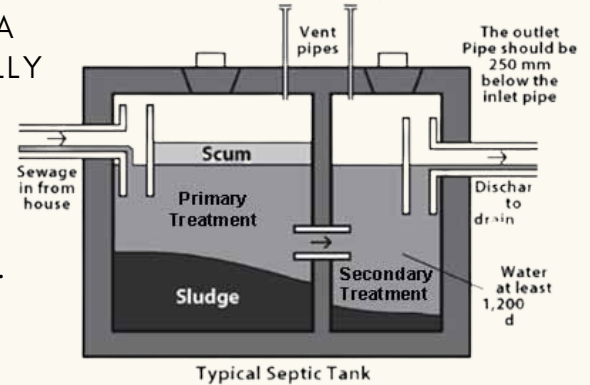


SEPTIC TANK

A SEPTIC TANK IS A MAJOR COMPONENT OF A HSTS SYSTEM. THE TANK IS MADE OF CONCRETE, FIBERGLASS, OR PVC AND CONTAINS BAFFLES AND TEES AT THE INLET AND OUTLET POINTS. THE PORT OPENING SHOULD HAVE A RISER TO GRADE OR ABOVE GRADE OF THE LAWN. THE SEPTIC TANK HOLDS THE WASTEWATER IN THE TANK LONG ENOUGH FOR SOLIDS AND LIQUIDS TO SEPARATE. THE WASTEWATER FORMS THREE LAYERS INSIDE THE TANK. SEDIMENTS LIGHTER THAN WATER (GREASES & OILS) FLOAT TO THE TOP FORMING A LAYER OF SCUM. SEDIMENTS HEAVIER THAN WATER SETTLE AT THE BOTTOM OF THE TANK FORMING A LAYER OF SLUDGE. THIS LEAVES A MIDDLE LAYER OF PARTIALLY CLARIFIED WASTEWATER. THE LAYERS OF SLUDGE AND SCUM REMAIN IN THE SEPTIC TANK WHERE BACTERIA FOUND NATURALLY IN THE WASTEWATER WORK TO BREAK THE SOLIDS DOWN. THE SLUDGE AND SCUM THAT CANNOT BE BROKEN DOWN ARE RETAINED IN THE TANK UNTIL THE TANK IS PUMPED.



SIGNS YOUR SEPTIC TANK IS NOT FUNCTIONING PROPERLY

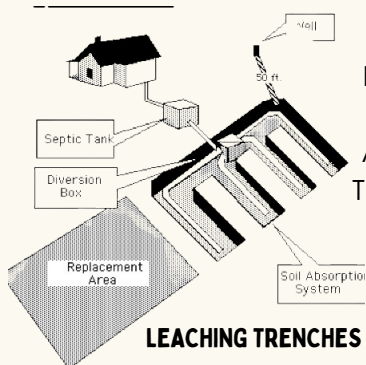
SEPTIC ODOR
WET AREA IN YOUR YARD
DRAINS DISCHARGING SLOWLY
TANK OVERFLOWING

SEPTIC TANK SIZING

1-2 BEDROOMS - 1,000 GALLONS
3 BEDROOMS - 1,500 TWO TANKS OR COMP.
4-5 BEDROOMS - 2,000 TWO TANKS OR COMP.
6+ BEDROOMS - 1,000 PLUS 250 FOR EACH
BEDROOM TWO TANKS OR COMP.

LEACH FIELD

THE WASTEWATER EXITS THE SEPTIC TANK AND ENTERS A DISTRIBUTION BOX (D-BOX) OR BULL-RUN VALVE. SOME OLDER LEACH SYSTEMS MAY NOT HAVE A DISTRIBUTION DEVICE. THE WASTEWATER IS THEN DISTRIBUTED INTO A LEACH FIELD. THE LEACH FIELD CAN EITHER BE A SERIES OF TRENCHES WITH CHAMBERS OR A SQUARE FOOTAGE BED. A LEACHING CHAMBER IS AN OPEN-BOTTOMED PLASTIC GRAVELLESS DEVICE THAT TRANSMITS THE WASTEWATER INTO THE SOIL FOR FINAL TREATMENT AND DISPOSAL. THE DISTRIBUTION DEVICE CONTROLS AND DIVERTS WASTEWATER FROM ONE HALF OF THE LEACH TRENCHES OR BED TO THE OTHER. DEPENDING ON WATER USAGE IT IS RECOMMENDED THAT THE DBOX OR VALVE BE SWITCHED EVERY 6 MONTHS. THE LEACH FIELD TREATS THE WASTEWATER BY ALLOWING IT TO SLOWLY TRICKLE FROM PIPES INTO THE GRAVEL AND DOWN THROUGH THE SOIL. THE GRAVEL AND SOIL ACT AS BIOLOGICAL FILTERS. AS THE WASTEWATER MOVES THROUGH THE SOIL TO THE GROUND WATER THE FILTRATION PROCESS AND ORGANISMS IN THE SOIL WORK TO REMOVE TOXINS, BACTERIA, VIRUSES AND OTHER POLLUTANTS.



LEACHING
CHAMBER

