenches in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. There must be unsaturated soil material beneath the absorption field to filter the effluent effectively. Unsatisfactory performance, including excessively slow absorption of effluent, surfacing of effluent, and hillside seepage, can affect public health.

The ratings are represented by symbols for five interpretive groups and their subgroups. These groups and subgroups are described in the following paragraphs.

Group I soils are well suited to onsite waste disposal systems. Good performance and low maintenance can be expected. The soils in this group are sandy and gravelly soils that formed in outwash and that have rapid permeability in the substratum and well drained soils that formed in till and that have a friable substratum with moderate permeability. Slopes generally are less than 20 percent.

- Map units in subgroup Ia have rapid permeability and slopes of less than 20 percent.
- Map units in subgroup Ib have rapid permeability and have slopes that range to more than 20 percent.
- Map units in subgroup Ic have moderate permeability and slopes of less than 20 percent.
- Map units in subgroup Id have moderate permeability and have slopes that range to more than 20 percent.

Group II soils are moderately suited to onsite waste disposal systems. The group includes soils with moderately slow to very slow permeability; complexes in which one or more of the soils have bedrock at a moderate depth (20 to 40 inches); soils that would qualify for inclusion in group I but have slopes of more than 20 percent; soils that are subject to flooding; and soils that have a seasonal high water table at a depth of 18 inches or more.

- Map units in subgroup IIa have moderately slow to very slow permeability and slopes of less than 20 percent.
- Map units in subgroup IIb have moderately slow to very slow permeability and have slopes that range to more than 20 percent.
- Map units in subgroup IIc have bedrock at a moderate depth (20 to 40 inches) in some areas and have slopes of less than 20 percent.
- Map units in subgroup IId have bedrock at a moderate depth (20 to 40 inches) and have slopes that range to more than 20 percent.
- Map units in subgroup IIe have rapid permeability and have slopes of more than 20 percent.
- Map units in subgroup IIf have moderate permeability and slopes of more than 20 percent.
- Map units in subgroup IIg are subject to flooding.
- Map units in subgroup IIh have a seasonal high water table at a depth of 18 inches or more and have slopes of less than 20 percent.

Group III map units are marginally suited to onsite waste disposal systems. Intensive onsite investigation may be needed to locate suitable areas, or special design, extra maintenance, or costly alteration may be needed to overcome the soil-related limitations. In areas where the water table is at a shallow depth, seasonal onsite monitoring of the water table may be needed to determine whether the site is suitable. Some areas of any of the map units in group III may not be suitable for onsite waste disposal systems.

- Map units in subgroup IIIa have bedrock at a depth of less than 10 inches in some areas. Some map units are limited by slopes that range to more than 20 percent.
- Map units in subgroup IIIb are subject to flooding and have a seasonal high water table at a moderate depth.
- Map units in subgroup IIIc have a seasonal high water table at a depth of 1 foot or less and have slopes of 8 percent or less.
- Map units in subgroup IIId have a seasonal high water table at a depth of 1 foot or less and have slopes of 8 to 20 percent.
- Map units in subgroup IIIe generally have a seasonal high water table within a depth of 2 feet and have slopes that range to more than 20 percent.
- Map units in subgroup IIIf have a seasonal high water table and limited depth to bedrock. Some map units have slopes that range to more than 20 percent.

Group IV map units are not suited to onsite waste disposal systems because of such limitations as wetness, depth to bedrock, restricted permeability, or slope.

- Map units in subgroup IVa are subject to excessive wetness.

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- Map units in subgroup IVb are limited by the depth to bedrock and by slopes of more than 20 percent.

- Map units in subgroup IVc are not suited because of a very limited depth to bedrock and the slope.

- Map units in subgroup IVd have moderately slow to very slow permeability and have slopes of more than 20 percent. Some map units have a seasonal high water table.

Group V map units are not rated for onsite waste disposal systems. This group includes miscellaneous areas that have been filled, excavated, regraded, or otherwise disturbed by human activities; areas that are mapped above the series level, such as Udorthents; and areas of water. The miscellaneous areas and the areas mapped above the series level have a wide range of soil properties. Onsite investigation is needed to determine the suitability of these areas for onsite waste disposal.

The ratings in this report are based on the installation of a new septic system for a new single-family home on a lot subdivided on or after June 14, 2002, in a municipality that has planning and zoning bylaws. The ratings do not necessarily apply to the siting of a replacement system for an existing residence. The ratings for lots subdivided before June 14, 2002, are based on a slope limitation of 30 percent, whereas the ratings in this table are based on a slope limitation of 20 percent. The ratings in this table do not take into consideration some site factors that can affect the placement of septic systems, such as wellhead and source protection areas, isolation distances, and the size of the parcel.

This table is intended for general planning purposes only and is not intended to replace or supercede an onsite soil investigation. These ratings apply only to land within the State of Vermont.