

BOARD OF SUPERVISORS, COUNTY OF SAN MATEO, STATE OF CALIFORNIA

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AN ORDINANCE AMENDING, RENUMBERING, AND
REDESIGNATING CHAPTER 6, DIVISION VII TO CHAPTER 4,
COMMENCING WITH SECTION 9300 (REGULATION OF
INDIVIDUAL ONSITE WASTEWATER TREATMENT
AND DISPOSAL SYSTEMS), SAN MATEO COUNTY ORDINANCE CODE

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The Board of Supervisors of the County of San Mateo, State of California, ORDAINS as follows:

Section 1. Chapter 6 (Sections 8500 through 8509.10), Division VII, San Mateo County Ordinance Code is hereby repealed.

Section 2. Chapter 4 (Sections 9300, et seq) (Regulation of Individual Onsite Wastewater Treatment and Disposal Systems), Division VII, San Mateo County Ordinance Code is hereby added to read as follows:

CHAPTER 4. REGULATION OF INDIVIDUAL ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS.

ARTICLE 1. INTERPRETATION OF REGULATIONS, DEFINITIONS, AND AUTHORIZATION OF SOIL PERCOLATION TESTERS.

SECTIONS:

- SECTION 9300. PURPOSE AND FINDINGS.
- SECTION 9301. DEFINITIONS.
- SECTION 9302. AUTHORIZATION OF SOIL PERCOLATION TESTERS.
- SECTION 9303. AUTHORIZATION OF INSTALLERS.

SECTION 9300. PURPOSE AND FINDINGS. The San Mateo County Board of Supervisors finds that to promote the orderly development, public health and safety in unincorporated San Mateo County it is necessary to provide requirements governing all non-sewered onsite wastewater treatment and disposal systems. These requirements are intended to provide procedures for soil percolation testing, installation, maintenance and abatement of onsite wastewater treatment and disposal systems.

SECTION 9301. DEFINITIONS. For the purpose of this Chapter, the following definitions shall be used:

1. **Active Horse Use Area** - means any area where horses are kept in enclosed pens, corrals or paddocks. Such facilities may be indoors or out-of-doors and are walled or fenced-in. This definition does not include open or fenced pastures or paddocks which are permanently covered with vegetation.
2. **Agent** - means a representative of the property owner with the owner's written authorization.
3. **Appeal** - means the process whereby a person who has been denied a permit or authorization issued under the authority of the Health Officer, or who has had permit or authorization issued by the Health Officer suspended or revoked, receives a hearing before the San Mateo County Board of Supervisors.
4. **Chemical Toilet** - means and includes any toilet or water closet constructed, installed or placed for the purpose of having deposited therein wastewater which is disposed of by a chemical process other than by discharge into a sewer system for treatment in the wastewater treatment plant of a public agency or district.
5. **Health Officer** - means the Director of Environmental Health Services or an authorized representative.
6. **Registered Installer** - means any individual, organization, partnership, business, association or corporation who does not possess a State Contractor's license to construct, enlarge, alter, repair, improve or replace a septic tank, cesspool, seepage pit, drainage field, leaching system or any other type of individual onsite wastewater treatment and disposal system.
7. **Contractor State License Board** - means a certificate, permit, registration, or any other authorization issued by the Contractor State License Board, Department of Consumers Affairs.
8. **Registered Professional** - means a State of California Registered Environmental Health Specialist, Geologist, Civil or Soils Engineer.
9. **Wastewater** - means any and all waste or substance, liquid or solid, associated with human habitation or which contains or may be contaminated with human or animal excreta, excrement, offal or any feculent matter or matters, or substances that may be injurious or dangerous to health, either directly or indirectly.

SECTION 9302. AUTHORIZATION OF SOIL PERCOLATION TESTERS. No person shall perform percolation testing or submit testing results unless he or she possesses a current authorization issued by the Health Officer.

1. The Health Officer shall authorize any applicant who demonstrates competence to perform and submit data on soil percolation testing in compliance with the requirements of the San

Mateo County Ordinance, Chapter 4, Section 9302, and the performance standards issued pursuant to Section 9325, and who submits payment of an annual authorization fee as set forth in San Mateo County Ordinance Code, Division V, Section 5523.3. Applicants shall demonstrate such competence by:

- a. Presenting a valid registration or certification as a Registered Professional as defined in Section 9301.8 or;
 - b. Passing a written examination administered by the Health Officer and having a history of not violating any applicable San Mateo County Ordinance Code sections regarding soil percolation testing. Any applicant for a certificate may be required to undergo additional training re-examination, other demonstration of competency or any combination thereof as may be deemed necessary by the Health Officer.
2. A tester's authorization may be suspended or revoked at any time if the Health Officer determines that the tester's actions were not in compliance with Article 4, and or the performance standards adopted pursuant to Section 9325. The tester whose authorization has been suspended, revoked or denied, shall be given a determination and given a hearing in front of the Health Officer, if requested by the tester. Such hearing shall be requested within ten (10) working days from the date of notification of the intended suspension, revocation or denial of the authorization.
 3. The Department of Health Services, Division of Environmental Health, shall maintain a current list of names and business addresses of all authorized testers and of all testers whose certifications/authorizations have been suspended or revoked. Any tester may be required to undergo additional training, reexamination, other demonstration of competency, or any combination thereof, as may be deemed necessary by the Health Officer.
 4. Authorization may be renewed by payment of the annual authorization fee on the first of the month that the authorization was originally issued. Proof of a current San Mateo County certification/authorization or proof of a current Registered Professional as defined in Section 9301.8 shall be submitted to the Health Officer for the annual renewal.

SECTION 9303. AUTHORIZATION OF INSTALLERS. No person shall install an individual onsite wastewater treatment and disposal system unless he or she possesses a current authorization issued by the Health Officer. This authorization shall be in addition to any license required by State law to install the individual onsite wastewater treatment and disposal system.

1. The Health Officer shall authorize any applicant who demonstrates competence to install an individual onsite wastewater treatment and disposal systems in compliance with the requirements of the San Mateo County Ordinance, Chapter 4, Section 9303, and the performance standards issued pursuant to Section 9325, and who submits payment of an annual authorization fee as set forth in San Mateo County Ordinance Code, Division V, Section 5523.3. Applicants shall demonstrate such competence by:
 - a. Presenting a valid license as a State Contractor as defined in Section 9301.7 or;

- b. Passing a written examination administered by the Health Officer and having a history of not violating any applicable San Mateo County Ordinance Code sections regarding installation procedures and requirements. Any applicant for a certificate may be required to undergo additional training, re-examination, other demonstration of competency or any combination thereof as may be deemed necessary by the Health Officer.
2. An installer's authorization may be suspended or revoked at any time if the Health Officer determines that the installer's actions were not in compliance with performance standards adopted pursuant to Section 9325. The installer whose authorization has been either suspended, revoked or denied, shall be given a determination and given a hearing in front of the Health Officer, if requested by the installer. Such hearing shall be requested within ten (10) working days from the date of notification of the intended suspension, revocation or denial of the authorization.
3. The Department of Health Services, Division of Environmental Health, shall maintain a current list of names and business addresses of all authorized installers and of all installers whose certifications/authorizations have been suspended or revoked. Any installer may be required to undergo additional training, re-examination, other demonstration of competency, or any combination thereof, as may be deemed necessary by the Health Officer.
4. Authorization may be renewed by payment of the annual authorization fee on the first of the month that the authorization was originally issued. Proof of a current State Contractor's License or proof of a current Registered Installer as defined in Section 9301 shall be submitted to the Health Officer for the annual renewal.

ARTICLE 2. PERMITS.

SECTIONS:

- SECTION 9305. INDIVIDUAL SEWAGE DISPOSAL SYSTEMS.
SECTION 9306. CHEMICAL TOILETS.
SECTION 9307. APPLICATION: PLOT PLANS, INSPECTIONS AND OTHER REQUIREMENTS FOR BUILDINGS OR STRUCTURES.
SECTION 9308. REPAIRS OR ALTERATIONS.
SECTION 9309. EXPIRATION OF PERMIT.
SECTION 9310. TRANSFER OF PERMIT.
SECTION 9311. EXCEPTIONS.
SECTION 9312. APPEAL, SUSPENSION OR REVOCATION OF PERMIT.

SECTION 9305. INDIVIDUAL SEWAGE DISPOSAL SYSTEMS. It shall be unlawful for any person, whether as principal, servant, agent or employee to construct, enlarge, alter, repair, improve or replace a septic tank, cesspool, seepage pit, drainage field, leaching system or any other type of individual onsite wastewater treatment and disposal system, or any part thereof, in or upon any property in the unincorporated areas within the County of San Mateo without first having obtained a permit to do so from the San Mateo County Department of Health Services,

Environmental Health Services Division. Holding tanks installed within the boundaries of a sanitary district who has jurisdiction over the maintenance and repair of said tanks shall be exempt from this section.

SECTION 9306. CHEMICAL TOILETS. It shall be unlawful for any person, whether as principal, servant, agent, or employee to install or replace a chemical toilet installation in or upon any property in the unincorporated areas within the County of San Mateo without first having obtained a permit to do so from the San Mateo County Department of Health Services, provided, however, that no permit shall be required for the installation of such chemical toilets for temporary use upon property where a building or other structure is being constructed during the period of such construction.

SECTION 9307. APPLICATION: PLOT PLANS, INSPECTIONS AND OTHER REQUIREMENTS FOR BUILDINGS OR STRUCTURES.

1. Application shall be signed by the legal owner of the property or their designated agent.
2. An approved soil percolation test shall be conducted to determine drainfield size and location. All percolation testing must comply with standards adopted pursuant to Section 9325.
3. Each applicant for a permit to install, or repair an individual onsite wastewater treatment and disposal system pursuant to this Chapter shall, at the time of making such application, submit a plot plan which shall show the following:
 - a. The existing property lines of the property in or upon which the disposal system is to be placed in relation to streets and highways and surrounding properties.
 - b. The location of all existing or proposed septic drainfield and expansion area, wells, buildings, structures, driveways, patios, swimming pools, active horse use areas and similar installations upon the property.
4. A representative of the Environmental Health Services Division shall conduct an initial inspection of the property in or upon which each individual onsite wastewater treatment and disposal system is to be placed, to determine the feasibility of the construction of such a system. A permit will not be issued if, in the opinion of the Health Officer, the proposed system will not function properly.
5. A representative of the Environmental Health Services Division shall conduct an inspection of each installation before the individual onsite wastewater treatment and disposal system, or any part thereof is backfilled or covered.
6. If any alteration has been made to the original approved plans, as-built plans shall be submitted prior to final approval.

SECTION 9308. REPAIRS OR ALTERATIONS.

Repairs or alterations to the existing septic system shall comply as closely as practicable with the on-site wastewater treatment and disposal system requirements.

SECTION 9309. EXPIRATION OF PERMIT.

1. Each permit issued pursuant to this Chapter shall expire and become null and void if the work authorized thereby has not commenced within one (1) year after the permit has been issued.
2. If, after the commencement of the installation of a system authorized by a permit issued pursuant to this Chapter and before the completion thereof, the project is abandoned for a continuous period of one (1) year, then the permit shall expire and become null and void.
3. Upon the expiration of any permit as herein provided, no further work may be done in connection with the installation of the system unless and until a new permit for such purpose is issued in accordance with this Chapter.

SECTION 9310. TRANSFER OF PERMIT. No permit issued pursuant to this Chapter shall be transferred from one person, contractor or site to another.

SECTION 9311. EXCEPTIONS.

1. An exception from the specific terms of this Chapter may be granted by the Health Officer under the following conditions:
 - a. The exception will not harm the public health, safety and welfare of the people of San Mateo County.
 - b. Due to special conditions or exceptional characteristics of the property, its location or surroundings, a literal enforcement of the Chapter would result in unnecessary hardship.
 - c. The hardship was not caused with the intent to avoid the requirements of this chapter.
 - d. The exception will not have any adverse environmental effect on the use of the adjoining property.
2. Exceptions shall not be granted in any land division process.
3. **PROCEDURE:** Application for an exception shall be made in writing and filed with the Health Officer with the completed application request for a permit or certificate provided by this chapter. The application shall be completed in full, and be accompanied by the appropriate filing fee and all exhibits required by the Health Officer.

SECTION 9312. APPEAL, SUSPENSION OR REVOCATION OF PERMIT.

1. **Grounds for Denial, Suspension or Revocation.** A permit may be denied, suspended or revoked by the Health Officer where it has been determined that a violation of state law or a provision of this Chapter exists.
2. **Notification of Decision.** The Health Officer shall issue a decision as to whether the permit for the individual sewage disposal system should be granted, denied, suspended or revoked and citing the grounds therefor. Notification of said decision shall be sent to the applicant.
3. **Right of Appeal.** Any applicant may appeal the decision of the Health Officer issuing, denying or suspending or revoking the permit for the individual sewage disposal system.
4. **Appeal Procedure.** The appeal shall be made to the Board of Supervisors by submitting to the Health Officer a completed appeal application and the appropriate filing fees as set forth in the current fee schedule. The appeal application must be submitted within ten (10) calendar days from the date of the Health Officer's decision to grant, deny, suspend or revoke the permit. The Board of Supervisors may reject, affirm or modify the Health Officer's decision.

ARTICLE 3. FEES.

SECTION 9320. PERMIT FEES. No permit shall be issued under this chapter unless the applicant has previously paid the non-refundable filing fees as set forth in Section 5522.3, Division V, San Mateo County Ordinance Code.

1. **Construction/Destruction of Individual Wastewater Disposal Systems.** The filing fee for construction of an individual wastewater disposal systems shall be paid by the applicant at the time of application for a permit to construct, enlarge, alter, repair, destruct or improve an individual wastewater disposal system or to install or replace a chemical toilet and prior to the inspection of the site of any such construction, enlargement, alteration, repair, destruction or improvement of an individual wastewater disposal system or installation or replacement of a chemical toilet.
2. **Fee for Examinations.** The fee for the examination of a property to determine whether a permit for an individual wastewater disposal system pursuant to Section 9305 of this Division shall be paid prior to the examination. Filing fees shall not be refunded to the applicant whether or not the County grants the permit.
3. **Refund.** In the event the County fails to process the application for construction of an individual wastewater disposal system, or for the enlargement, alteration, repair, destruction or improvement of an individual wastewater disposal system, or fails to conduct the examination of the property to determine whether a new individual wastewater disposal system installation permit under Section 9305 of this Ordinance can be issued at a future date, it shall return to the applicant any filing fee paid by the applicant.

ARTICLE 4. REQUIREMENTS FOR INDIVIDUAL SEPTIC DISPOSAL SYSTEMS.

SECTIONS:

- SECTION 9321. LOCATIONS.
- SECTION 9322. TYPE OF INSTALLATIONS.
- SECTION 9323. INSTALLATION.
- SECTION 9324. NON-RESIDENTIAL DESIGN.
- SECTION 9325. PERFORMANCE STANDARDS

SECTION 9321. LOCATIONS.

1. No septic, pumping or holding tank shall be located closer than:
 - a. Five (5) feet of any building
 - b. Fifty (50) feet of any property line for parcels without an available public water supply. Ten (10) feet of any property line for parcels with approved public water supply.
 - c. One hundred feet of any well.
 - d. One hundred (100) feet of the top of the bank of a stream as defined by the most recent U.S. Geological Survey topographical map (7 1/2 minute series, or equivalent scale) of the area.
 - e. Twenty-five (25) feet of a swimming pool.
2. No drainfield or other leaching system shall be located closer than:
 - a. Ten (10) feet of any building.
 - b. Fifty (50) feet of any property line for parcels without an available public water supply. Ten (10) feet of any property line for parcels with approved public water supply.
 - c. One hundred (100) feet of any well.
 - d. One hundred (100) feet of the top bank of a stream.
 - e. Fifty (50) feet of a ditch, cut bank or slope 50% or greater.
 - f. Twenty-five (25) feet of a swimming pool.
 - g. Two hundred (200) feet of a domestic water supply reservoir.

- h. One hundred (100) feet of a reservoir, other than a domestic water supply reservoir.
3. The septic tank, drainfield, and other components of the septic system shall be located within the boundaries of the parcel upon which the structure requiring the system is built.
4. No drainfield or other leaching system shall be located in slopes of fifty percent (50%) or greater.
5. Exception from Subsections 1, 2 or 3 above, shall be with the written approval of the Health Officer. No exception shall be considered for new development under Subsection 3. No exception shall be considered for Subsection 4.
6. No exceptions will be made for setbacks that are public health standards. These include but are not limited to Subsections 2 c, d, e, g, & h.

SECTION 9322. TYPE OF INSTALLATIONS. The type and manner of construction and installation of individual onsite wastewater treatment and disposal systems shall conform to the size and extent as required by the performance standards issued pursuant to Section 9325. Those installations requiring special consideration shall meet a design approved by the San Mateo County Department of Health Services, Environmental Health Services Division.

SECTION 9323. INSTALLATION. This chapter in no way prohibits an owner from constructing and installing his or her own onsite wastewater treatment and disposal system providing that all of the provisions of this Chapter are met.

SECTION 9324. NON-RESIDENTIAL DESIGN. Commercial or non-residential onsite systems shall be sized and designed based on wastewater flow as compared to the current EPA Design Manual for "Onsite Wastewater Treatment and Disposal Systems".

SECTION 9325. PERFORMANCE STANDARDS. The Health Officer may prepare and issue performance standards deemed necessary to obtain compliance with this Chapter and to ensure public health and safety. Such performance standards may be reviewed and amended at any time.

ARTICLE 5. ABATEMENT.

SECTION 9335. ABATEMENT OF EXISTING UNSANITARY INDIVIDUAL SEWAGE ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS. Every individual onsite wastewater treatment and disposal system which is so unsanitary that it constitutes a hazard to safety or health by reason of inadequate maintenance, dilapidation, or obsolescence is hereby declared to be a public nuisance and shall be abated by repair or rehabilitation after reasonable notice in writing from the Health Officer.

ARTICLE 6. CHEMICAL TOILETS & INDIVIDUAL WASTEWATER DISPOSAL SYSTEMS.

SECTION 9340. CLEANING OF CHEMICAL TOILETS & INDIVIDUAL WASTEWATER DISPOSAL SYSTEMS.

1. APPLICABILITY. The provisions of this Section shall not apply to any public entity that owns and operates chemical toilets and individual wastewater disposal system.
2. REGISTRATION. It is unlawful for any person or firm to clean or engage in the business of the cleaning of chemical toilets, or septic systems, or to dispose of the cleanings therefrom without possession of a valid registration issued by the Environmental Health Services Division.
 - a. Application for Registration. All applications for registration under this section shall be filed with the Environmental Health Services Division. The application shall state the name of the applicant in full. If application is a partnership, then the names and addresses of each partner shall be provided. The applicant shall state the location of the place at which he/she proposed to dispose the cleanings. The application shall be signed by an authorized officer of the corporation, or by the managing partner.
 - b. Standards for Registration. Registration shall be issued only after the applicant satisfactorily demonstrates to the Health Officer:
 - (1) Applicant's knowledge of, and competence with, the equipment to be used as well as the sanitary principles, laws and ordinances which affect human health or public nuisances;
 - (2) The suitability of the proposed place or places of disposal of the cleanings;
 - (3) The suitability of the manner of disposing such cleanings.
 - c. Issuance of Registration. The Department of Environmental Health Services shall act upon each application within thirty (30) days of the date of filing same.
 - d. Term of Validity. Registration shall be valid for twelve (12) months. It shall be the responsibility of the applicant to renew this registration annually.
 - e. Special Provisions and Restrictions. Applicants may be registered under such terms, conditions, orders and directions as the Health Officer may deem necessary for the protection of human health and comfort. The Environmental Health Services Division is hereby empowered to require persons who are registered to clean chemical toilets and/or dispose of the cleanings therefrom, to file, a statement giving the name and address of the owner or tenant of each of the premises where a chemical toilet has been cleaned out by said registrant, his employees or others on his behalf. This statement shall also describe, in precise terms, the place where the cleanings have been disposed and by whom. The Environmental Health Services Division is empowered to require such statements to be notarized.
 - f. Change of Address of Registrant. A change of address of any registrant or of his/her place of business shall be reported to the Environmental Health Services Division in writing within two days after said change of address.

- g. Revocation. Any registration issued under this section may be revoked for cause by the Health Officer. Verification notice shall be served at the latest place of residence, or business reported by the applicant. Any person who feels aggrieved by a registration revocation by the Health Officer is entitled to a hearing before the San Mateo County Board of Supervisors. The procedure for filing for such a hearing shall conform to Section 9312 (2) of this Ordinance.
- h. Violation. It shall be unlawful to violate any of the provisions of this section or any order or orders of the Environmental Health Services Division made pursuant to this section.

Section 3. The provisions of this ordinance shall not be applicable to any application for a permit for the installation of an individual onsite waste water treatment and disposal system that is submitted to the Environmental Health Division prior to the effective date of this ordinance.

Section 4. This Ordinance will be in full force and become effective thirty (30) days after its passage.

a:chapter.2
(9/16/96)

Regularly passed and adopted this 1st day of October, 1996.

AYES and in favor of said ordinance:

Supervisors:

MARY GRIFFIN

TOM HUENING

TED LEMPert

RUBEN BARRALES

MICHAEL D. NEVIN

NOES and against said ordinance:

Supervisors:

NONE

Absent Supervisors:

NONE

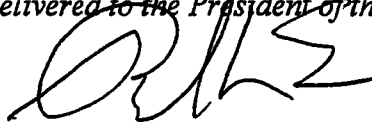


President, Board of Supervisors
County of San Mateo
State of California

Certificate of Delivery

(Government Code section 25103)

I certify that a copy of the original ordinance filed in the Office of the Clerk of the Board of Supervisors of San Mateo County has been delivered to the President of the Board of Supervisors.



RICHARD L. SILVER
Clerk of the Board of Supervisors

03740

I. PERFORMANCE STANDARDS FOR PERCOLATION TEST PROCEDURE.

(A) PERFORMANCE STANDARDS ADOPTED.

In accordance with the provisions of Section 9325, Chapter 4, Division VII of the San Mateo County Ordinance Code, the following performance standards are hereby adopted. Soil percolation testing must comply with these standards and the test results must satisfy the requirements of Section II before a permit to construct an onsite wastewater treatment and disposal system will be issued or a building permit application approved.

(B) PERCOLATION TEST PROCEDURE FOR THE STANDARD TRENCH (SIX FEET OF ROCK BELOW TILE DRAINAGE PIPE)

The following procedure shall be used where soil is acceptable for a drainfield trench with a standard depth of 8 feet.

- (1) The standard percolation test of this department involves an excavation by the use of a backhoe to a depth of from four (4) to five (5) feet. A minimum of six (6) test holes per building site in the area to be used for drainfields shall be provided. Three (3) holes must be in the primary area and three (3) must be in the proposed expansion area.
- (2) At the bottom of each excavation, dig or bore a twelve (12") diameter hole to a depth of twelve (12) inches.
- (3) Scratch or roughen the sides of the hole to remove smeared surfaces. Remove all loose materials from the hole. Add two (2) inches of coarse clean sand or fine gravel to protect the bottom from scouring and sediment.
- (4) Fill the hole with clear water and keep water in hole at least four (4) hours prior to the start of the test.
- (5) Begin the test by adding clear water to bring the depth of water to approximately eight (8) to ten (10) inches over the gravel. From a fixed reference point, measure the drop in water level at thirty (30) minute intervals for four (4) hours refilling six inches over the gravel as necessary. The drop that occurs during the final thirty (30) minute period is used to calculate the percolation rate. This rate must be a stabilized rate over the last three (3) readings. The testing shall continue until a stabilized rate has occurred.
- (6) All percolation test holes, trenches and excavations must be filled upon completion of testing.
- (7) All percolation test data shall be verified and submitted to this office upon completion of the test.

(C) AUGER/DRILLED METHOD.

A twelve (12) inch diameter hole drilled to a depth of six (6) feet has been proposed as an alternative method. While this method will be accepted, the applicant or his agent should realize the difficulties inherent in this method which are unfavorable to the successful conduct of the percolation test.

Caution must be exercised in: (a) the addition of the two (2) inches of sand or fine gravel to the bottom of the hole six (6) feet deep so as to evenly cover and protect the bottom soil from erosion during the test; (b) the scratching or equivalent roughening of the bottom of the wall so as to return it to approximately the original percolation capacity since drilling usually causes a sealing of the side walls; (c) the introduction of water into the hole so as to avoid turbulence, erosion, and increased turbidity of the test water; (d) the construction of the hole and the conduct of the test to avoid sloughing of soil from the side walls into the bottom of the hole; (e) the maintenance of a maximum depth of twelve (12) inches of water.

(D) OBSERVATION OF PERCOLATION TEST.

Percolation test data must be verified and the percolation test card must be signed by a representative of the Division to be valid. The person conducting the percolation test shall notify this office twenty-four (24) hours prior to the time of such test to permit a departmental representative to observe the drop in water level.

When a Registered Professional submits data for review regarding onsite wastewater treatment and disposal systems, they shall interpret such percolation tests, borings and similar information in terms of conformance with current standards. The Registered Professional shall also state that geologic conditions, historical and seasonal ground water fluctuations, topography and other factors covered in the regulations have been investigated and based on this information, in their professional judgement, the on-site wastewater treatment and disposal system will be in compliance with the ordinance.

(E) OBSERVATION OF SOIL CONDITIONS THREE (3) FEET BELOW PROPOSED STANDARD DRAINFIELD TRENCH BOTTOM.

An eleven (11) foot deep test hole shall be excavated in the presence of the Health Officer to determine soil conditions three (3) feet or greater below the proposed drainfield/disposal system depth. If it is determined that seasonal ground water conditions exist at a depth within three (3) feet of the bottom of the proposed drainfield, wet weather or seasonal groundwater testing shall be required using methods as described by the EPA Design Manual On-Site Wastewater Treatment Disposal Systems. Wet weather testing shall be conducted prior to March 21 when fifty (50%) percent of the annual rainfall has occurred according to local NOAA (National Oceanic Atmospheric Administration),

Weather Service data.

(F) PERCOLATION TEST FOR PROPOSED SUBDIVISION.

A Registered Professional shall submit all percolation test data for each of the proposed parcels of the subdivision. They shall interpret such percolation test, borings and similar information in terms of conformance with current regulations. They shall also state that fluctuations, topography and other factors covered in the regulations have been investigated and based on this information in their professional judgment, the on-site sewage disposal system will be in compliance with the ordinance of the County of San Mateo.

II. PERFORMANCE STANDARDS FOR THE APPROVAL OF INDIVIDUAL SEWAGE ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS.

In accordance with the provisions of Section 9325, Chapter 4, Division VII of the San Mateo County Ordinance Code, the following performance standards are hereby adopted. Plans for an individual onsite wastewater treatment and disposal systems where permitted must comply with these standards before a permit to construct an onsite wastewater treatment and disposal system will be issued or a building permit application approved.

(A) SEPTIC TANK

(1) Materials for construction:

Reinforced concrete or other durable materials that are not subject to excessive corrosion or decay and which will produce a watertight tank shall be used. Interior surfaces of porous tanks require a coating of a bitumastic or similar compound to minimize corrosion. The coating shall extend from the top of the tank to six (6) inches below the water line.

(2) Size of tank:

Minimum size for one (1) to four (4) bedrooms shall be 1500 gallons. Septic tanks serving more than four (4) bedrooms shall be sized as follows:

5 - 6 bedrooms - 2000 gallons
7 - 8 bedrooms - 2500 gallons
9 -10 bedrooms - 3000 gallons

(3) Design:

(a) Septic tanks for private residences shall be one (1) piece comprised of two (2) compartments with the first compartment containing two-thirds of the total tank volume.

- (b) Such tanks shall conform to the standards outlined in the EPA Design Manual for Onsite Wastewater Treatment and Disposal Systems.
 - (c) Septic tanks installed to serve other than individual residential structures shall require special design considerations.
 - (d) Each tank shall be structurally designed to withstand all anticipated loads, stress and weight. Tanks subjected to vehicular traffic shall be traffic rated to State Department of Transportation Standard H20-44 truck loading standards. Complete plans and design calculations shall be submitted for approval prior to installation.
 - (e) Septic tank designs other than above shall require a variance approved by the Health Officer.
- (4) Location:
- (a) The septic tank shall be located in a place accessible for vacuum pumping. Each compartment shall be provided with an access port extending at least to grade and covered with watertight, weight bearing covers.
 - (b) The septic tank may be permitted under driveways provided it is traffic rated and the septic tank is provided with a metal sewer access ring and cover over both compartments.
 - (c) No pumping of sewage from the house to the septic tank shall be permitted; gravity flow only shall be utilized.
 - (d) Tanks shall have a minimum of eight (8) inches of soil cover, however, as a minimum tank access risers shall extend to grade.

B. THE DRAINFIELD SYSTEM.

- (1) The width of the drainfield trench shall be a minimum of eighteen (18) inches and a maximum of twenty four (24) inches.
- (2) The minimum distance between drainfield trenches shall be fifteen (15) feet measured horizontally from the edges of adjacent trenches. In cases of sloping terrain and where geological conditions indicate, an increase in this spacing may be required.
- (3) The total drainfield shall be divided into two (2) equal lengths preceded by a diversion valve or equivalent device of approved design to allow for alternate use of each half of the drainfield system.

- (4) Each half of the drainfield shall, whenever possible, be located on one contour (one elevation).
- (5) Three (3) inch minimum diameter solid pipe schedule 40 PVC or stronger shall be used between the septic tank and drainfield and between units of drainfield.
- (6) Minimum length for a trench shall be twenty five (25) feet. Maximum length shall be one hundred twenty five (125) feet for gravity flow systems.
- (7) The standard trench shall have six (6) feet of properly graded clean rock fill of 3/4 to 1-1/2 inch size below the standard perforated drain pipe and extending at least two (2) inches above the top of the perforated drain pipe. The rock fill shall be covered with a protective layer of filter fabric and then with twelve (12) to eighteen (18) inches of uncompacted native topsoil.
- (8) The above drainfield shall be sized in accord with the following:
 - (a) For stabilized percolation rates of two (2) inches per hour but less than twelve (12) inches per hour;

Up to three bedrooms - two lines each of seventy 70 linear feet;

Each additional bedroom - add twenty (20) linear feet to each line.
 - (b) For stabilized percolation rates between one (1.00) inch per hour and one and ninety-nine hundredths (1.99) inches per hour;

Up to three bedrooms - two (2) lines each of one hundred twenty-five (125) feet;

Each additional bedroom - add forty (40) feet to each line.
 - (c) For stabilized percolation rates between three-fourths (.75) and ninety-nine hundredths (.99) inches per hour;

Up to three bedrooms - two (2) lines each of one hundred eighty (180) feet;

Each additional bedroom - add sixty (60) feet to each line.

Drainfields located in soils demonstrating percolation rates of between three-fourths (.75) and ninety-nine hundredths (.99) inches per hour shall utilize pressure dosing to distribute wastewater uniformly.

No individual onsite wastewater treatment and disposal system which requires percolation of wastewater into the ground shall be approved where the stabilized percolation rate is less than three-fourths (.75) inch per hour or more than twelve (12) inches per hour.

(9) Drainfields of lesser depths but equivalent sidewall area may be permitted subject to the approval of the Health Officer.

(10) Both the perforated drain tile pipe and the trench bottom shall be level.

Perforated pipe shall be a minimum 2,000 lb. standard crush weight ASTM F810-8149232 or greater and shall be capped at the ends.

(11) Soil of an accepted quality to receive effluent from the drainfield shall extend a minimum of three (3) feet below the drainfield.

(12) Capped observation standpipes shall be installed at the end of each drainfield trench, and extend from the bottom of the trench to ground level. The standpipe shall not be connected to the drainline.

(13) No portion of any drainfield shall be located in fill over twelve (12) inches deep. Fill is defined as a deposit of earth or waste material placed by artificial means. (Engineered fill is material placed according to the recommendations and under the observation of a geotechnical consultant). No portion of any drainfield shall be located within fifty (50) lateral feet of any fill placed on slopes of 35% or greater.

(14) Pumping shall be permitted from the septic tank to the drainfield, subject to the following conditions:

(a) Only when gravity flow system cannot meet current standards.

(b) A separate pumping/holding tank of construction equivalent to an approved septic tank shall be provided.

(c) The system shall have an electrical alarm system to alert the occupants of the residence of pump failure.

(d) The holding tank shall be sized equivalent to the approved septic tank for overflow during pump failure.

(e) The distribution system for the drainfields shall consist of an adequately sized, pressure-dosing system equivalent to standards on file with the Environmental Health Services Division.

(f) A geotechnical report approved in accordance with the Minimum Standards for Geotechnical Reports shall be submitted to the

Environmental Health Services Division.

- (g) Maintain an annual inspection permit.
- (15) Drainfields proposed to serve other than individual residences may require special design by a Registered Professional.
- (16) Drainfield location may take precedence over house location, thus the most desirable building pad may have to be converted to a drainfield site.
- (17) Information required in the guidelines for drainfield soil stability can be a part of any soils report requested by the Building or Public Works Department.
- (18) Soil percolation testing to determine drainfield lengths can be performed by the same consultant.
- (19) If soil conditions (slope stability and percolation rates) dictate drainfield depths of less than eight (8) feet, the consultant should so state. Longer drainfield lengths will be adjusted according to the consultant's suggested trench depth.
- (20) Investigation and report input are NOT limited to the above. If more detailed field investigation is necessary, those results shall be a part of the final report.

(C) BEDROOM ADDITIONS.

Bedroom additions to an existing house structure shall require upgrading of the individual on-site wastewater treatment and disposal system to current regulations.

(D) AVAILABLE AREA FOR WASTEWATER DISPOSAL FROM SEPTIC TANKS.

In addition to the area required under these standards for the installation of the drainfield trenches, further area shall be available and reserved upon the property, which will allow for 100% expansion of the wastewater disposal system. Specified distances from property lines, buildings, wells, etc., will be maintained.

(E) DIVERSION VALVE.

- (1) The diversion valve shall be installed within fifteen (15) feet of the tank and the housing of the valve shall be four (4) inches above grade and easily accessible for periodic use.
- (2) The valve shall be watertight and shall operate freely under conditions of normal usage.

(F) SLOPE OF TERRAIN.

Drainfields, including repairs to existing drainfields, shall not be permitted where steep slopes, rock outcropping, cuts in banks, underground clay lenses or similar topographic and geologic conditions could be expected to result in the surfacing of the liquid effluent or cause instability in the slope. The following requirements shall be followed:

- (a) Drainfields for proposed homes shall not be installed on existing any portion or such parcels with an average slope of twenty percent (20%) percent or greater.

Exception: Where slopes in excess of twenty percent (20%) are proposed for use, substantiating detailed geotechnical data shall be provided to demonstrate that wastewater surfacing and/or slope instability will not occur throughout the drainfield and expansion areas or downslope of the leach lines. Data shall include, but shall not be limited to, topography (by means of contours); subsurface lithologic and structural data: all existing or proposed grading; accurate cross sections showing all soil bedrocks, zones, etc.; seasonal ground water elevation determination and any other appropriate factors. Static and seismic analyses with safety factors of 1.5 and 1.2 + respectively, using residual strengths under saturated conditions, must be presented for slopes of greater than thirty five (35%) percent. No slopes of fifty percent (50%) or greater shall be considered.

- (b) Drainfields shall not be installed where deep roadside cuts exist, which can be expected to later cause sewage seepage from drainfields installed at a higher level.
- (c) Drainfields located in slopes of thirty-five percent (35%) or greater shall utilize a pressure dosing design to distribute the wastewater uniformly throughout the drain line.

(G) OTHER REQUIREMENTS.

- (1) The drainfield shall not be located under any paving or in an area subject to vehicular traffic.
- (2) The drainfield shall not be constructed in low-lying areas subject to annual drainage or flooding.
- (3) The bottom of the drainfield shall be at least three (3) feet above the highest anticipated standing ground water level.
- (4) Underground utility lines or conduits shall not be installed in or across

drainfields.

- (5) The soil shall retain its form and percolative capacity when the local water of known chemical quality is applied.
- (6) Trenches shall be constructed when the soil is dry. If moisture still remains in portions of the soil resulting in a smearing (sealing) effect on the sidewalls by the excavating equipment, the sidewalls shall be adequately scarified to restore the soil to its original drainage capacity.
- (7) Trenches shall not be left without adequate cover overnight if rock fill is not added the same day as excavation.
- (8) Environmental Health Services Division shall be notified for inspection at least twenty four (24) hours prior to the excavation of trenches.
- (9) Variance from any of the regulations above shall be with the written approval of the Health Officer.
- (10) Percolation test procedures shall be conducted in accordance with standard procedures as stated in this ordinance.
- (11) Percolation tests other than the above may be used with prior approval of the Director, provided that such tests are verifiable and the results can be expressed in inches/hour for a twelve (12) inch deep test hole, twelve (12) inches in diameter.

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