

AERATION TANK

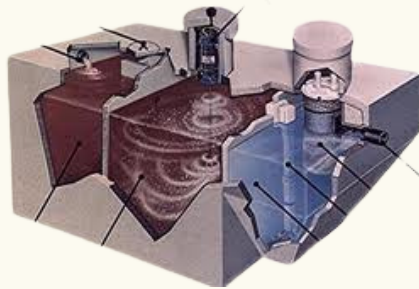
AN AERATION TANK IS A MAJOR COMPONENT OF A HSTS SYSTEM. UNLIKE A SEPTIC TANK, THE AERATION TANK DEPENDS ON AN ELECTRIC MOTOR. THE MAIN PRINCIPLE BEHIND THE OPERATION OF THIS TYPE OF TANK IS AIR INJECTED INTO THE SEWAGE; THE AIR IS UTILIZED BY AEROBIC BACTERIA. AEROBIC BACTERIA WORK TO BREAK DOWN THE WASTEWATER AND CONVERT IT TO ODORLESS LIQUIDS AND GASES. AEROBIC BACTERIA ARE MORE EFFICIENT IN BREAKING DOWN THE WASTEWATER THAN ANAEROBIC BACTERIA FOUND IN A SEPTIC TANK.

COMMON TYPES OF AERATORS FOUND IN THE COUNTY

JET



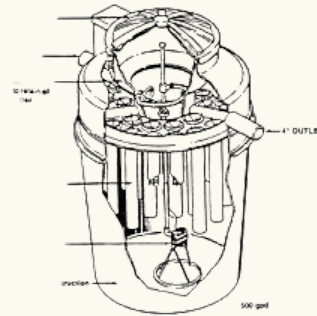
NORWECO



NYADIC



MULTI-FLO



MOUND SYSTEM

THE WASTEWATER EXITS THE SEPTIC TANK AND ENTERS A LIFT STATION. THE WASTEWATER IS THEN PRESSURE DISTRIBUTED OR PUMPED INTO THE MOUND. THE MOUND IS CONSTRUCTED ABOVE GRADE DUE TO A LIMITING CONDITION BELOW THE SURFACE. A LIMITING LAYER CAN BE BEDROCK, A DENSE SOIL, OR SEASONALLY HIGH GROUND-WATER. IN A MOUND SYSTEM SAND IS PLACED ON TOP OF THE NATURAL SOIL TO HELP TREAT AND DISPOSE OF SEPTIC TANK EFFLUENT. NEXT A LAYER OF GRAVEL IS PLACED AROUND THE PIPES AND COVERED WITH CONSTRUCTION FABRIC. FINALLY A LAYER OF SOIL IS PLACED OVER THE ENTIRE MOUND TO PROTECT IT FROM FREEZING. THE LAYER OF SOIL IS ALSO NEEDED FOR GROWING GRASS OR OTHER NON-WOODY PLANTS THAT CONTROL EROSION.

