

capable of friction fit in the Inside Diameter of a 1½" N.P.S. Schedule 40 pipe. Said fitting shall, in addition, be designed, constructed and/or equipped to assure a liquid tight closure during normal operation of the watercraft; afford no obstruction to the flow of sewage; shall be cleanable; and shall when necessary be designed to prevent the discharge of static electricity.

4.041 Fittings intended for use in emptying holding and retention tank shall be permanently and legibly marked with the word "WASTE". If the cover is detachable, then both the cover and fitting shall be so marked.

4.05 OPERATION UNDER LOAD CONDITIONS: Treatment and discharge devices shall, when installed and operated in accordance with manufacturer's instructions, be capable of producing an effluent meeting the microbiological and chemical/physical requirements of this Standard throughout the testing period of two hours operations at normal load conditions after initial discharge, followed by 20 minutes of operation at peak conditions, and then an additional two-hours at normal load conditions.

4.051* NORMAL LOAD CONDITIONS*: The device shall be placed in service and used (flushed) at a frequency of ½ hour. When discharge of effluent is evident, the normal loading shall continue for a period of two hours, at which time the Peak Load conditions (Item 4.052), shall be applied.

4.052* PEAK LOAD CONDITIONS*:

Single Head Units: The minimum time between uses (flushes) under peak load conditions shall be considered to be five (5) minutes over a 20 minute period.

Multiple Head Units: Peak load conditions for multiple head units shall be considered simultaneous uses (flushes) of all units possible at five (5) minute intervals over a twenty (20) minute period.

4.06 SERVICEABILITY: Units shall be so designed and constructed that when installed in accordance with a manufacturer's recommendations, they shall be capable of being easily maintained, drained and cleaned.

4.07 ENERGY AND CHEMICAL REQUIREMENTS: the manufacturer's engineering data and literature shall specify the power requirements to properly operate the device and/or its necessary auxiliary systems.

4.071 Both the manufacturer's literature and data plate shall state the type of chemicals to be used, if any. If of a proprietary nature, the trade designation shall be given; or, if of a non-proprietary nature, the chemical name and its strength shall be stated.

4.072 When there is an effluent discharge there shall be a field test method available for determining the strength of the chemical specified.

4.073 Chemicals used in a recirculating non-discharge type device shall at least be capable of maintaining the recirculated media in a bacteriostatic condition throughout the maximum recommended use cycle.

4.08 PARTS LIST: There shall be a comprehensive parts list provided by the manufacturer with each unit. The individual parts shall be identified by means of illustration, photographs or the like, and be designated by number, letter, symbol, etc.

4.09 INSTRUCTIONS: The manufacturer shall provide clear, concise, instructions with each unit which, when followed, will assure proper installation, safe and satisfactory operation and adequate procedures for long-term storage and/or securing the unit. Said instructions shall also provide recommendations for the safe storage and handling of chemicals and/or energy.

4.10 DATA PLATE: A permanent type data plate shall be provided, so inscribed as to be easily read and understood, and securely attached to the device at a location which is normally visible following recommended installation, or visible under normal servicing. Said data plate shall include the following:

4.101 Name of Manufacturer.

4.102 Model and/or Serial number designation.

4.103 Use capacity of the unit.

a. Capacity of treatment and disposal devices shall be noted in one or more of the following means:

- (1) the chemical dosage required per use
- (2) number of uses per the chemical storage provided
- (3) comparable type of rating

b. Storage tank capacity shall be stated in terms of gallons and/or number of uses of a given volume.

*Artificial media may be established for normal and peak load evaluations.