

INTEROFFICE MEMORANDUM

**INFORMATION
HSES 01-023**

DATE: August 22, 2001

TO: County Health Department Directors/Administrators
ATTN: Environmental Health and Engineering Directors

THROUGH: Sharon L. Heber, Dr.P.H., Director
Division of Environmental Health

FROM: Gerald R. Briggs, Chief, Bureau of Onsite Sewage Programs

SUBJECT: Changes to Terralift Operating Manual

INFORMATION ONLY

This memorandum supercedes HSES Information Memorandum 00-029, OSTDS Repairs Using Terralift Equipment, November 29, 2000. Agreement has been reached with Terralift, Inc., on changes to their operating manual. The changes (attached) allow the probe to be inserted into the biomat but not penetrate the unsaturated zone beneath the drainfield. Where the wet season water table is not a limiting factor, the probe should never go further than one foot below the bottom of the trench or bed.

The revisions also allow the probe to be inserted into a drainfield in the bed configuration between the laterals. County health departments may issue repair permits for systems using the Terralift procedures attached. The repair permit application must show where and at what depth the Terralift equipment is to be used in relation to the existing drainfield. The Terralift procedure cannot be used on systems that would otherwise not be eligible for repair, for example illegal systems or systems which do not have the minimum separation from the wet season water table as required in Table V, Chapter 64E-6. FAC. The repair site must be left free of any sanitary nuisance conditions.

Please note the caution and warnings in the attachment regarding use of the Terralift equipment. Any allegations of damage to an applicant's property as a result of using this equipment are a civil litigation matter between the applicant and contractor.

Please provide a copy of this memorandum by certified mail to all licensed contractors utilizing Terralift equipment in your county.

Please call Bill Melton at SunCom 205-4070 or (850) 2445-4070 if you have any questions on this memorandum.

TERRALIFT OPERATING MANUAL

Preparing the Job Site

1. Know the Law: Most states, counties, and towns have regulations and codes governing septic systems. These codes and regulations vary between states, between counties, and even between cities. Generally, the city code controls over the county and state codes. You must follow the applicable septic system regulations and codes of all applicable jurisdictions.

WARNING! THE OPERATOR IS SOLELY RESPONSIBLE FOR KNOWING THE LAW RELATED TO THE LOCAL SEPTIC SYSTEM CODES AND REGULATIONS.

2. Identify Underground Utilities: Contact "Dig Safe", "Miss Utility", or other appropriate organizations, such as power and utility companies, to ascertain the location of any underground electric, gas, water, or telephone line, which might be affected by the operation of Terralift. Most of these organizations will come out to the job site and mark any underground cables and lines. Others may provide a plan for the area. Personally check the job site carefully for any signs of underground utility pipes or cables.

WARNING! THE OPERATOR MUST LOCATE UNDERGROUND UTILITY, ELECTRIC, GAS, WATER, OR TELEPHONE LINES AND CABLES BEFORE USING TERRALIFT. FAILURE TO LOCATE UNDERGROUND LINES AND CABLES MAY CAUSE SERIOUS BODILY INJURY OR DEATH TO THE OPERATOR AND OTHER PERSONS AND MAY CAUSE SERIOUS DAMAGE TO THE TERRALIFT AND OTHER PROPERTY!

3. Locate and Mark the Septic System: Review plans (if available) of the septic system and mark the tank, distribution box, and lateral lines with lime or other temporary marking material.

a. Find the System: If no plan is available, locate the tank, distribution box, and lateral lines with a hand probe (or electronic finder etc.) and mark accordingly. The borders of the trench or bed can be located with the hand probe by feeling for gravel. CAUTION SHOULD BE EXERCISED IN PROBING ALTERNATIVE DRAINFIELD MATERIALS, SUCH AS CHAMBERS, SO AS NOT TO DAMAGE THE UNITS.

NOTE: IT IS ESPECIALLY IMPORTANT TO KNOW THE PRESCRIBED DEPTH FOR LEACHING TRENCHES OR BEDS IN AREAS OF HIGH GROUND WATER. IN THESE CASES THE TERRALIFT PROBE SHOULD BE INSERTED INTO THE BIOMAT. IT IS IMPORTANT NOT TO PENETRATE THE UNSATURATED SOIL ZONE BENEATH THE DRAINFIELD WITH TERRALIFT PROBE. THE PURPOSE OF THE TERRALIFT IS TO "BREAK UP" THE BIO-MATT TO ALLOW PROPER TREATMENT OF EFFLUENT.

b. Locate, dig for, and remove the cover of the Septic Tank and/or Distribution Box. If the system is not vented and is extremely saturated, there is the risk of effluent surging back into the house when Terralift is operated. SOME STATES, SUCH AS FLORIDA, REQUIRE SYSTEMS TO BE PUMPED OUT PRIOR TO ANY REPAIR PROCEDURE, INCLUDING TERRALIFT. (SEE #1)

WARNING! FAILURE TO REMOVE THE COVERS TO THE SEPTIC TANK AND/OR DISTRIBUTION BOX MAY CAUSE EFFLUENT TO SURGE BACK INTO HOUSE.

c. Determine the wet season water table elevation. This is the highest water table level as indicated by soil color and conditions.

d. Determine the Trench/Bed depth. If unable to determine the depth of the trench or bed, the operator should dig a hole next to the trench or bed, and physically measure from the bottom of the trench to the top of the ground. Transfer that measurement to the probe, so as to never INSERT THE PROBE INTO THE UNSATURATED SOIL ZONE REQUIRED FOR TREATMENT BETWEEN THE WET SEASON WATER TABLE AND THE BOTTOM OF THE DRAINFIELD. MOST STATES HAVE A MINIMUM REQUIRED UNSATURATED LAYER (FLORIDA'S IS 24 INCHES, CONNECTICUT IS 4 FEET ETC...SEE PAGE 20 #1) (See 3a-NOTE). Where the wet season water table is not a limiting factor, the probe should never go further than one foot below the bottom of the trench or bed.

e. Mark each proposed Operation or Blow Site. The operator should mark each site where the Terralift probe will be inserted. Center blow sites between laterals. Do not operate Terralift within five feet of any building.

WARNING! DO NOT PLACE THE PROBE WITHIN FIVE FEET OF ANY BUILDING. PLACEMENT OF THE PROBE WITHIN FIVE FEET OF A BUILDING MAY CAUSE SERIOUS BODILY INJURY OR DEATH TO THE OPERATOR OR OTHER PERSONS AND MAY CAUSE DAMAGE TO TERRALIFT AND OTHER PROPERTY

WARNING! KEEP THE JOB SITE AND AREA OF OPERATION CLEAR OF ALL PERSONS AND ANIMALS, ESPECIALLY CHILDREN AND PETS. FAILURE TO KEEP THE AREA CLEAR MAY CAUSE THE OPERATOR TO SLIP OR FALL AND MAY CAUSE SERIOUS BODILY INJURY OR DEATH TO THE OPERATOR AND OTHER PERSONS AND MAY CAUSE SERIOUS DAMAGE TO THE TERRALIFT AND OTHER PROPERTY!

CAUTION! DO NOT OPERATE TERRALIFT ON UNEVEN OR SLOPING TERRAIN WITHOUT PURCHASING AND IMPLEMENTING THE OUTRIGGER ASSEMBLY FOR STABILIZATION. FAILURE TO PURCHASE THE OUTRIGGER ASSEMBLY MAY RESULT IN SERIOUS BODILY INJURY OR DEATH TO THE OPERATOR AND OTHER PERSONS AND MAY CAUSE SERIOUS DAMAGE TO THE TERRALIFT AND OTHER PROPERTY!