

SECTION 1

POLICIES AND ADMINISTRATIVE PROCEDURES

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SECTION 1 POLICIES AND ADMINISTRATIVE PROCEDURES

A. INTRODUCTION

Section 1 of the Onsite Systems Manual provides an overview and clarification of various onsite wastewater treatment systems (OWTS) and other wastewater related policies and administrative procedures pertaining to:

- OWTS and other wastewater related permits and fees;
- Certifications of soil percolation testers, OWTS installers and septage pumping companies;
- Development and OWTS requirements for site approval for building projects, secondary dwellings, remodeling projects, and subdivisions;
- Requirements for properties located near sanitary sewer systems;
- Repair or destruction of existing septic systems;
- Provisions and permitting requirements for alternative treatment and dispersal systems;
- Provisions and permitting requirements for septic holding tanks and portable toilets; and
- Amendments to this Onsite Systems Manual.

B. FEES

Fees, as prescribed by resolution of the Board of Supervisors of the County of San Mateo, are payable separately to Environmental Health for services described throughout this Manual. See Environmental Health website for listing of applicable fees. Fees are non-refundable once received by Environmental Health.

Note that a fee waiver may be considered for OWTS work consistent with Board of Supervisors resolutions (i.e., farm labor housing units).

C. CERTIFICATION OF SOIL PERCOLATION TESTERS

Soil percolation testing is a method of evaluating water absorption of the soil. The test is conducted with clean water and test results are used in the design and sizing of the dispersal system. No person shall perform soil percolation testing or submit testing results unless they possess a current certification issued by Environmental Health as prescribed below.



1. Environmental Health shall certify any applicant who demonstrates competence to test and make reports on soil percolation testing in compliance with the requirements of San Mateo County Ordinance 4.84 and as prescribed in below, and who has paid an annual certification fee as set forth in San Mateo County Ordinance Section 5.64.070. Applicants shall demonstrate such competence by one of the following.
 - a. Presenting a current valid registration or certification as a State of California Registered Environmental Health Specialist, Professional Geologist, or Professional Civil Engineer.
 - b. Undertaking and passing an examination administered by Environmental Health.
2. Any such certificate holder may be required to undergo re-examination, additional training, other demonstration of competency or any combination thereof, as may be deemed necessary by Environmental Health.
3. Soil percolation tester certification may be renewed annually by payment of the annual certification fee. Payment must be made before expiration of certification. If there is any lapse in certification, Environmental Health may require the tester to undergo re-examination, additional training, or other demonstration of competency, or any combination thereof prior to re-certification.

D. CERTIFICATION OF OWTS INSTALLERS

A Certified Installer is any individual, organization, partnership, business, association, or corporation holding a current authorization to install or repair OWTS in San Mateo County as described below. No person shall install, construct, add to, alter, or replace an OWTS in San Mateo County unless they possess a current certification issued by Environmental Health as prescribed below. This certification shall be in addition to any license required by State law to install the OWTS.

1. Environmental Health shall certify any applicant who demonstrates competence to install, construct, add to, alter, or replace an OWTS in compliance with the requirements of San Mateo County Ordinance 4.84 and as prescribed below, and who has paid an annual certification fee as set forth in San Mateo County Ordinance Section 5.64.070. Applicants shall demonstrate such competence by one of the following.
 - a. Presenting a current and valid State of California contractor license (“A” – General Engineering Contractor; C36 – Plumbing Contractor; or C42:



Sanitation System Contractor).

- b. In the case of a property owner personally installing or repairing their own Conventional OWTS on property they own, property owners must undertake and pass an examination administered by Environmental Health and all work must be in compliance with this Chapter and as prescribed in the Onsite Systems Manual.
2. Any such certificate holder may be required to undergo re-examination, additional training, other demonstration of competency or any combination thereof, as may be deemed necessary by Environmental Health.
 3. OWTS installer certification may be renewed annually by payment of the annual certification fee. Payment must be made before expiration of certification. If there is any lapse in certification, Environmental Health may require the installer to undergo re-examination, additional training, or other demonstration of competency, or any combination thereof prior to re-certification.

E. REQUIREMENTS FOR SEPTAGE PUMPING AND CLEANING COMPANIES AND TRUCKS

1. **Septage Pumping Company Applications.** All applications for certification of a septage pumping and cleaning company shall be completed in full and filed with Environmental Health as prescribed below. The application shall be signed by an authorized officer of the corporation or by a managing partner.
 - a. The applicant shall use a disposal site(s) approved by Environmental Health for receiving OWTS, holding tank or portable toilet septage wastes.
 - b. The applicant shall demonstrate to the satisfaction of Environmental Health, their 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.
 - c. The applicant shall utilize sanitary equipment meeting the requirements as prescribed below.
 - d. Pumper Registration shall be valid for twelve (12) months. It shall be the responsibility of the applicant to renew this registration annually.
 - e. All certified pumpers shall be required to file a monthly statement with Environmental Health, giving the name and address of the owner or tenant of each of the premises where an OWTS, holding tank or portable toilet has



been cleaned out by said pumper, his employees or others on his behalf. This statement shall also describe the place where the cleanings have been disposed.

- f. **Septic Tank Pumping.** Whenever an OWTS is serviced for the purpose of septic tank pumping, pumping of the tank and visual inspection of the tank, pumps, visible piping and dispersal field area shall be made by the pumper, as prescribed below.
- g. A written report on form(s) provided by Environmental Health shall be completed by the registered septic tank pumper and shall be submitted to Environmental Health and the property owner no later than 30 days following septic tank pumping as prescribed below.
- h. Upon being notified of a failure condition or other uncorrected deficiency in an OWTS, Environmental Health will notify the owner in writing, by hand-delivery or first class U.S. mail, of the needed corrections required to comply with the applicable standards in this manual.
- i. Within 60 days of notice of such written notification, the property owner shall take all corrective actions necessary to comply with the applicable standards, unless otherwise approved by Environmental Health.

2. Pumper truck inspections. All pumper trucks operating within San Mateo County must be inspected and certified by Environmental Health.

- a. The pumper truck tank shall hold a volume at least equal to or exceeding the volume of the tank being pumped, be in good repair, and be constructed in a manner to facilitate cleaning.
- b. All outer contact surfaces and fittings shall be kept in a clean and sanitary condition while stored or in transit, and all premises served and equipment used shall be left in a clean and sanitary condition.
- c. All discharge valves shall be in good repair, free from leaks and fitted with water-tight caps.
- d. The pumper truck must have a spill clean-up kit on board at all times.
- e. The name of the operating firm shall be prominently displayed on the sides of any pump tank vehicle.
- f. The pumper truck must bear a valid Environmental Health ID Permit unique to each vehicle, as affixed by Environmental Health staff following inspection. The ID Permit is not transferable to any other vehicle.



3. **Septic Tank Pumping.** Whenever an OWTS is serviced for the purpose of septic tank pumping, pumping of the tank and visual inspection of the tank, pumps, visible piping and dispersal field area shall be made by the pumper as follows.
 - a. All compartments of the septic tank shall be pumped of all scum and sludge by a certified septic tank pumper.
 - b. The septic tank shall be inspected for signs of damage, deterioration, corrosion, leakage, blockages, high liquid level or other deficiencies.
 - c. Any pumping systems that are part of the OWTS shall be tested for proper operation and inspected for any deficiencies in the pump/sump tank, pump unit, piping, valves or control systems.
 - d. The dispersal field shall be inspected for indications of system failure such as flooded trenches, soil saturation or surfacing sewage, backflow of water into the septic tank, down-slope seepage, erosion or drainage problems, or other deficiencies.

4. **Septic Inspection Report.** For every septic tank pumped and inspected as described above, a written report on form(s) provided by Environmental Health shall be completed by the registered septic tank pumper and shall be submitted to Environmental Health and the property owner no later than 30 days following septic tank pumping. At a minimum, the report must include the following.
 - a. The name of the property owner, the street address of the property where the OWTS is located, and the date of servicing.
 - b. The name of the septic tank pumper, size of the septic tank(s), gallons pumped, the name and location of the disposal site, and a description of servicing activities.
 - c. A description of any OWTS maintenance performed.
 - d. A description of any failure or uncorrected deficiencies in the OWTS. Reported deficiencies shall include, but not be limited to, deteriorated, corroded or damage septic tank components; deficiencies in the condition or operation of any pumping systems; dispersal field problems such as surface failure, flooded trenches, down-slope seepage, backflow of effluent from the dispersal system into the septic tank; existence of a cesspool; and/or other deficiencies.

5. **Monthly Septic Tank, Holding Tank and Portable Toilet Pumping Statement.**
All certified pumpers shall file a monthly statement with Environmental Health,



giving the name and address of the owner or tenant of each of the premises where an OWTS, holding tank or portable toilet has been cleaned out by said pumper, his employees or others on his behalf. This statement shall also describe the place where the cleanings have been disposed.

F. ENVIRONMENTAL HEALTH REVIEW FOR PLANNING OR BUILDING PERMITS

San Mateo County Planning and Building Department, as well as Town of Woodside, Town of Portola Valley and City of Half Moon Bay planning and building departments, refer projects for review by Environmental Health that may require a new OWTS or that may affect an existing OWTS. For projects referred through County Planning and Building, Environmental Health review fees are paid through the Planning and Building Department. For projects referred through town or city planning and building departments, a separate Environmental Health Review Application with applicable fee must be submitted prior to Environmental Health staff review of the project.

Projects that do not include a new OWTS or repair to an existing OWTS, may still be referred to Environmental Health for review because the proposed project may affect an existing OWTS (i.e., a deck that may impinge upon the location of an existing OWTS or the reserved replacement area for an existing OWTS). For projects that do include a new OWTS or repair to an existing OWTS, it is at the planning/building permit review stage that Environmental Health typically reviews an OWTS project for any conflict with proposed improvements related to grading, drainage, other utilities, hardscape, landscape, etc. Note that, depending on the scope and stage in the planning/building permit process, this may require submittal of a septic system design that relies on having already completed site exam and soil percolation testing.

Environmental Health approval of a planning application or a building permit does not constitute a permit to construct/install an OWTS. See below for OWTS installation permit information.

G. INSTALLATION PERMIT REQUIREMENTS

An OWTS is required for all new residential or commercial facilities which are unable to connect to a sanitary sewer. For a new septic system, a Site Exam and Soil Percolation Test must be completed prior to the submittal of a Septic Installation Permit Application.

1. Site Exam

- a. An application for a site exam and soil percolation test must be completed and submitted with appropriate fee. This application must include:



- (1) Owner's name, address and phone number;
 - (2) Assessor's Parcel Number (APN);
 - (3) Address and/or location of property upon which the septic system is to be installed;
 - (4) Owner's signature or Letter of Agent Authorization, signed by the property owner, if necessary;
 - (5) Contractor information and signature; and
 - (6) Topographic map showing proposed locations for soil percolation test holes and deeper hole(s) for evaluation of soil and depth to groundwater, as well as identifying all relevant setbacks and any slopes of $\geq 50\%$ (and $\geq 35\%$ for sites in Town of Woodside). Note: this may require mapping beyond property line to show relevant setbacks.
- b. Environmental Health staff will evaluate the proposed soil percolation test and deeper hole(s) locations and give any needed feedback to the applicant.
 - c. An appointment to investigate the site must be made with Environmental Health staff at least two (2) working days in advance of any field work.
 - d. During the site exam, the proposed location of the soil percolation test holes, deeper hole(s) for evaluation of soil and depth to groundwater (and potential OWTS) will be confirmed, and if acceptable, presoak of the soil percolation test holes can commence. Note that a Qualified OWTS Design Professional must be onsite to, at a minimum, make observations required for the soil profile from the deeper hole(s).
 - e. During the site exam, Environmental Health will make a preliminary review of compliance with minimum depth to groundwater criteria and assess the need for wet weather groundwater observations per requirements detailed in Section 2 of this Manual.
 - f. Applications for which a permit has not been issued due to failure to submit required information shall become null and void after one year from the date the application was submitted.

2. Soil Percolation Test

- a. An application must be completed and submitted with appropriate fee (see above for Site Exam).



- (1) A soil percolation test must be conducted by a County Environmental Health Certified Soil Percolation Tester to investigate the absorption capability of the soil in which the OWTS is proposed to be installed.
- (2) All soil percolation tests must be conducted in accordance with the guidelines stipulated in Section 2 of this Manual.
- (3) Environmental Health staff must field-verify both the pre-soak and the soil percolation test; otherwise neither are considered valid and must be repeated. Soil percolation test-hole presoak is typically performed during the afternoon prior to the soil percolation testing during the Site Exam, as described above.
- (4) With permission from Environmental Health staff, soil percolation testing may commence prior to arrival of Environmental Health field inspector observing the soil percolation testing. However, Environmental Health staff must be present for at least the final three (3) readings collected. All readings taken during the soil percolation test must be submitted to Environmental Health for incorporation in the site file.
- (5) For the soil percolation rate to be considered “stabilized”, variation in last three readings must be as follows.
 - For maximum readings up to 1-inch in last ½-hour, three readings must vary by less than 35% of maximum of the three readings.
 - For maximum reading greater than 1-inch and less than 5-inches, three readings must vary by less than 25% of maximum of the three readings.
 - For maximum reading greater than 5-inches in last ½-hour, three readings must vary by less than 15% of maximum of the three readings.
- (6) The soil percolation rating (size) for the area represented by the soil percolation test holes, to be used in design of the OWTS, will be determined by Environmental Health staff, as described in Section 2 of this Manual, once the soil percolation test has been completed. This information will be provided in writing, and must be included on any plot plans with the application for the installation permit.
- (7) If the slope of the area tested is greater than 20%, a geotechnical report will be required. Details of geotechnical investigation and reporting requirements are included in Section 2 of this Manual. The report must be included with the submittal of the application for the OWTS Installation Permit.



(8) Applications for site exam or soil percolation testing, for which the work has not been completed, shall become null and void after one year from the date of application submittal.

3. OWTS Installation Permit Application

- a. An application for a permit to install an OWTS must be completed and submitted for review and approval by Environmental Health staff. Incomplete applications may be returned with plans as un-reviewed. Currently, installation permit fees are based on the size of the home(s) to be served. It is our intent that the fees will be updated in the near future to be based on the length of leach trench to be installed.
- b. Proposed OWTS design must be certified by a Qualified OWTS Design Professional as defined in the County OWTS Ordinance (Registered Environmental Health Specialist, Professional Geologist, or Professional Civil Engineer).
- c. OWTS can only be installed by a County Environmental Health Certified OWTS Installer (listed as contractor on permit application).
- d. Applications must be submitted with:
 - (1) Scaled (1 inch to 40 feet minimum, base 10 preferred) plot plan of the property and adjacent areas, as needed, indicating:
 - Topographic contours of the property (minimum 2 foot increments);
 - Footprint of all existing and proposed site structures, hardscape, grading and drainage;
 - Locations of the soil percolation test holes and the deeper soil and groundwater characterization holes;
 - Proposed location and design of the OWTS, including both primary and reserve trenches, septic tank, piping, and diversion valve(s);
 - Location of well(s), both on property and on adjacent properties; and
 - Any other limiting features (i.e., trees) or item covered by the setback requirements in the County OWTS Ordinance (Topography and structures adjacent to the subject parcel may be required to establish all appropriate setbacks).
 - (2) Completed Coastal Development Permit, if required by the San Mateo County Planning Department or Half Moon Bay Planning Department.
 - (3) Letter of Agent Authorization signed by the property owner, if necessary.



- e. Applications, for which a permit has not been issued due to failure to submit required information, shall become null and void after one year from the date of application submittal. No fees will be refunded once received by Environmental Health.

4. Installation Permit Requirements

- a. OWTS must be installed in accordance with the plans approved by Environmental Health. Any changes in the installation plans must be reviewed and approved by Environmental Health prior to installation.
- b. Inspection by Environmental Health staff of an OWTS being installed shall occur both prior to and during the installation. Critical inspections points include:
 - (1) Stake out of proposed trench locations;
 - (2) Inspections of empty (no rock) leach trenches for condition and total depth;
 - (3) Inspection of installed perforated drainpipe over drain rock in trenches;
 - (4) Location and proper installation of diversion valve(s); and
 - (5) Location and proper installation of septic tank(s).
 - (6) Location and proper installation of supplemental treatment units and/or pumps.
- c. OWTS must be constructed in accordance with requirements stipulated in the County OWTS ordinance and this Manual, as applicable.
- d. Permits shall expire and become null and void if the work authorized has not commenced within one (1) year after the permit has been issued. No fees will be refunded once received by Environmental Health. A permit extension may be granted if application for extension is made and appropriate fee paid, prior to the expiration of the original permit.

Additional details regarding the above are provided in this Manual as follows:

- **Section 2 – Site Investigation Requirements and Procedures**
- **Section 3 – Design and Construction Requirements for Conventional OWTS**
- **Section 4 – Alternative OWTS Requirements**



H. OWTS SUBJECT TO CRWQCB WASTE DISCHARGE REQUIREMENTS

OWTS that are subject to the requirements and approval of the CRWQCB are also required to obtain approval of Environmental Health in accordance with the following:

1. The proposed system must be designed to accommodate the waste discharge consistent with the requirements of the appropriate CRWQCB;
2. Environmental Health will require engineered sewerage plans to be submitted by a qualified professional with experience in OWTS design before issuing a permit;
3. A qualified professional will be required to inspect the construction of the OWTS and, upon completion, to submit a letter of certification to Environmental Health verifying the proper installation and operation of the OWTS;
4. Site evaluations, plan submittals, design and construction details, inspection, and operation and maintenance shall be consistent with guidelines and procedures prescribed by County Ordinance and prescribed in this manual.
5. The applicant must obtain a permit(s) from Environmental Health and pay a permit fee(s) in an amount established in County Ordinance Section 5.64.070.

I. OVER 50% REMODEL OR ADDITION OF A BEDROOM

For a building remodel that is 50% or greater the value of a structure¹ served by an existing OWTS, or remodel that includes addition of a bedroom served by an existing OWTS, all elements of the OWTS must meet the standards required by current County OWTS ordinance. This may require installation of additional leach trenches, installation of a larger or additional septic tank, and/or soil percolation testing (including determination of depth to groundwater).

1. **Condition of Existing OWTS.** In order to establish the condition of an existing OWTS, the following may be required:
 - a. Plans must be submitted and include information showing the location of the septic tank, drainfields and expansion area in sufficient detail to confirm no encroachment upon required setbacks.

¹ Specific to the unincorporated County projects based on County Planning and Building policy. Other jurisdictions' Building Department may have different requirements.



- b. Environmental Health will require that the existing septic tank be pumped, inspected and the drainfields undergo a hydraulic load test as appropriate to the requirements of the Planning and Building Department of record and based on the age and construction of the system.
- c. A hydraulic load test of the OWTS must be performed by a County Environmental Health Certified septic tank pumper, recognized maintenance provider, or other qualified professional. A report of the testing shall be submitted addressing the following:
 - (1) Size of the tank and type of construction material;
 - (2) Condition of the tank, baffles and tees;
 - (3) Length of the test. A minimum of 20 minutes required;
 - (4) If the drain fields were functioning (taking water) or if the drain fields failed to take water or result in surfacing of water/effluent;
 - (5) Condition of the diversion valve; and
 - (6) The tester shall indicate on the report if the house appears to be vacant.
- d. If the existing OWTS complies with current septic regulations, but is found to have deficiencies that constitute a threat to public health and safety, Environmental Health staff will require that the system be repaired under permit.
- e. A soil percolation test may be required to determine the adequacy of soil conditions in the area of the existing septic system.

2. OWTS Expansion or Repairs. Where findings from evaluation of the existing OWTS indicate the need for system expansion or repair to accommodate the proposed remodel or bedroom addition(s), the following shall be required:

- a. Site exam as described in Section C.1 above;
- b. Soil percolation testing will be required if the area in which additional leach trenches are proposed, has not been tested, if the soil percolation information is not available or verifiable by Environmental Health staff, or existing soil percolation information is considered no longer representative of site conditions. Soil percolation tests must be conducted and verified as described in Section C.2 above;
- c. Additional leach trenches must be installed and verified as described in Section C.4 above; and



- d. A permit, per Section C.3 above, must be obtained from Environmental Health for retrofit of existing leach trenches, installation of additional leach trenches, and installation or replacement of septic tanks. Existing wooden septic tanks do not meet current septic code and must be replaced with appropriate septic tanks.

J. UNDER 50% REMODEL WITH NO BEDROOM ADDITION

For building remodels that are less than 50% the value of the existing home as described above, or for those buildings as determined by the Planning and Building Department of record, for which no bedroom addition is proposed, the following may be required (especially for those properties with no or limited record of the existing OWTS on file with Environmental Health):

1. Submittal of plans showing detail of the existing septic system. For systems for which installation permits were issued after December 1969, 100% reserve distribution area must be designated. For systems for which installation permits were issued prior to December 1969, 50% reserve distribution area must be designated (consistent with requirements of that earlier septic ordinance).
2. Hydraulic load test of the existing septic system by a San Mateo County Certified Septic Tank Pumper, recognized maintenance provider or other qualified professional.

K. SECOND DWELLING UNITS

Second Dwelling Units have varying definitions in different planning/building jurisdictions of the County. Each Second Dwelling Unit shall be served by an OWTS, which conforms to current OWTS code. This may be a separate OWTS serving only the second dwelling, or the second dwelling may be connected to the main house OWTS, provided there is sufficient treatment and dispersal capacity.

For second dwelling units of up to 2 bedrooms that share an OWTS with the main house, whether detached or attached (having a shared wall, but not necessarily a direct access between the main house and second dwelling), the septic tank and dispersal system will be sized based on the number of bedrooms for both the main house and second dwelling. For existing main house OWTS, this may require modifications or expansion of existing septic tank and/or leach trench capacity.

For second dwelling units of up to 2 bedrooms that have their own separate OWTS from the main house, whether detached or attached, the septic tank and dispersal system will be sized based on the number of bedrooms served and measured soil percolation rate



as described in Section 3, D. and E. This instance of second dwelling units is the only instance in which OWTS dispersal systems for residential use will be considered less than the minimum (up to 3 bedrooms) OWTS dispersal systems.

Therefore, the following requirements apply to applications for the addition of a second dwelling unit at properties served by an existing OWTS.

1. If connection to a sanitary sewer system is not available, any proposed second unit addition would have to comply with current County regulations relating to OWTS.
2. If the second unit is within the structure of the main house, the addition would be treated in the same manner as a bedroom addition, and subject to OWTS requirements per Section 1.D. (over 50% remodel or addition of a bedroom) above, which may include modifications or expansion of septic tank and/or leach trench capacity.
3. If the second unit is detached from the main house, the waste plumbing may be connected by gravity to the main house OWTS as long as it can be accomplished with gravity flow to the existing septic tank and sufficient capacity is provided for the additional sewage flow from the proposed second unit per Section 1.D. above.
4. For detached second units where gravity flow to the main house system is not possible, a new OWTS meeting County regulations may be required for the second unit. If local planning and building department allows, a septic tank-effluent pump (STEP) system designed to pump effluent from the second unit septic tank to the main house OWTS may be considered but may require a variance.
5. Where a separate OWTS is required for a detached second unit addition, minimum requirements shall include the following:
 - a. Site exam, soil profile, groundwater determinations, soil percolation testing, and, where applicable, geotechnical slope stability analysis (>20% slope);
 - b. New 1,500-gallon septic tank as per Section 3.D.
 - c. New effluent dispersal systems as described in Section 3.E.; an
 - d. Identification of 100% reserve dispersal field area.



6. All other County requirements, including, but not limited to, permit fees and plot, plans would apply to second dwelling unit additions.

L. REPAIR OF EXISTING OWTS

All repairs or alterations to existing OWTS that were not required to meet the standards of new OWTS must comply as closely as practical with current OWTS requirements, and must be protective of human health and the environment. An exemption application with corresponding fee may be required by Environmental Health. Additionally, all repairs to an existing OWTS, including septic tank replacements, must be conducted under permit with Environmental Health and verified by Environmental Health staff as described above in Sections C.3 and C.4 above.

Replacement of a septic tank in the same location as previous tank is typically considered a minor repair/alteration.

The following, occurring individually, are considered a major repair/alteration:

- Installation of a replacement septic tank in a new location,
- Installation of any new leach trenches adding to an existing system, where the total length of new leach trenches installed is less than 100 linear feet,
- Alteration of any existing leach trenches where rock is removed and trench is deepened, requiring inspection of the trench bottom, where the total length of trench being deepened is less than 100 linear feet.

Any combination of the above, as well as any leach trench installation or alteration (as described above) totally more than 100 linear feet, is considered a new installation as is subject to the corresponding installation fee..

M. DESTRUCTION OF SEPTIC TANKS AND LEACH TRENCHES

OWTS, including septic tanks, can either be completely removed or properly abandoned in-place. Destruction of any element of an OWTS must be conducted under permit with Environmental Health and verified by Environmental Health staff. Permit application for septic system destruction must include the proposed method of destruction/disposal for all elements of the system.

1. **Septic Tanks.** Septic tanks can either be completely removed and properly disposed of or abandoned in place. In either case, both chambers of the septic tank must be pumped out by a pumping company certified to work in San Mateo County and the sewage must be disposed of in an approved manner.



2. **Complete Removal.** After pumping of residual sewage as described above, the septic tank must be rinsed, pumped of its rinsed water, and completely removed from the ground. The tank can then be recycled or disposed of depending upon the construction materials.
3. **Abandonment In-Place.** After pumping of residual sewage as described above, the following steps must be completed:
 - a. The bottom of the empty septic tank must be broken-up or perforated to allow for bottom drainage;
 - b. The septic tank must be filled in with sand, native soil, or other approved material, and the material must be compacted as appropriate; and
 - c. The top of the septic tank must be removed or collapsed.
4. **Leach Trenches.** Leach trenches can be removed, although such removal may not be necessary. If leach trench removal is necessary (i.e. for future construction or for geotechnical stability), such removal should be conducted as follows, or as may be modified in accordance with recommendations provided by a geotechnical professional:
 - a. Drainpipe (and conveyance pipe) removed and properly disposed;
 - b. Drain rock removed to the extent practicable and properly disposed; and
 - c. Trenches backfilled with native soil or other geotechnical appropriate material, and the material compacted as appropriate.

Appropriate erosion control measures must be employed during any excavation or earth movement activities.

N. SUBDIVISIONS AND LOT LINE ADJUSTMENTS

For subdivisions and lot line adjustments, each proposed lot shall be evaluated separately to verify OWTS suitability for each proposed developed or undeveloped lot. At a minimum:

1. Site examination and soil percolation testing for each proposed lot;
2. Demonstration that a legal minimum (3-bedroom) system, consistent with the actual soil percolation rate, meeting all requirements of the County OWTS Ordinance and this Manual, can be designed/installed for each proposed lot (with no exemptions allowed per OWTS Ordinance Section 4.84.185);
3. Each developed parcel(s) within a proposed subdivision or lot split will be evaluated to determine if the existing OWTS meets the required setbacks; and



4. Verify that the system is functioning adequately.

O. PROPERTIES NEAR A SANITARY SEWER SYSTEM

On property where there is an existing OWTS and where the structures served by the OWTS are within two hundred (200) feet of an approved available sanitary sewer, connection to the sanitary sewer will be required when addition to the OWTS is required or proposed or a major repair is required or proposed, provided any necessary approval from the planning and building department of record, the appropriate sewer authority and the San Mateo County Local Agency Formation Commission is first obtained.

P. ALTERNATIVE SYSTEMS

Alternatives to conventional OWTS may be used as detailed in Section 4.84.145 of County OWTS Ordinance, to provide a broader range of OWTS treatment and dispersal options for new construction and repair/replacement situations. These alternative systems may be allowed in accordance with certain general provisions and specific requirements as follows.

1. General provisions.

- a. Types of alternative systems permitted are limited to those for which siting and design standards have been adopted and incorporated in the County OWTS Ordinance and this Manual.
- b. All alternative systems must be installed by a contractor duly licensed by the Contractors State License Board of the State of California to install OWTS.

2. Specific Requirements

- a. **Design and Installation Permit.** Alternative OWTS require design by a licensed professional and completion of site evaluation and installation permitting as required for conventional OWTS. Additional engineering and design requirements applicable to different types of alternative OWTS are contained in Section 4 of this Manual.
- b. **Operating Permits.** A County-issued operating permit is required for all alternative systems. Operating permits are intended to serve as the basis for verifying the adequacy of alternative system performance and ensuring on-going maintenance, including requirements for system inspection, monitoring and reporting of results to Environmental Health, along with the requirement for permit renewal, typically on an annual basis. An OWTS operating permit gives Environmental Health right of inspection. In addition,



failure to comply with requirements of an OWTS operating permit may subject the system owner or user to administrative enforcement and fines.

- c. **Performance Monitoring and Reporting.** Performance monitoring and reporting is required for all alternative OWTS in accordance with conditions established by Environmental Health as part of the operating permit. Performance monitoring requirements are covered in Sections 4 and 5 of this Manual.
- d. **Design and Construction Guidelines.** Design and construction guidelines for approved alternative treatment and dispersal technologies are provided in Section 4 of this Manual.

Q. OPERATING PERMITS

A County-issued operating permit is required for all alternative systems, as well as for septic holding tanks (which have been granted exemptions to occur) and some portable toilet installations as described in Section 4.84.110 of County Ordinance code. Operating permits are intended to serve as the basis for verifying the adequacy of performance and ensuring on-going maintenance, including requirements for inspection, monitoring and reporting to Environmental Health, along with the requirement for permit renewal, typically on an annual basis. An operating permit gives Environmental Health the right of entry and inspection. In addition, failure to comply with requirements of an operating permit may subject the permit holder (whether owner or user) to administrative enforcement and fines.

R. EXEMPTIONS (VARIANCE)

An exemption from the terms of the OWTS Ordinance or this Manual may be granted by Environmental Health under those conditions as described in Section 4.84.185 of the OWTS Ordinance.

Application for an exemption shall be made by submitting a permit application, required fee, and all other plans and documents as may be required by Environmental Health staff in support of the request for exemption. The request for exemption will be evaluated by Environmental Health Land Use staff, and presented to the Director of Environmental Health for concurrence or denial.



S. AMENDMENTS TO THIS MANUAL

Environmental Health will periodically review and make amendments to the various procedures and technical information contained in this Onsite Systems Manual, typically on an annual or biannual basis. The amendments may include recommended changes originating from Environmental Health staff, RWQCB staff, other departments or agencies, contactors and consultants working in the OWTS industry, or other affected groups or individuals. Any substantive changes in requirements, such as changes in design criteria or addition of alternative design options, are expected to involve review and approval by the RWQCB as an update to the County LAMP.

The general format for considering changes to this Manual are as follows:

1. Environmental Health will announce its intent to entertain and review proposed changes, including a due date for submission of proposals. Environmental Health may establish, with Board of Supervisors approval, a fee to be charged for proposals that relate to proprietary equipment, systems or materials.
2. Proposals received shall include a description of the proposed change(s) along with supporting rationale, technical information, and specific language/text additions or changes.
3. Environmental Health will conduct a preliminary internal review to determine the completeness and general merit of the proposal, and request additional information, as applicable.
4. Environmental Health will circulate the proposal(s) for review by local consultants, contractors and maintenance providers, environmental groups and other stakeholders as deemed appropriate. Environmental Health will convene a workshop-meeting with interested parties to review and discuss the proposal.
5. Based on the Environmental Health review and workshop findings, proposals acceptable to the Director and warranting further consideration will be forwarded to the RWQCB for review and approval; changes will be incorporated following RWQCB approval.



FORMS AND FIGURES



SEPTIC APPLICATION CHECK LIST

*Application(s) that are not completely filled out will not be processed.

Application(s) must be:

- ▶ Legible
- ▶ Complete with current application (filled out and signed)

check box indicating the service(s) applying for

APN (Assessor Parcel Number)

Mailing Address & Site Address (street, city and zip)

Applicant / Agent's Signature (Attach a letter from the property owner providing authorization if signed by an Agent.)

Contractor's Information and Signature

Submit with a form of payment.

cash (over the counter only), check (made to San Mateo County) or credit card (visa, mastercard)

3 surveyed plot plans with topography, must graphically indicate slopes greater than or equal to 50%. Make plans to scale 1" = 20' preferred (not required for permit extension or tank destruction)

Method of Abandonment/Destruction on separate sheet (required for tank destruction)

SEPTIC APPLICATION FOR INDIVIDUAL SEWAGE DISPOSAL SYSTEM PERMIT

ALL WORK MUST BE SCHEDULED WITH ENVIRONMENTAL HEALTH STAFF AT LEAST 2 WORKING DAYS IN ADVANCE

NEW CONSTRUCTION: (check one or more)		Fees must be submitted with application
<input type="checkbox"/> PE 4218 Site Exam	<input type="checkbox"/> PE 4211 Tank Destruction *	<input type="checkbox"/> PE 4260 Filing Fee / Water Test
<input type="checkbox"/> PE 4220 Perc Test	<input type="checkbox"/> PE 4225 Permit Appeal	<input type="checkbox"/> PE 4216 Wet Weather Testing
<input type="checkbox"/> PE 4219 Repair/Alteration		<input type="checkbox"/> PE 4208 Alternative / Pres Dose Annual
<input type="checkbox"/> PE 4214 Tank Replacement in same location (Minor Repair)		<input type="checkbox"/> PE 4213 Alternative System (in addition to Installation permit fee)
Installation Permit: (check one)		<input type="checkbox"/> PE 4212 Exception / Variance
<input type="checkbox"/> PE 4221 <2500 feet ² House Size		<input type="checkbox"/> PE 4217 Permit Extension: _____
<input type="checkbox"/> PE 4223 <3500 feet ² House Size		<input type="checkbox"/> PE 4210 Re-submittal: _____
<input type="checkbox"/> PE 4224 >3501 feet ² House Size		<input type="checkbox"/> PE 4209 Annual Certification of Perc Tester or Installer

SITE INFORMATION			
SITE ADDRESS: _____		City _____	Zip _____
APN: _____		(9 digit number required) Building Application #: _____	
NUMBER OF BEDROOMS _____	ADDITION TO HOUSE <input type="checkbox"/> YES <input type="checkbox"/> NO	SOURCE OF WATER SUPPLY: <input type="checkbox"/> PUBLIC WATER	<input type="checkbox"/> WELL <input type="checkbox"/> SPRING

OWNER INFORMATION			
OWNER _____			
Mailing Address: _____		City: _____	Zip: _____
Phone: _____		Email: _____	

CONTRACTOR INFORMATION (MUST BE CERTIFIED SEPTIC CONTRACTOR)			
CONTRACTOR: _____		Contractor License No. _____	
Mailing Address: _____		City: _____	Zip: _____
Phone: _____		E-Mail: _____	

San Mateo County Certified Percolation Tester No. OR Installer No _____

Workmen's Compensation Insurance Coverage: _____

I certify that I have valid Workmen's Compensation Coverage or that I shall not employ any person in a manner so as to become subject to California Workmen's Compensation Laws for the work for which this permit is being requested.

Contractor Signature: _____ Date: _____

Property Owner/ Agent Signature: _____ Date: _____

(Attach a letter from the property owner providing authorization if signed by an agent)

3 surveyed plot plans MUST be submitted with this application. (Make plans to scale 1" = 20' preferred)
*Submit Method of Tank Abandonment/ Destruction on a separate sheet.

APPLICATION WILL BE VOID AFTER 1 YEAR FROM DATE OF SUBMITTAL

LANDUSE Program Element Fee Guide/Schedule



PE 2699- Landuse Services/Hour	\$167.00
PE 2667- Building Permit Review/Hour	\$834.00
PE 2656- Planning Application Review	\$834.00
PE 4210- Resubmittal Fee	\$834.00
WELL	
PE 4666- Well Drilling Permit	\$1376.00
PE 4667- Well Abandonment/Destruction	\$697.00
PE 4668- Certification (Pump Test)	\$1394.00
PE 4670- Well Permit Extension (1 year)	50% Current Fee
PE 4672- Permit to Operate	\$1533.00
PE 4678- Well Exception/Variance	\$697.00
PE 4699- Other (Change of Contractor, hourly review/consultation)	\$167.00
<u>Ground Source Heat Exchange Well Bores:</u>	
PE 4686- from 1 to 3 bores	\$1376.00
PE 4687- from 4 to 8 bores	\$2751.00
PE 4688- from 9 to 13 bores	\$4127.00
PE 4689- from 14 to 19 bores	\$5502.00
PE 4690- from 20 to 29 bores	\$6878.00
PE 4691- from 30 to 39 bores	\$8253.00
PE 4692- from 40 to 49 bores	\$9629.00
SEPTIC	
PE 4208- Alt/ Press Dosed Annual	\$434.00
PE 4209- Certification Fee (Soil Perc Tester/Installer)	\$52.00
PE 4211- Tank Destruction	\$881.00
PE 4212- Septic Exception/Variance	\$697.00
PE 4213- Alternative Systems	\$5003.00
PE 4214- Septic Tank Replacement (Same Location)	\$881.00
PE 4216- Wet Weather Test	\$960.00
PE 4217- Septic Permit Extension (1 year)	50% Current Fee
PE 4218- Site Exam	\$1009.00
PE 4219- Repair/Alteration	\$1601.00
PE 4220- Perc Test	\$1836.00
PE 4221- Installation Permit <2500 ft ² House Size	\$1836.00
PE 4223- Installation Permit <3500 ft ² House Size	\$2794.00
PE 4224- Installation Permit >3501 ft ² House Size	\$3839.00
PE 4225- Permit Appeal	\$288.00
PE 4226- Inspection Cancellation	\$348.00
PE 4244- Septic Pumper Vehicle (Annual)	\$640.00
PE 4245- Business Registration Annual (Septic Pumper)	\$1416.00
PE 4260- Filing Fee/Water Test	\$37.00
PE 4299- Other (Change of Contractor, hourly review/consultation)	\$167.00

COUNTY OF SAN MATEO ENVIRONMENTAL HEALTH SERVICES DIVISION
 2000 Alameda de las Pulgas, Suite 100
 San Mateo, CA 94403
 Telephone (650) 372-6200 Fax (650) 627-8244
www.smchealth.org



SEPTIC PUMPER TRUCKS and BUSINESS APPLICATION

Check box: (see Land Use Fee Guide/Schedule for Fee)

Total Amount Paid \$ _____

- (PE 4244) Annual Fee per Vehicle Operating in San Mateo County \$640.00 X _____ = \$ _____
of Vehicles
- (PE 4245) Annual Fee for Septic Pumper Business Registration \$1416.00
- Will NOT be Engaging in any Business within San Mateo County

Application for registration to engage in the business of cleaning septic tanks, chemical toilets, etc. As issued in accordance with Sections 25000 to 25010 of the State Health & Safety Code and San Mateo County Ordinance Code, Chapter 4 Section 9340

BUSINESS NAME		PHONE #
OWNERS NAME		FAX #
MAILING ADDRESS		
CONTACT PERSON	EMAIL ADDRESS	

Names & Addresses of Partner(s):

List Vehicles Operating in San Mateo County (use additional paper if needed)

Year	Make	License Number	Capacity in Gallons

Is the Business Name, Address, Telephone Number & Capacity in Gallons printed on both sides of truck, with letters at least four inches high? Yes No

Location of discharge: _____

The undersigned agrees to conform to all conditions, orders and directions issued pursuant to above laws and to furnish monthly reports to all work done in County of San Mateo to the Environmental Health Services Division.

Signature: _____ **Date:** _____

**SAN MATEO COUNTY ENVIRONMENTAL HEALTH
SEPTIC TANK AND CHEMICAL TOILET CLEANERS REPORT**

COMPANY NAME: _____

COMPANY ADDRESS: _____

REPORT FOR THE MONTH OF: _____ 20____

DATE:	NAME OF PROPERTY OWNER	ADDRESS WHERE WORK WAS COMPLETED	GALLONS PUMPED	WHERE CLEANING WERE UNLOADED

**Return by the 12th of each month to
County of San Mateo
Environmental Health Services Division
2000 Alameda de las Pulgas, Suite 100, San Mateo, CA 94403**

L:\Land Use\ FORMS\APPLICATIONS\SEPTIC - PUMP Revised August 2015 Septic Pump Standard App.doc
Updated: 8/01/2015



San Mateo County Environmental Health Services Division
 Phone (650) 372-6200
 Fax (650) 627-8244

2000 Alameda de las Pulgas, Suite 100
 San Mateo, CA 94403
www.smchealth.org/landuse

SEPTIC TANK PUMPING AND INSPECTION REPORT

PUMPER COMPANY NAME: _____

JOB LOCATION: _____ **APN:** _____

OWNER: _____ **REQUESTED BY:** _____

REASON FOR PUMPING/INSPECTION:

MAINTENANCE HAULAWAY SALE INSPECTION SYSTEM FAILURE REPAIR OTHER _____

SLUDGE DISPOSAL LOCATION: _____

PROPERTY USE: HOME OTHER _____ OCCUPIED? YES NO

SEPTIC TANK: SIZE _____ GALLONS PUMPED _____ BOTH COMPARTMENTS PUMPED? YES NO

TYPE: REDWOOD _____ CONCRETE _____ POLY _____ FIBERGLASS _____ OTHER _____

CONDITION OF TANK	GOOD	FAIR	POOR	REPAIRS RECOMMENDED
SEPTIC ELLS/TEES				
TANK TOP AND/OR LIDS				
SIDES/BOTTOM OF TANK				
BAFFLES				

OPERATIONAL LEVEL: HIGH _____ LOW _____ NORMAL _____ DATE LAST PUMPED: _____

LEACHING SYSTEM

PRESENT OR PAST HIGH LEVEL IN TANK YES NO

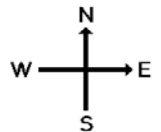
LIQUID FLOWBACK WHILE PUMPING? YES NO

SIGNS OF SURFACING EFFLUENT ? YES NO

SEPARATE GREYWATER DISCHARGE? YES NO TO SUMP ONTO GROUND

OTHER SYSTEM COMPONENTS/NOTES:

SYSTEM LOCATION (SKETCH OR DESCRIBE, WITH MEASURED DIMENSIONS AND DIRECTION OF NORTH; INCLUDED ANY PERTINENT FEATURES SUCH AS PAVED AREAS, SURFACING EFFLUENT, CREEKS, LARGE TREES, ETC.)



INSPECTION DATE: _____

INSPECTED BY: _____



COUNTY OF SAN MATEO
 Environmental Health Services Division
 2000 Alameda de las Pulgas, Suite 100, San Mateo, CA 94403
 Phone (650) 372-6200 Fax (650) 627-8244

Environmental Health Review Application

**Fees subject to change*

Applicant:

Name: _____
 Site Address: _____
 City: _____ Zip: _____
 Phone #: _____

_____ Unincorporated
 _____ Incorporated

Assessor's Parcel Number(s)

TYPES OF REVIEW

Planning Application Review
 Planning App #: _____

Building Application Review
 Building App #: _____

Other _____

FEES

\$ 834.00
 (PE 2656)

\$ 834.00
 (PE 2667)

\$ _____

TOTAL: \$ _____

Property Owner:

Name: _____
 Address: _____
 City: _____ Zip: _____
 Home #: _____
 Business#: _____

Contractor/Architect:

Name: _____
 Address: _____
 City: _____ Zip: _____
 Phone #: _____

Detailed Description of Work _____

Owner or Authorized Representative: _____ **Date:** _____

Please submit check payable to San Mateo County with this review application. This application is for Environmental Health Review only. Additional permits, site inspections from this office will require additional applications and/or fees.