

SS-180

STANDARDS  
FOR  
SEWAGE TANK CLEANING EQUIPMENT



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WEST VIRGINIA DEPARTMENT OF HEALTH  
DIVISION OF SANITARY ENGINEERING

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STANDARDS FOR SEWAGE TANK CLEANING EQUIPMENT

SECTION 1.0 GENERAL

- 1.1 These standards have been prepared as a guide for the design, construction, and operation of sewage tank cleaning equipment.
- 1.2 These standards are the minimum standards acceptable to the State Department of Health.
- 1.3 Nothing in these standards shall be construed as preventing a person from recommending or the State Department of Health from approving, more effective methods or equipment where conditions indicate such action.
- 1.4 It is the policy of the State Department of Health to encourage progress in better methods of operation and design in sewage tank cleaning equipment, however, reliable information and supporting data on new equipment design or operating techniques must be made available to the State Department of Health for review before any approval for use can be given. Experimental equipment or methods of operation may be permitted, but should this equipment or operational method fail to produce results satisfactory to the State Department of Health, the experimental equipment and/or operational methods shall be promptly replaced by conventional equipment and/or operational procedures.
- 1.5 The terms, “shall” and “must” as used herein are intended to mean a mandatory requirement insofar as any confirmatory action by the State Department of Health is concerned.
- 1.6 The terms, “should,” “recommended,” “preferred” and like terms indicate discretionary use on the part of the State Department of Health and deviations are subject to individual consideration by said Department.
- 1.7 In addition to meeting all applicable provisions of the design standards and the West Virginia Board of Health Regulations governing Small Sewage and Excreta Disposal Systems, all sewage tank cleaners, their equipment, and operational procedures shall be in compliance with all applicable public health laws, rules, and regulation of this State.

SECTION 2.0 MOTOR VEHICLES AND CHASSIS

- 2.1 The motor vehicle and its chassis shall be of sufficient capacity to haul all equipment necessary for transporting, pumping, tank filling, emptying, and cleaning of sewage tanks.
- 2.2 It is recommended that the motor vehicle be equipped with dual rear wheels so as to encounter less difficulty in getting into close proximity of the sewage tank that is to be cleaned.

- 2.3 Sewage tank cleaning motor vehicles may be of one unit or of the tractor-trailer type, but regardless of the type, said motor vehicles shall be in compliance with all applicable provision of these standards.
- 2.4 All vehicles used in these operations shall carry in a conspicuous place the name and address of the firm or operator under which the business is conducted. All lettering shall be at least 2 inches in height.

### SECTION 3.0 CARRIER TANK

- 3.1 Carrier tanks shall be fully enclosed, leak-proof, fly-proof, and operated in such manner as to prevent spillage during the collection, removal, transportation, and disposal of the sewage tank contents.
- 3.2 Carrier tanks shall be of heavy gauge metal, preferably 10-12 gauge or equivalent, to withstand the treatment to which it will be subjected.
  - 3.2.1 The carrier tank shall have a capacity of at least 500 gallons, preferably 750 gallons, to readily hold the accumulation of the average size sewage tank serving a one-family dwelling.
  - 3.2.2 The capacity of the carrier tank, in gallons, shall be conspicuously painted on the side of said tank.
- 3.3 Carrier tank shall be constructed so as to permit proper cleaning of the interior and exterior of the tank.
- 3.4 The exterior of the carrier tank shall be painted and said tank and appurtenances kept clean and in a state of good repair.
- 3.5 Carrier tanks shall be conspicuously and permanently labeled near the outlet valve in letters at least two inches high, "FOR SEWAGE ONLY," and said carrier tank shall not be used for any other purpose
- 3.6 An operational permit must be obtained from each County Health Department.
- 3.7 The Health Department permit number issued in county of origin for the sewage tank cleaner shall be prominently displayed on the carrier tank.
- 3.8 Carrier tanks should have a manhole in the top, of sufficient size, to provide for easy access to the tank interior for flushing and cleaning purposes. The manhole may be in combination with, or separate from, the filling connection.
- 3.9 The carrier tank shall have an outlet valve so located that the entire contents of the tank can be drained.

- 3.9.1 The outlet valve opening shall be at least three inches in diameter and shall have a non-leaking, non-clog type valve for draining the tank.
- 3.9.2 The outlet valve shall be adapted for a standard hose connection to the pump for recirculating the contents of the tank if required prior to emptying or for pumping to the disposal site if gravity draining is not feasible.
- 3.9.3 In pumping from the carrier tank, an air inlet is recommended to prevent collapsing the tank.
- 3.9.4 Outlet valves shall be capped when not in actual use to prevent leaking or spilling of the carrier tank contents. Caps shall be secured by chain to outlet valve or tank.

#### SECTION 4.0 PUMPS AND HOSES

- 4.1 All pumps used for sewage tank cleaning purposes shall be of the non-clog, self-priming type and shall be capable of handling the contents of sewage tanks.
- 4.2 The use of potable water under pressure to prime pumps or to operate aspirators is prohibited.
- 4.3 Pumps and pump bases shall be of such construction that they can be easily handled and used for the purpose intended.
- 4.4 It is recommended that pumps be gasoline powered.
- 4.5 Hoses shall be of sufficient length for recirculating the contents of the sewage tank or carrier tank and to reach the point of discharge at the disposal site readily.
- 4.6 Hoses shall be flexible and so constructed that they can be readily cleaned.
  - 4.6.1 Hoses shall be kept clean and in a good state of repair.
  - 4.6.2 Hoses shall be used and stored in such manner as to prevent leaking, spilling, and dripping of any sewage tank contents.
  - 4.6.3 When not in actual use, hoses shall be tightly capped.
- 4.7 Hose connections shall be of the fire hose type or equivalent so as to enable tight and rapid connections.

#### SECTION 5.0 OTHER CONDITIONS

- 5.1 The cleaning of sewage tanks by bailing or dipping and emptying the bailing or dipping container into a carrier tank is prohibited without written approval of the State Department of Health.
- 5.2 Precaution shall be taken by the sewage tank cleaner to prevent the leaking, spilling, or dripping of the sewage tank contents during collection, removal, transportation, and disposal.

- 5.2.1 Any leakage, spillage, or drippings shall be cleaned up immediately
- 5.2.2 Provisions shall be made by the sewage tank cleaner to carry chlorinated lime or similar satisfactory disinfectant for immediately treating the areas where leakage, spillage, or dripping has occurred.
- 5.3 Necessary hand tools such as picks and shovels, and other items such as sand and cement for repairing concrete sewage tanks shall be carried on the sewage tank cleaning vehicle.
- 5.4 The contents of sewage tanks shall not be transported in an open bed motor carrier vehicle, or any other type vehicle, unless said sewage contents are contained within approved portable receptacles.
  - 5.4.1 All portable receptacles used for transporting the contents of sewage tanks shall be of approved construction, metal or equivalent, easily cleanable, good repair, equipped with tight-fitting lids and shall be cleaned, deodorized, and disinfected daily or more often if needed.
- 5.5 All facilities used for the cleaning of sewage tank cleaning equipment shall, prior to use, be inspected and approved by the State Director of Health.

#### SECTION 6.0 RECORDS

- 6.1 All sewage tank cleaners shall keep a written record of all jobs accomplished.
- 6.2 Such record shall contain, but not be limited to:
  - 6.2.1 Name and address of the person for whom the sewage tank was cleaned.
  - 6.2.2 Date and time the job was completed.
  - 6.2.3 Size of sewage tank and the amount, in gallons, of the contents removed from said sewage tank.
  - 6.2.4 Location and type of disposal site utilized for the disposal of the sewage tank contents.

#### SECTION 7.0 MISCELLANEOUS

- 7.1 These standards supercede all previous standards for sewage tank cleaning equipment issued by the State Department of Health.
- 7.2 No approval for a permit can be given until all applicable provisions of the West Virginia Board of Health Regulations governing Small Sewage and Excreta Disposal Systems and of these standards have been complied with in full.