

UTAH COUNTY HEALTH DEPARTMENT
Div. of Environmental Health
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GUIDELINES FOR INSTALLATION OF ON-SITE SEWAGE SYSTEMS

This is intended to be used as a guideline only, and does not include all requirements and restrictions. Installers should refer to the *Utah Administrative Code for Individual Wastewater Disposal Systems*, or contact the Utah County Health Department, for additional information.

All systems must be inspected by the Health Department prior to backfilling. A water tightness test is required on all new septic tanks.

CONVENTIONAL DRAIN FIELD SYSTEMS

TRENCHES

1. The bottom of the trenches must be at least two feet above the **highest known** water table (four feet in Pleasant Grove).
2. The required total length of drain lines is specified in lineal feet for trenches **three feet wide**. Narrower trenches require more length to produce the same square footage of the trench bottom. The minimum trench width in any case is two feet.
3. The drain field trenches must be at least ten feet from any potable water lines.

PIPE

1. The maximum length of a line is 100 feet, measured around corners. The maximum length of a 2-line system is 200 feet; the maximum length of a 3-line system is 300 feet, etc. A system with only 2 lines from the distribution box is a 2-line system. (For example, a system requiring 325 lineal feet would require at least 4 lines.)
2. Solid (non-perforated) pipe is required between the foundation and the septic tank, and between the septic tank and the distribution box. The minimum length is 5 feet for either section. Solid pipe must be ABS Schedule 40 or PVC ASTM D-3034 or better, ADS H-810, or cast iron, etc. **Solid PVC ASTM D-2729, flex pipe and "eggshell" pipe are not acceptable!**
3. All piping must be at least 4 inch diameter, and have water-tight joints.
4. The distribution piping should be laid level. The maximum fall allowed in this piping is 4 inches per 100 feet.
5. Drain pipes must be at least ten feet apart.
6. If the line from the home to the septic tank is more than 100 feet long, a cleanout is required between the foundation and septic tank. A cleanout must be provided at least every 100 feet.
7. A cleanout must be provided at every elbow with a bend greater than 45 degrees upstream of the septic tank, and must be extended to grade and capped.
8. Both of the *solid* pipes must have a fall of *at least* 1/4 inch per foot.

GRAVEL

1. The gravel, slag or crushed rock must be clean and free from dust, fines, sand, soil etc.
2. Care must be taken not to allow soil to fall back into the trenches when placing gravel, or it may be rejected.
3. Gravel 3/4 to 2-1/2 inches must be used, and must not contain stones smaller than 3/4 inch. When ordering gravel, always **ask for "one-and-a-half-inch drain rock"**.
4. At least 6 inches of gravel depth is required under the drain pipe, and at least 2 inches above the pipe. Since the pipe itself is 4 inches diameter, the total depth of the gravel in the trenches is at least 12 inches. (Where the drain pipe is within 10 feet of trees and shrubs, the gravel depth below the pipe must be at least 12 inches.)

SEPTIC TANK

1. The tank must be set level, with the inlet at least 2 inches higher than the outlet.
2. Care must be taken when backfilling to prevent damage to the tank.
3. When tanks of unequal capacity are used in series, the first tank must have the greater capacity.
4. The top of the tank must be at least 6 inches below the final ground surface.
5. If the top of the tank is more than 18 inches under the final grade, a stand pipe must be used to extend the manhole so the top is between 6 and 18 inches below the final ground surface. **The stand pipe or "riser" must be grouted to the tank.**
6. The tank must be at least 5 feet from foundations, property lines, drain fields, etc. The tank must be at least 50 feet from wells and 25 feet from streams, ditches, ponds etc. The tank must be at least 10 feet from the water supply line.
7. Make sure the inlet and outlet pipes are not pushed in closer to the baffles than necessary.
8. Inlet and outlet piping must be grouted into the tank, if the tank is not provided with self-sealing plastic seals.
9. The entire septic tank must remain uncovered until approved in the final inspection. A water-tightness test is required. The tank will be filled with water at least 24 hours before the final inspection. Do not backfill around the tank higher than the seam on 2-piece tanks.

DISTRIBUTION BOX

1. The box must be set level, with the highest hole used as the inlet from the septic tank.
2. Unused holes must remain plugged.

ADDITIONAL REQUIREMENTS

1. The drainfield must be at least 100 feet from wells, streams, ponds, ditches etc.
2. The gravel must be covered with either landscape fabric (available at home centers etc.), or at least 2 inches of compacted straw.

DEEP TRENCH SYSTEMS

(Requirements are the same as for conventional drain field systems, with the following exceptions):

SOIL EXPLORATION

A percolation test using water is usually not required for deep trench systems, except in certain areas of the county. The soil test for deep trench systems is usually a deep excavation to about 20 feet deep. The pit will not be entered for any reason. Soil samples will be collected from the soil dug from the pit, and the system sized from the soil analysis.

TRENCHES AND LINES

1. Trenches may be as narrow as 2 feet wide in deep trench systems. Width does not affect required length or depth.
2. The recommended maximum length of a line is 60 feet. Absolute maximum length is 100 feet.
3. ***Trenches must be separated by at least 3 times the depth of gravel under the pipe.***
4. For safety, unfilled deep trenches should not be entered for any reason.

GRAVEL

1. Gravel must be between 3/4 inch and 12 inches in diameter, and ***clean***.
2. If stone coarser than 2-1/2 inches is used in the trenches of deep trench systems, ***a 6-inch layer of gravel between 3/4 and 2-1/2 inches diameter must be used under the drain pipe (as in a regular system) and must fill trench to at least 2 inches over the pipe.***