

**ORDINANCE NO. 3512  
ORDINANCE OF THE MARIN COUNTY BOARD OF SUPERVISORS  
MARSHALL ONSITE WASTEWATER DISPOSAL ZONE #1**

**WASTEWATER REGULATIONS**

**An Ordinance of the Marin County Board of Supervisors regulating the use of community sewers and drains, the installation and connection of building sewers, the installation of sewer laterals, providing permits and fixing fees for the installation and connection of sanitary waste systems, and regulating the discharge of waters and wastes into the community sewer system.**

The Board of Supervisors of the County of Marin acting as the Directors of the Marshall Onsite Wastewater Disposal Zone #1 Marin County, California, hereby ordains as follows:

**ARTICLE I - DEFINITIONS**

**Section 1.01 - Applicant** is the person making application for a permit for a connection to the Marshall Onsite Wastewater Disposal Zone community wastewater collection and treatment system. Applicant shall be either the owner of premises to be served by the sewer for which a permit is requested, or the owner's authorized agent.

**Section 1.02 - Authority** shall mean the San Francisco Bay Regional Water Quality Control Board.

**Section 1.03 - Beneficial Uses** shall mean the use of waters of the State that may be protected against quality degradation, including domestic, municipal, agricultural and industrial supply, power generation, recreation, aesthetic enjoyment, navigation and the preservation and enhancement of fish, wildlife, and other aquatic resources or reserves, and other uses, both tangible or intangible as specified by Federal or State law.

**Section 1.04 - Biochemical Oxygen Demand** (denoted BOD) is the quantity of oxygen utilized in the biochemical oxidation of the wastewater under standard laboratory conditions in five days at 20° centigrade, expressed in milligrams per liter (mg/l).

**Section 1.05 - Board** is the Marin County Board of Supervisors, acting as the Board of Directors of the Marshall Phase 1 Onsite Wastewater Disposal Zone (Zone).

**Section 1.06 - Building** is any structure used for human habitation or a place of business, recreation, or other purposes and containing sanitary facilities.

**Section 1.07 - Building Sewer** is that portion of any sewer beginning at the plumbing or drainage outlet of any building or industrial facility and running to the septic tank.

**Section 1.08 - Clean Water Act** is the Federal Water Pollution Control Act, P.L. 92-500, and any amendments thereto; as well as any guidelines, limitations, and standards promulgated by the Environmental Protection Agency pursuant to the Act.

**Section 1.09** – Clerk is the Assistant Clerk to the Marin County Board of Supervisors.

**Section 1.10** - County is any government agent, officer, representative, or building that is overseen and operated by the County of Marin.

**Section 1.11** - Community Sewer is a sewer lying within a street or easement and which is owned, operated and under the jurisdiction of the Zone, and shall include the main line sewer, lateral sewers, septic tanks, pumps, and all other related facilities, tributary to a disposal facility operated by the Zone.

**Section 1.12** - Compatible Pollutant is BOD, SS, pH, and fecal coliform bacteria, plus additional pollutants identified in the Zone's Waste Discharge Requirements (permit) if the Zone's treatment works were designed to treat such pollutants, and, in fact, do remove such pollutants to a substantial degree.

**Section 1.13** - Contamination is an impairment of the quality of the waters of the State by waste to a degree that creates a hazard to the public health through the spread of disease, or degradation of environmental quality. Contamination shall include any equivalent effect resulting from the disposal of wastewater, whether or not waters of the State are affected.

**Section 1.14.** - Contractor is an individual, firm, corporation, partnership, or association duly licensed by the State of California or other licensing agency to perform the type of work to be done under the permit, or shall be the owner or owner's agent.

**Section 1.15** - Domestic Wastewater is any wastewater derived principally from dwellings including, but not limited to, private residences, apartment units, retail businesses, offices, and hotels.

**Section 1.16** - Engineer is the Engineer appointed by and acting for the Board and shall be a California Registered Civil Engineer.

**Section 1.17** - Garbage is the solid wastes from the preparation, cooking, and dispensing of food and from the handling, storage, and sale of produce.

**Section 1.18** - Improvement Standards are the Improvement Standards adopted by the Zone and all subsequent additions, deletions or revisions thereto.

**Section 1.19** - Lateral Sewer is the portion of the horizontal piping beginning at the outlet end of the septic tank and running to the property line or to a point of connection to the community sewer provided by the Zone. A lateral sewer may also connect to and from a separate pump chamber that houses a STEP unit between the septic tank and the community sewer.

**Section 1.20** - Manager is the Zone's General Manager or an appointed representative.

**Section 1.21** - Nuisance is anything which is injurious to health or is indecent or offensive to the senses or an obstruction to the free use of property so as to interfere with the comfort or enjoyment of life or property or which affects at the same time an entire community or neighborhood or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

**Section 1.22** – Operating Permit is a written authorization to operate and maintain an onsite wastewater system issued by the County to a system owner in accordance with provisions of Marin County Code Chapter 18.07 and Regulations adopted thereunder. An operating permit contains specific requirements for ongoing inspection and monitoring of system performance, reporting to the County of same, and provisions for periodic review and renewal of the permit.

**Section 1.23** - Outside Sewer is a private sewer beyond the limits of the Zone.

**Section 1.24** - Permit is any written authorization required pursuant to this or any other rule, regulation or ordinance of Zone for work to be conducted on any part of the private or public portions of the Marshall community wastewater collection and treatment system.

**Section 1.25** - Person is any human being, firm, company, partnership, association and private, public or municipal corporations, the United States of America, the State of California, districts and all political subdivisions, governmental agencies and mandataries thereof.

**Section 1.26** - pH is the logarithm of the reciprocal of the hydrogen ion concentration. The concentration is the weight of hydrogen ions, in grams, per liter of solution. Neutral water, for example has a pH value of 7 and a hydrogen ion concentration of  $10^{-7}$ .

**Section 1.27** - Pollution is an alteration of the quality of the waters of the state by waste to a degree that unreasonably affects such waters for the beneficial use or affects the facilities that serve such beneficial uses. Pollution may include contamination.

**Section 1.28** - Plumbing System is all plumbing fixtures and traps, or soil, special waste, and vent pipes and all sanitary sewage pipes within the property lines of the premises up to the septic tank, including the building sewer.

**Section 1.29** - Premises means any parcel of real estate or portion thereof, including any improvements thereon which is determined by the Zone to be a single user for purposes of receiving, using, and paying for service.

**Section 1.30** - Sanitary Sewer is a sewer which carries wastewater and to which storm, surface, and ground waters are not intentionally admitted.

**Section 1.31** - Septic Tank is a water-tight, covered receptacle designed and constructed to receive the discharge of sewage from a building sewer, separate solids from the liquid, digest organic matter and store digested solids through a period of detention, and allow the clarified liquids to discharge for final disposal.

**Section 1.32** - Sewer is a pipe or conduit that carries sewage to which storm, surface and groundwater are not intentionally admitted.

**Section 1.33** - Shall is mandatory; May is permissive.

**Section 1.34** - Standard Construction Specifications are the Standard Construction Specifications adopted by the Zone and all subsequent additions, deletions or revisions thereto.

**Section 1.35 - STEP Unit** is an effluent pump with associated controls and components that typically is located in the outlet compartment of the septic tank or a separate pump chamber and is used to pump septic tank effluent from the septic tank to a leachfield or public sewer where gravity flow is not possible.

**Section 1.36 - Street** is any public highway, road, street, avenue, alley, way, easement, or right-of-way.

**Section 1.37 - Suspended Solids** (denoted SS) are solids that either float on the surface of, or are in suspension in water, wastewater, or other liquids, and which are removable by laboratory filtering, and are referred to as nonfilterable residue in the laboratory described in "Standard Methods for the Examination of Water and Wastewater".

**Section 1.38 - Treatment Works** are any devices and systems used in the storage, treatment, recycling, and reclamation of domestic wastes of a liquid nature, including interceptor sewers, outfall sewers, wastewater collection systems, plumbing, power, and other equipment and appurtenances; extensions, improvements, remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities and any works, including site acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment, or any other method or system for preventing, abating, reducing, storing, treating, separating or disposing of municipal waste or industrial waste.

**Section 1.39 - Unpolluted Water** is water to which no constituent has been added, either intentionally or accidentally, which would render such water unacceptable or accidentally, which would render such water unacceptable to the agency having jurisdiction thereof for disposal to storm or natural drainages or directly to surface waters.

**Section 1.40 - User** is any person that discharges, causes, or permits the discharge of wastewater into a community sewer.

**Section 1.41 - Waste** is any and all waste substances, liquid, solid gaseous, or radio-active, associated with human habitation, or of human or animal origin, or from any producing manufacturing, or processing operation of whatever nature, including such waste placed within containers of whatever nature prior to and for the purposes of disposal.

**Section 1.42 - Wastewater** is any waste and water, whether treated or untreated, discharged into or permitted to enter a community sewer.

**Section 1.43 - Wastewater Constituents and Characteristics** means the individual chemical, physical, bacteriological and radiological parameters, including volume and flow rate and such other parameters that serve to define, classify, or measure the contents, quality, quantity, and strength of wastewater.

**Section 1.44 - Wastewater Works** is the system of building sewers, lateral sewers, community sewers, and treatment works designed for collection, conveyance, treatment, and disposal of wastewater.

**Section 1.45 - Waters of the State** are any waters, surface or underground, including saline waters within the boundaries of the State.

**Section 1.46 – Zone** is the Marshall Onsite Wastewater Disposal Zone #1.

**Section 1.47 – Zone Inspector** is the Inspector acting for the Board and may be the Zone Manager, Zone Engineer, or Inspector appointed by the Board or Manager of the Zone.

**Section 1.48 - Additional Definitions.** For the purpose of this Ordinance, additional terms shall have the meaning indicated in Marin County Code Chapter 18.06 and Regulations adopted thereunder, and Chapter 1 of the most recent edition of the "Uniform Plumbing Code", copies of which are on file with the Zone.

## **ARTICLE II - GENERAL PROVISIONS**

**Section 2.01 - Rules and Regulations.** The following rules and regulations respecting sewer construction and disposal of sewage and drainage of buildings and connection to the sewage works of said Zone are hereby adopted, and all work in respect thereto shall be performed as herein required and not otherwise.

**Section 2.02 - Purpose.** This Ordinance is intended to provide certain minimum standards, provisions, and requirements for design, methods of construction and use of materials in sanitary sewage facilities in lateral sewers hereafter installed, altered or repaired.

**Section 2.03 - Short Title.** The Ordinance shall be known as the Marshall Onsite Wastewater Disposal Zone #1 Wastewater Regulation Ordinance.

**Section 2.04 - Posting.** Upon adoption, this Ordinance shall be entered in the minutes of the Board and shall be posted in three public places in the Zone within ten days following its passage and shall take effect 30 days from the date of its adoption.

**Section 2.05 - Violation Unlawful.** Following the effective date of this Ordinance it shall be unlawful for any person to connect to, construct, install, or provide, maintain and use any other means of sewage disposal from any building in the Zone except by connection to the community sewer in the manner as herein provided, or under the provisions of individual Operating Permit issued by the County.

**Section 2.06 - Relief on Application.** When any person by reason of special circumstances is of the opinion that any provision of this Ordinance is unjust or inequitable as applied to his/her premises, he/she may make written application to the Zone Manager stating the special circumstances, citing the provision complained of, and requesting suspension or modification of that provision as applied to his/her premises.

If such application be approved, the Board may, by resolution, suspend or modify the provision complained of, as applied to such premises, to be effective as of the date of the application and continuing during the period of the special circumstances.

**Section 2.07 - Relief on Own Motion.** The Board may, on its own motion, find that by reason of special circumstances any provision of this regulation and Ordinance should be suspended or modified as applied to a particular premises and may, by resolution, order such suspension or modification for such premises during the period of such special circumstances, or any part thereof.

### **ARTICLE III - USE OF COMMUNITY SEWERS REQUIRED**

**Section 3.01 - Disposal of Wastes.** It shall be unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner upon public or private property within the established Zone any human excrement, garbage or other objectionable waste.

**Section 3.02 - Treatment of Wastes Required.** It shall be unlawful to discharge to any stream or watercourse any sewage, industrial wastes or other polluted waters, except where suitable treatment has been provided in accordance with the provisions of this Ordinance.

**Section 3.03 - Unlawful Disposal.** Except as herein provided, it shall be unlawful to construct or maintain any privy, privy vault, cesspool, seepage pit, or other on-lot facility intended or used for disposal of sewage within the Zone, except as may be approved by the Board under the terms of an individual operating permit.

**Section 3.04 - Occupancy Prohibited.** No building, industrial facility or other structure within the Zone shall be occupied until the owner of the premises has complied with rules and regulations of the Zone and this Ordinance.

**Section 3.05 - Sewer Required.** The owner of any building situated within the Zone and which is to be occupied is hereby required to connect said building directly with the community sewer in accordance with the provisions of this Ordinance or to obtain from the County an individual operating permit for continued use of a private onsite wastewater system acceptable to the Board.

**Section 3.06 - Abandoned Sewage Disposal Systems.** Where a sewage disposal system is abandoned consequent to connecting with the community sewer, the applicant making the connection shall fill and render safe the abandoned septic tank under permit from and as required by the County Health Officer and Environmental Health Services within 30 days from the time of connecting to the community sewer. Every abandoned building sewer or part thereof shall be plugged or capped in an approved manner.

### **ARTICLE IV - BUILDING SEWERS, SEPTIC TANKS, PUMP SYSTEMS, LATERALS SEWERS, AND CONNECTIONS**

**Section 4.01 - Permit Required.** In accordance with Article X (Miscellaneous Provisions) of this Ordinance, no person shall construct or install a building sewer, lateral sewer, septic tank and/or appurtenances, or make a connection to the community sewer without first obtaining a written permit from the Zone and paying all fees and connection charges as required herein and as required by the Resolution establishing Sewer Service Charges.

**Section 4.02 - Construction Requirements.** Construction and inspection of building sewers, lateral sewers, septic tanks and appurtenances shall be in accordance with the Standard Construction Specifications and Improvement Standards of the Zone.

**Section 4.03 - Minimum Size and Slope.** The size and slope of the building sewer shall be subject to the approval of the Zone, but in no event shall the diameter be less than three inches. The slope of such three-inch pipe shall not be less than 1/4-inch per foot, except where the grade may require a slope of 1/8-inch per foot, which may be installed only with Zone approval.

**Section 4.04 - Building Sewer.** Whenever possible, the building sewer shall be brought to the building at an elevation below the lowest floor. No building sewer shall be laid parallel to and within three feet of any bearing wall which might thereby be weakened. The building sewer shall be laid at uniform grade and in straight alignment in so far as possible. Changes in direction shall be made only with properly curved pipe fittings, with clean-outs at each 45 degree bend or more, and in conformance with the Uniform Plumbing Code.

**Section 4.05 - Old Building Sewers.** Old building sewers may be used to connect to Zone sewage facilities only when they are found, upon examination and tested by the Zone Inspector, to meet all requirements of the Zone.

**Section 4.06 - Clean-Outs.** Clean-outs in building sewers shall be provided in accordance with all applicable rules, regulations, and ordinance. All clean-outs shall be maintained watertight. Clean-outs shall comply with the Uniform Plumbing Code.

**Section 4.07 - Joints and Connections.** All excavations required for the installation of building and lateral sewers shall be open trench work unless otherwise approved by the Zone Inspector. Pipe laying and backfill shall be performed in accordance with the rules, regulations, and ordinances of the Zone, except that no backfill shall be placed until the work has been inspected.

**Section 4.08 - Connection to Community Sewer.** The connection of the building sewer into the community sewer shall be made in strict accordance with standard Zone specifications and at the applicant's expense. The invert of the building sewer at the point of connection shall be at a higher elevation than the invert of the septic tank. A smooth neat joint shall be made and the connection made secure and watertight. The connection to the community sewer shall be made in accordance with the rules, regulations, and ordinances of the Zone. Any work on community sewers and any work on lateral sewers done within a public right-of-way or easement shall be performed under the inspection of the Zone. Any damage to a septic tank, STEP unit, lateral sewer or the community sewer by the applicant shall be repaired by, and to the satisfaction of the Zone and shall be paid for by the applicant.

**Section 4.09 - Sewer Too Low.** In all buildings in which any building sewer is too low to permit gravity flow to the community sewer, sanitary sewage carried by such building sewer shall be lifted by artificial means, approved by the Zone Inspector, and discharged to the public sewer at the expense of the owner.

**Section 4.10 - Protection of Excavation.** All excavations for side sewer installation shall be adequately guarded with barricades or lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other property disturbed in the course of the work shall be restored in a manner satisfactory to the Zone and/or County or any other agency having jurisdiction there over.

**Section 4.11 - Maintenance or Repair of Plumbing Systems, Building Sewers, Septic Tanks, STEP Units, Lateral Sewer and Community Sewer.** Plumbing systems and building sewers shall be maintained or repaired by the owner of the property served thereby at the owner's expense. Except for septic tank pumpouts, which shall be the responsibility of the property owners, the Zone will perform all maintenance of septic tanks, STEP units, lateral sewers, and the community sewer to the disposal facility at the Zone's expense.

**Section 4.12 - Testing & Inspection.** All building sewers, laterals, septic tanks, and appurtenances shall be tested in strict accordance with the regulation and ordinances of the Zone. All work on septic tanks, laterals and STEP units shall be performed under the inspection of the Zone.

## ARTICLE V - COMMUNITY SEWER CONSTRUCTION

**Section 5.01 - Permit Required.** In accordance with Ordinance \_\_\_\_\_ (Permit and Fees) or Article VII of this Ordinance, no person shall construct, extend or connect to any the community sewer without first obtaining a written permit from the Zone and paying all fees and connection charges and furnishing bonds as required therein. The provisions of this section requiring permits shall not be construed to apply to contractors constructing sewers and appurtenances under contracts awarded and entered into by the Zone.

**Section 5.02 - Persons Authorized to Perform Work.** Only Contractors or those persons experienced in sewer system construction and approved by the Zone shall be authorized to perform the work of community sewer construction within the Zone. The application for a permit for community sewer construction shall be accompanied by complete plans, profiles and specifications, complying with all applicable ordinances, rules and regulations of the Zone and shall be prepared by a Registered Civil Engineer showing all details of the proposed work based on an accurate survey of the ground. The application, together with the plans, profiles, and outline specifications, shall be examined by the Zone Manager who shall, after consultation with the Zone Engineer, approve them as filed or require them to be modified as he/she deems necessary for proper installation. After examination by the Manager, a permit may be issued predicated upon sewer capacity, the payment of all costs, connection charges, fees, and furnishing bonds as required by the Zone. The permit shall prescribe such terms and conditions as the manager finds necessary in the public interest.

Community sewer construction for all properties served by the Zone shall be provided by and under the supervision of the Zone. All costs and expenses incident to the installation and connection to the community sewer system shall be borne by the owner.

Applicants for service shall dedicate for public use all streets, easements, or rights of way to which community sewer lines are to be constructed and shall provide a map accurately showing their location. If the work of constructing sewers to serve the facilities is not complete within the time limit allowed in the permit, the Manager may extend the time limit or may complete the work and take appropriate steps to enforce the provisions of the bond furnished by the applicant.

**Section 5.03 - Easements or Rights of Way.** In the event that an easement is required for the extension of the community sewer, including connections, septic tanks, power supply, and lateral sewers, the applicant shall grant proper easement or right of way sufficient in width to allow the laying and maintenance of such extension or connection. Right of way shall normally be ten feet minimum. Where easements across properties other than those served are necessary, sewer service shall be contingent on the ability of the applicant or Zone to obtain such easements as are necessary.

**Section 5.04 - Compliance with Local Regulations.** Any person constructing a sewer within a street shall comply with all state and county laws, ordinances, rules, and regulations pertaining to the cutting of pavement, opening, barricading, safety, lighting, and protecting trenches, backfilling and repaving thereof and shall obtain all permits and pay all fees required by the department or agency having jurisdiction prior to the issuance of a permit by the Zone.



**Section 5.05 - Protection of Excavation.** The person(s) performing construction shall maintain such barriers, lights, and signs as necessary to give warning to the public at all times that a sewer is under construction and of each dangerous condition to be encountered as a result thereof. The person(s) performing construction shall also protect the public in the use of the sidewalk against any such conditions in connection with the construction of the sewer. Streets, sidewalks, parkways, and other property disturbed in the course of the work shall be reinstalled in a manner satisfactory to the County and Zone and any other person having jurisdiction thereover.

**Section 5.06 - Design and Construction Standards.** Minimum standards for the design and construction of septic tanks, STEP systems, and sewers within the Zone shall be in accordance with the applicable provisions of the ordinances, rules, regulations, and with the Improvement Standards and Standard Construction Specifications heretofore or hereafter adopted by the Zone, copies of which are on file with the Zone. The Zone or the Zone Engineer may permit modifications or may require higher standards where unusual conditions are encountered.

"As-built" drawings showing the actual location of all mains, structures, wyes, tees, laterals clean-outs, septic tanks, pumps and appurtenances shall be filled with the Zone before final acceptance of the work.

**Section 5.07 - Conditions for Connection to Community Sewer.** All sewer connections and sewer charges are subject to the following:

- (1) Zone will determine which facilities are necessary and available upon application.
- (2) Zone will evaluate installation and connection charges periodically and modify as necessary
- (3) Requirements of applicants:
  - a. Payment of connection and installation charges in advance.
  - b. Provide necessary easements, fully executed and recorded.
  - c. Provide waterproof junction box and 20 Amp 120/240 Volt, single phase, 3 wire circuit to the tank facility, prior to completion of installation where STEP unit is required as determined by the Zone.
  - d. Provide and install gravity sewer from buildings to STEP tank facility (materials and installation to be inspected and approved by Zone).

## **ARTICLE VI - USE OF COMMUNITY SEWER**

**Section 6.01 - Drainage Into Sanitary Sewers Prohibited.** No leaders from roofs and no surface drains for rain water shall be connected to any sanitary sewer. No surface or subsurface drainage, rain water, seepage, cooling water or unpolluted industrial process waters shall be permitted to enter any sanitary sewer by any device or method whatsoever.

**Section 6.02 - Types of Wastes Prohibited.** Except as hereinafter provided, no person shall discharge or cause to be discharged any of the following described waters or wastes to the community sewer:

- (1) Any liquid or vapor having a temperature higher than 150° F.
- (2) Any water or waste that may contain more than 100 parts per million, by weight, of fat, oil, or grease.

- (3) Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid or gas.
- (4) Any garbage including the wastes from the preparation, cooking, and dispensing of food, regardless of whether such wastes have been treated by garbage disposals, food masticators or other devices.
- (5) Any ashes, cinder, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manures, or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the septic tank and community sewage works.
- (6) Any waters or wastes having a pH lower than 5.5 or higher than 9.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the community sewage works.
- (7) Any waters or wastes containing a toxic, flammable or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to human or animals, or cause any hazard in the community sewage works. Wastes from chemical toilets, port-a-potties or holding tanks such as those installed in boats or recreational vehicles may not be discharged into the system.
- (8) Any waters or wastes containing suspended solids or dissolved matter of such character and quantity that unusual attention or expense is required to handle such materials in community sewage works.
- (9) Any noxious or malodorous gas or substance capable of creating a public nuisance.
- (10) Any septic tank sludge.

**Section 6.03 - Septic Tanks Required.** If septic tanks are to be installed on private property, the Zone may require the owner(s) to install traffic-rated tanks and appurtenances. Lids and risers shall be maintained so as to prevent water intrusion or mosquito breeding.

For all properties served by the community wastewater system that are determined to require septic tank treatment prior to effluent discharge to community sewer, the septic tank design shall conform to the Zone's construction specifications and the following sizing criteria:

**Single Family Dwellings:**

<u>Number of Bedrooms</u>	<u>Minimum Tank Capacity (gallons)</u>
4 or less	1,200
5 or more	1,500 plus 250 for each bedroom over 5

**(2) Multiple Connections and Commercial:**

For multiple connections and commercial properties using a single septic tank, use  $(Q \times 0.75) + 1,125 =$  septic tank size, where Q = total bedrooms x 150, or twice the daily wastewater flow, whichever is greater. In no case shall septic tank sizing for multiple connection and commercial properties be less than 1,500 gallons.

**Section 6.04 - Maintenance of Septic Tanks and Appurtenances.** All septic tanks and downstream appurtenances including STEP units and lateral sewers shall be maintained by the Zone in continuously efficient operation at all times.

**Section 6.05 – STEP Units.** Septic tank effluent pump units shall be used where gravity flow of sewage to the street sewer is not feasible. Design and construction of STEP units shall conform to the Zone's Construction Specifications and shall conform to all requirements of the Marin County Environmental Health Services and applicable provisions of the Uniform Building Code, Uniform Plumbing Code, and National Electric Code.

**Section 6.06 - Swimming Pools or Spa.** It shall be unlawful for any person to discharge the contents of a swimming pool or spa into the community sewer.

## **ARTICLE VII - PERMITS AND FEES**

**Section 7.01 - Permit Required.** No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb the community sewer or appurtenance or perform any work on any sewer or drainage system without first obtaining a written permit from the Zone.

**Section 7.02 - Application for Permit.** Any person, legally entitled to apply for and receive a permit, shall make such application on forms provided by the Zone for that purpose. Applicant shall give a description of the character of the work proposed to be done and the location, ownership, occupancy, and use of the premises in connection therewith. The Zone may require plans, specifications or drawings and such other information as may be deemed necessary.

If the Zone determines that the plans, specifications, drawings, descriptions, or information furnished by the applicant are in compliance with the ordinances, rules and regulations of the Zone and that sufficient collection and disposal capacity exists, it may issue the permit applied for upon payment of the required fees as hereinafter fixed.

**Section 7.03 - Compliance with Permit.** After approval of the application, evidenced by the issuance of a permit, no change shall be made in the location of the sewer, the grade, materials, or other details from those described in the permit or as shown on the plans and specifications for which the permit was issued except with written permission from the Zone, the Zone Inspector or other authorized representative.

**Section 7.04 - Agreement.** The applicant's signature on an application for any permit set forth in Section 7.05 hereof shall constitute an agreement to comply with all of the provisions, terms, and requirements of the ordinances, rules, regulations, Improvement Standards and Standard Construction Specifications of the Zone, and with the plans and specifications filed with the application, if any, together with such corrections or modifications as may be required by the Zone. Such agreement shall be binding upon the applicant and may be altered only by the Zone upon written request for alteration from the applicant.

**Section 7.05 - Classes of Permits.** There shall be three classes of permits, as follows:

- (1) single-family residential building sewer permit
- (2) multi-family residential
- (3) commercial building sewer permit

**Section 7.06 - Fees and Connection Charges.** All connection charges, fees, and other charges in the Zone and in areas annexed thereto, as set forth in the ordinances, rules, and regulations of the Zone as heretofore and hereafter fixed, shall be paid and complied with in the manner provided in said ordinances, rules and regulations.

**Section 7.07 - Disposition of Fees.** All fees collected on the tax rolls on behalf of the Zone shall be deposited with the office of the Marin County Tax Collector. For the purposes of collecting fees for the fiscal year 2008-9, the Zone may mail individual bills to property owners served by the Zone.

**Section 7.08 - All Work to be Inspected.** All sewer and septic tank effluent pump system construction work shall be inspected by an inspector acting for the Zone to insure compliance with all requirements of the Zone. No tank or sewer shall be covered at any point until it has been inspected and passed for acceptance. No sewer shall be connected to the Zone's community sewer until the work covered by the permit has been completed, inspected and approved by the Zone Inspector. If the test proves satisfactory, the Inspector shall issue a certificate of satisfactory completion.

**Section 7.09 - Notification.** It shall be the duty of the person doing the work authorized by permit to notify the office of the Zone a minimum of 48 hours in advance that said work is ready for inspection.

**Section 7.10 - Condemned Work.** When any work has been inspected and the work condemned and no certification of satisfactory completion given, a written notice to this effect shall be given instructing the owner of the premises, or the agent of such owner, to repair the sewer or other work authorized by the permit in accordance with the ordinances, rules, and regulations of the Zone.

**Section 7.11 - All Costs Paid by Owner.** All costs and expenses incident to the installation and connection of any sewer or other work for which a permit has been issued shall be borne by the owner. The owner shall indemnify the Zone from any loss or damage that may directly or indirectly be occasioned by the work.

**Section 7.12 - Permits for Outside Sewers.** Permission shall not be granted to connect any lot or parcel of land outside the Zone.

**Section 7.13 - Liability.** The Zone and its officers, agents, and employees shall not be answerable for any liability or injury or death to any person or damage to any property arising during or growing out of the performance of any work by any such applicant. The applicant shall be answerable for, and shall save the Zone and its officers, agents, and employees harmless from any liability imposed by law upon the Zone or its officers, agents, or employees, including all costs, expenses, fees, and interest incurred in defending same or in seeking to enforce this provision. Applicant shall be solely liable for any defects in the performance of applicant's work or any failure that may develop therein.

**Section 7.14 - Time Limit on Permits.** If work under permit is not commenced within 18 months from the date of issuance or if after partial completion the work be discontinued for a period of one year, the permit shall thereupon become void and no further work shall be done until a new permit shall have been secured. A new fee shall be paid upon the issuance of said new permit.

**Section 7.15 – Access Agreement.** Permit applicant shall be required to grant a perpetual agreement for Zone access to applicant's property to erect, construct, install, lay, use, operate, maintain, inspect, alter, clean, remove, and replace system pipes, pumps, controls, septic tanks and all appurtenances necessary for the purposes of the operation of the community sewerage facilities.

**Section 7.16 – Subdivision of Land.** The Zone will not serve parcels created by subdivision of land within the Zone.

## **ARTICLE VIII - WASTEWATER CHARGES AND FEES**

**Section 8.01 - Schedule of Charges and Fees.** A schedule of charges and fees shall be adopted by resolution of the Board which will enable them to comply with the operational requirements of the community sewerage facilities, requirements of the funding and regulating agencies, and applicable state laws.

**Section 8.02 - Classification of Users.** All users will be classified according to their single family residential equivalency, based on the amount and type of wastewater flow generated by each connection as compared with that generated by a single family residence. The purpose of such classification is to establish a system of charges and fees, which will insure an equitable recovery of wastewater system costs.

**Section 8.03 - Types of Charges and Fees.** The charges and fees as established in the Zone's schedules of charges and fees, may include, but not be limited to:

- (1) fees for permit applications;
- (2) connection fees or assessments;
- (3) service charges;
- (4) penalties or special cost recovery charges; and,

**Section 8.04 - Rate Schedule.** Any person owning any living unit or building within the Zone which has any fixture or outlet connected either directly or indirectly to the sanitation or sewerage system of the Zone shall pay the sewer service charges which are established from the time to time by resolution of the Board.

**Section 8.05 - Billing Time.** Bills for sewer service may be collected semi-annually by the County of Marin Tax Assessor's Office as part of the property tax bill. At its option, the Zone may also issue invoices directly to the property owner.

**Section 8.06 - Persons Responsible for Payment.** All sewer service charges shall be billed to the legal owner of the property.

**Section 8.07 - Penalties and Interest.** All sewer service charges not paid within 60 days after the billing date shall be delinquent and a penalty of 10% of the delinquent amount shall be assessed.

**Section 8.08 - Collection by Suit.** As an alternative to any of the other procedures herein provided, the Zone may collect said unpaid charges by suit, in which event it shall have judgment for the cost of suit and reasonable attorney's fees.

**Section 8.09 - Other Utility Charges.** The Board may provide for the collection of other special services furnished by the Zone. The special service charges shall, in such event, be itemized, and collected separately from the sewer service charge.

## **ARTICLE IX - MISCELLANEOUS PROVISIONS**

**Section 9.00 - Required Reports.** System users shall report the following matters to the Zone; minor repairs undertaken or needed, component or system failures, change in use of their premises e.g. from residential to bed & breakfast or commercial use, change in property ownership. Such reports shall be made within 30 days of the occurrence of the event to be reported.

**Section 9.01 - Protection from Damage.** No person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is part of the Zone's sewage works. Any person violating this provision shall be subject to the penalties provided by law.

**Section 9.02 - Severability.** If any section, sub-section, sentence, clause or phrase of this Ordinance or the application thereof to any person or circumstances is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this Ordinance or the application of such provisions to other persons or circumstances. The Board hereby declares that it would have passed this Ordinance or any section, sub-section, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, sub-sections, sentences, clauses or phrases are declared to be unconstitutional or otherwise invalid.

**Section 9.03 - Violation.** Any person found to be violating any provision of this or any other ordinance, rule or regulation of Zone, except **Section 9.02** hereof, shall be served by the Inspector or other authorized person with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. Said time limit shall be not less than two nor more than seven working days. The offender shall, within the period of time stated in such notice, permanently cease all violations. All persons shall be held strictly responsible for any and all acts of agents or employees done under the provisions of this or any other ordinance, rule or regulation of the Zone. Upon being notified by the Inspector of any defect arising in any sewer or of any violation of this Ordinance, the person or persons having charge of said work shall immediately correct same.

**Section 9.04 - Public Nuisance.** Continued habitation of any building or continued operation of any industrial facility in violation of the provisions of this or any other ordinance, rule or regulation of Zone is hereby declared to be a public nuisance. Zone may cause proceedings to be brought for the abatement of the occupancy of the building or industrial facility during the period of such violation.

**Section 9.05 - Disconnection.** As an alternative method of enforcing the provisions of this or any other ordinance, rule or regulation of Zone, the Zone shall have the power to disconnect the user from the sewer mains of the Zone. Upon disconnection, the Inspector shall estimate the cost of disconnection from and re-connection to the system and such user shall deposit the cost, as estimated, of disconnection and re-connection before such user is re-connected to the system. The Zone shall refund any part of the deposit remaining after payment of all costs of disconnection and re-connection.

**Section 9.06 - Abatement.** During the period of such disconnection, habitation of such premises by human beings shall constitute a public nuisance, whereupon Zone shall cause proceedings to be brought for the abatement of the occupancy of said premises by human beings during the period of such disconnection. In such event, and as a condition of re-connection, there is to be paid to Zone a reasonable attorney's fees and cost of suit arising in said action.

**Section 9.07 - Means of Enforcement Only.** Zone hereby declares that the foregoing procedures are established as a means of enforcement of the terms and conditions of its ordinances, rules, and regulations, and not as a penalty.

**Section 9.08 - Liability and Penalties for Violation.** Any person violating any of the provisions of the ordinances, rules, or regulations of Zone shall become liable to Zone for any expenses, loss, or damage occasioned by Zone by reason of such violation.

**Section 9.09 – Zone Review Required.** Prior to conducting any remodel or additions to premises, property owners shall submit plans to Marin County Environmental Health Services for review in accordance with policies, Codes and regulations established by the County of Marin and currently in effect. Connection to the Zone confers a Class II (Repair) status under the onsite wastewater regulations and policies, which does not permit the addition of bedrooms or expansions beyond certain specified limits. Permit applications for excavation, grading or filling of land shall be reviewed by the Zone prior to approval by the County of Marin.

## **ARTICLE X – INDIVIDUAL WASTEWATER SYSTEMS WITHIN THE ZONE**

**Section 10.0 – Individual Wastewater Systems within the Zone: Inspection Required.** The owners of any property not connected to the community sewer and served instead by an individual onsite wastewater system, any part of which lies within 100 feet of Tomales Bay or a tributary, shall cause such system to be tested at least every three years in accordance with the following provisions. The inspection shall be conducted according to the procedures set forth in the Septic System Performance Evaluation Guidelines and attached to this ordinance as Exhibit A and shall include a hydraulic load & dye test.

The inspection may be conducted by a County-registered inspector (Qualified Service Provider), a C-42 septic system contractor, a Registered Civil Engineer (RCE), Registered Geologist or Soil Scientist, or a Registered Environmental Health Specialist (REHS). The hydraulic load test shall be based on the number of legally permitted bedrooms on the property. If the wastewater system is sluggish and receives a marginal rating on the hydraulic load test, County staff may ask for a more detailed examination to determine the cause of the sluggishness. Owners whose systems fail the inspection due to surfacing effluent, failure to pass the hydraulic load test portion, or other cause may be required to connect the property to the Zone community sewer and pay the specified connection and operational fees.

The first such inspection shall be completed within twelve months of the date of passage of this Ordinance.

**Section 10.1 Inspection Review and Fees.** A property owner who is required by this Ordinance to conduct regular inspections of his or her individual onsite wastewater system shall submit a written copy of the results of such inspection to the Environmental Health Services Division of the Community Development Agency no later than 30 days following the due date of the inspection. A fee shall accompany such submission as specified in the current Environmental Health Services fee schedule.

**Section 10.2** Reporting Required A property owner or inspector who suspects, or has knowledge that a wastewater system subject to the inspection provisions of this Article may be discharging effluent to the ground surface or surface water, shall notify the County Environmental Health Services Division as soon as possible, and in no case more than 48 hours.

**ARTICLE XI – CALIFORNIA ENVIRONMENTAL QUALITY ACT**

**Section 11.0** California Environmental Quality Act The Board hereby finds that that the Ordinance and its provisions qualify for a categorical exemption under CEQA Section 15308 – Actions by Regulatory Agencies for the Protection of the Environment.

**ARTICLE XII – EFFECTIVE DATE OF ORDINANCE**

This Ordinance shall be and the same is hereby declared to be in full force and effect from and after thirty (30) days after the date of its passage and shall be published once before the expiration of fifteen (15) days after said passage, with the names of the Board of Supervisors voting for or against the same, in a newspaper of general circulation, published in the County of Marin, State of California, and the Clerk of the Board shall post in the office of the Clerk, a certified copy of the full text of this ordinance along with the names of those Directors voting for or against the Ordinance.

**PASSED AND ADOPTED** at a regular meeting of the Board of Supervisors of the County of Marin held on this 10th day of February, 2009, by the following vote:

AYES: SUPERVISORS Susan L. Adams, Steve Kinsey, Charles McGlashan,  
Judy Arnold, Harold C. Brown, Jr.

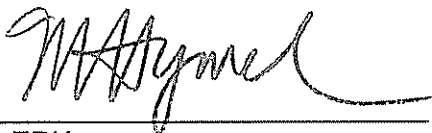
NOES: NONE

ABSENT: NONE



\_\_\_\_\_  
PRESIDENT, BOARD OF SUPERVISORS

ATTEST:



\_\_\_\_\_  
CLERK



## **SEPTIC SYSTEM PERFORMANCE EVALUATION GUIDELINES**

### **INTRODUCTION**

The purpose of these inspections will be to determine, on an individual basis, whether existing septic systems are functional and meet minimum standards of performance established by the San Francisco Regional Water Quality Control Board (RWQCB) and the County of Marin, Environmental Health Services (EHS). The following performance criteria are established as minimum requirements:

1. There is no surfacing effluent at any time.
2. The effluent is not discharged directly to groundwater. This means that site seasonal high ground water levels may not rise above 36 inches below standard leachlines or 24 inches below alternative sewage disposal systems.
3. There is always positive flow from the leachfield and from the septic tank with no backup to the tank or house plumbing during high groundwater conditions.
4. There is an adequately sized septic tank for the structure being served and it must be serviceable - e.g. access riser for maintenance. The septic tank must be water tight and constructed of approved materials.

The following sets forth procedures in conducting performance evaluations, to assure consistency and thoroughness in verifying the functioning status of existing septic systems.

### **INSPECTION RESPONSIBILITY**

The inspections shall be carried out by a Registered Civil Engineer or Registered Environmental Health Specialist. The individuals conducting the field inspection work shall be well versed in the operation and maintenance of individual sewage disposal systems and trained specifically in the testing and inspection procedures outlined in this document.

### **BACKGROUND DATA**

Prior to conducting the field performance inspection all background information pertaining to the property, structures and septic system shall be compiled and reviewed. This should include permit information, site plan, "As Built" drawings of the septic systems, prior sanitary survey inspection results, etc.

The site plan must show the location of the septic tank and leachfield, the locations of all buildings, decks, cutbanks, creeks, wells, reserve or failsafe area, direction and percentage of slope, or any other items which may affect the septic system. If a reserve or failsafe area is not specified or if any proposed construction encroaches upon it, a new reserve area must be identified. The evaluation must address system performance during wet weather conditions as well as dry weather conditions.

## **INITIAL SITE RECONNAISSANCE**

Initially, the inspector should walk the property to confirm the location of the septic tank, leachfield, and other pertinent features of the system. In verifying the leachfield location, the length of each line and the depth of the drainpipe (below ground surface) shall also be determined for comparison with observed groundwater conditions. This may require probing with a metal rod or actual excavation.

The septic tank and disposal field areas should be checked for any obvious signs of existing system problems such as surfacing effluent, odors, greywater bypasses, selective fertility (i.e., lush vegetation in the leachfield area) or any other condition that may suggest an existing or impending problem. The inspector should determine if the system has dual leachfields, and, if so, locate and check the diversion valve, (a) to see that it is functional; and (b) to determine which leachfield is in service. All observations should be noted.

As part of the initial site reconnaissance a hand augured boring (3-inch minimum) shall also be made alongside (but not within) the leachfield area for observation of groundwater conditions. An initial reading (i.e., depth to groundwater from ground surface) shall be taken when the boring is made. The boring shall then be left open for the remainder of the performance inspection so that a final reading may be taken after the water level has been allowed to stabilize for about 1-hour. The boring should be backfilled before leaving the site.

## **SEPTIC TANK INSPECTION**

After the initial site reconnaissance has been conducted, the detailed inspection of the system should commence.

### Access Risers

First, locate the septic tank and determine if permanent access risers have been installed on the septic tank. If the tank is equipped with risers, check their general condition. Ideally, the risers should be properly grouted or sealed to the top of the septic tank to prevent groundwater and/or surface water intrusion. The lids of the risers should also be properly sealed to prevent odors and the entry of insects, (e.g., flies, mosquitoes, etc.). Any observed defects in the access risers should be noted. If the tank lacks access risers, this information should be so noted; and the property owner should be provided information about access risers and shall be required to install them.

### Opening the tank

After inspecting the access risers the septic tank lids should be carefully removed. Care must be taken if gardens and shrubs are near to prevent damage and to disturb the yard area as little as possible. Concrete lids are heavy and may be "cemented" in place by silt. A steel bar or other suitable tool may be needed to assist in opening the lids. During the tank inspection process, personnel should wear protective boots and gloves (neoprene) to guard against infection from pathogenic organisms.

### Structural Condition

Once the tank is open, the inspector should observe and probe the structural condition of the septic tank to check for any obvious signs of cracking or other structural defects in the tank. A steel rod is used to probe the walls and bottom of the tank. Normally, the tank will not need to be pumped-out to perform this procedure. The inlet and outlet sanitary "tees" should also be inspected to assure that they are in satisfactory condition, properly positioned, and free of scum accumulation, rocks, root matter or other obstructions. Any problems should be noted and the inspector shall conduct whatever additional tests or observations necessary to verify the structural integrity of the septic tank.

### Liquid Level

The liquid level in the tank should be measured with respect to the outlet pipe. In a properly functioning system, the level in the tank should be even with the invert (i.e., bottom) of the outlet pipe (**see Figure 1**). If the liquid level is below the outlet pipe, the tank is leaking. If the liquid is above the pipe, the leachfield is either flooded or obstructed. The depth of water above or below the outlet pipe should be measured and noted.

### Tank Capacity

The capacity of the septic tank (in gallons) shall be determined from measurements of the width, length and depth (below outlet pipe) of the tank. The capacity shall then be compared with the established water use/wastewater flow rates for the property. A minimum septic capacity of 3 times the maximum expected daily wastewater flow rate shall be required for the existing septic tank size to be judged adequate. If this criteria is not met or there is any uncertainty regarding compliance, then additional tank capacity is required.

## HYDRAULIC LOAD TEST

### General

The inspector should then proceed with the hydraulic load test of the septic tank and disposal field. The test, as described here, is conducted only for standard gravity fed leachfields, and does not apply if the system utilizes a pump. A separate test to be conducted for pump systems is described in the next section. The hydraulic load test is conducted by surcharging the septic tank with about 150 gallons of water over a 20 - 30 minute period; and then observing the rise of water in the tank and the subsequent draining process. (Tracer dye may be used to assist in observing leachfield failure). A garden hose discharging into the outlet side of the tank can be used to surcharge the tank. The hose outlet should remain well above the water level in the tank to prevent cross contamination. Before starting the test, the flow rate from the hose should be determined (i.e., with 5-gallon bucket and stop watch) to properly gauge the amount of surcharge water added to the tank. Alternatively, a portable water meter can be installed between the house faucet and the hose to directly measure the water volume added.

### Test Procedures

The step-by step procedures for the hydraulic load test are then as follows:

- Measure the location of the static water line in the septic tank (at the outlet side) as an initial reference point.
- Begin surcharging the tank with water to start the hydraulic load test.
- Observe any rise in the liquid level at the outlet pipe and measure the water level at the end of filling. Typically, the liquid level will rise from 0.5-to 1-inch, at which point the liquid level should stabilize for the remainder of filling; and the return to the initial level in a matter of minutes after filling is stopped.
- After the filling cycle is finished, the water level decline in the septic tank is observed until the initial level is reached; and the time to achieve this is recorded. If the initial level is not attained within 30-minutes, the test is terminated and the final water level is noted.

### System Rating

Based upon the water level readings during the test, a hydraulic performance rating shall be assigned to the system in accordance with the guidelines provided in **Table 1**. It should be emphasized that these are guidelines only, and special circumstances may be cause for modifying the evaluation and rating of particular systems. A system receiving a "Failed" rating shall require appropriate upgrading. A rating of "Failed" may also be a result of other factors such as not maintaining minimum setbacks to high seasonal groundwater.

## **FINAL LEACHFIELD INSPECTION\_**

At the completion of the hydraulic load test, the drainfield area and downslope areas should be checked again for indications of surfacing effluent, wetness, or odors. If any of these conditions exist as a result of the hydraulic load test, this shall be considered conclusive evidence of system failure. If the field observations of wetness are not obviously the result of the hydraulic load test, further investigation may be necessary to determine if the drainfield is failing and the cause of the failure. Additional investigative work may include water quality sampling (for total and fecal coliform, ammonia and nitrate) or dye testing. The cause of seepage could be related to gopher holes, site drainage or erosion problems, excessive water use or simply the age of the disposal system.

## **PUMP SYSTEMS**

For systems equipped with an effluent pump, the following inspection procedures should be followed. **Figure 2** provides a diagram of a typical pump system installation for reference.

### General

Remove the pump access cover and basin lid, taking care that no soil or other material enters the basin. Note any signs of scum or sludge buildup, indications of previous pump failure (such as scum line above the high water alarm switch), or evidence of soil or roots entering the basin. Also, inspect the float controls to see that they have free movement, and check the electrical junction box (if located in the basin or access riser) for any obvious signs of corrosion. If the water level in the basin is normal (i.e., between the high and low water controls) proceed with testing of the pump systems.

### Pump Test

The pump test is conducted by adding sufficient water to the basin to activate the pump "on" control, and observing the performance of the system over at least one pumping cycle. The total amount of water added should be about 150 gallons, to approximate the same hydraulic loading of the leachfield as for gravity systems. Using a garden hose, the water may be added to the outlet side of the septic tank, or directly to the pump basin. If filling the basin directly, care should be taken to minimize turbulence and disturbance of sediment or sludge that may have collected in the basin. This can be best accomplished by directing the stream of water against the interior side of the chamber, rather than directly toward the bottom of the pump chamber.

Observe the filling of the basin, and note and measure the point at which the pump is activated. Immediately stop the filling operation and observe the pumping cycle until the pump shuts off. While the pump is discharging, examine the piping system for any leaks. Even small leaks could be a forewarning of possible breaks in the pressure line at some point in the future; and these should be corrected as soon as possible. Note and measure the depth at which the pump shuts off, and calculate the volume of water between the "on" and "off" measurements. Compare this dose with the design dose volume specified for the system. If the dose is too high or too low, float controls should be readjusted to correct the dose. Any adjustments to the pump system should be done by a licensed and properly qualified contractor (not by the inspector).

The pumping cycle (from "on" to "off") levels should be timed and the results recorded on the inspection form. Typically, if the pump is sized and operating properly, pump operation lasts 1-5 minutes per dose. Pump cycles lasting longer than this may indicate leachfield clogging and/or pump deficiencies. If this is observed, it should be noted and further investigation of the pump and leachfield should be conducted to determine the specific cause.

If during filling of the sump basin or chamber, the pump does not activate when the water reaches the high liquid level control (i.e., "on" float), discontinue the pump test. This indicates a pump failure, defective float switch or wiring problems and will require the repair service of a competent contractor familiar with these types of systems. The pump system failure should be noted, communicated immediately to the resident/owner, and followed up with a notice requiring prompt corrective action.

### Leachfield Inspection

At the completion of the pump test, the disposal field area shall be checked for signs of seepage in the same manner as done for gravity-fed systems following the hydraulic load test.

### **Clean Up**

At the completion of the septic system inspection and testing, the inspector shall replace all access lids and clean all tools before leaving the site. All tools, and equipment that come into contact with wastewater should be cleaned and disinfected with a 1:5 bleach solution; and all contaminated rinse water shall be disposed of in the septic tank.

Note: Check with Environmental Health Services prior to conducting any corrective work to the system. Marin County Code requires permits be issued prior to conducting any repair activity.

TABLE 1

HYDRAULIC LOAD TEST RATING GUIDELINES

RATING	SEPTIC TANK RESPONSE TO HYDRAULIC LOADING
<b>EXCELLENT</b>	No noticeable rise in water level during filling.
<b>GOOD</b>	Maximum water level rise of about 1-inch, with rapid decline to initial level within 5-minutes after end of filling.
<b>SATISFACTORY</b>	Maximum water level rise of about 2-inches, with decline to initial level within about 15-minutes after end of filling.
<b>MARGINAL</b>	Maximum water level rise of about 3-inches, with decline to initial level within about 30-minutes after end of filling.
<b>POOR</b>	Water level rise of more than 3-inches, with decline not reaching initial level within 30-minutes after end of filling.
<b>FAILED</b>	Water level rise of more than 3-inches, with no noticeable decline within 30-minutes after end of filling.