# Local Agency Management Program (LAMP) for Onsite Wastewater Treatment Systems (OWTS)



County of Madera
Community and Economic Development
Environmental Health Division
Liquid Waste Program
200 West 4th Street, Suite 3100
Madera, CA 93637

# **Table of Contents**

Introduction	3
Definitions	4
General Policy Recommendations/Provisions	6
OWTS Permitting Process and Design Criteria	7
Conventional/Standard OWTS	8
Alternative OWTS	9
Septic Tanks	10
Aerobic System Requirements	11
Soil Conditions/Percolation Testing	12
Leach Field	13
Leach Field Sizing	14
Seepage Pits	
OWTS Corrective Actions	
OWTS Abandonment Standards	16
OWTS Limitations	17
Data Collection/Reporting/Notifications	
OWTS Near Impaired Water Bodies	20
Septic Pumper Trucks	
Chemical, Composting, and Incinerating Toilets	22
Conclusion	22
Appendix A – Minimum Separation Distances/Setback Chart	23
Appendix B – Septic Tank Sizing	
Appendix C – Portable Toilet Calculator for Special Events	
Appendix D – Conventional Leach Field Specification	
Appendix E – Alternative OWTS Guidelines	28
Appendix F – Leach Line Construction Diagram	29
Appendix G – Seepage Pit Construction Diagram	30
Appendix H – Septic Tank Deficiencies Guidelines	31

## Introduction

The Local Agency Management Program (LAMP) is the result of the actions required by Assembly Bill 885 (AB 885). AB 885 was introduced to the California State Assembly on February 25, 1999 and approved on September 27, 2000. This legislation directed the State Water Resources Control Board (SWRCB) to develop regulations or standards for on-site wastewater treatment systems (OWTS) to be implemented by qualified local agencies. The SWRCB adopted the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of On-site Wastewater Treatment Systems on June 19, 2012 (OWTS Policy). The policy was subsequently approved by the Office of Administrative Law on November 13, 2012 and became effective on May 13, 2013. The OWTS Policy allows local agencies to approve OWTS, based on a local ordinance, after approval of a LAMP by the Regional Waste Quality Control Board (RWQCB).

The purpose of the LAMP is to allow the continued use of on-site wastewater treatment systems (OWTS) within the jurisdiction of Madera County as well as to expand the local program to permit and regulate alternative OWTS while protecting water quality and public health. The LAMP also applies to OWTS on federal, state, and tribal lands to the extent authorized by law or agreement.

The LAMP is designed to protect groundwater sources and surface water bodies from contamination through the proper design, placement, installation, maintenance, and assessment of individual OWTS. This plan develops minimum standards for the treatment and ultimate disposal of sewage through the use of OWTS in Madera County. The LAMP does not include the following which require individual waste discharge requirements or a waiver of individual waste discharge requirements issued by the RWQCB.

- Any OWTS with a projected wastewater flow of over 5,000 gallons per day (gpd), upon case-by-case scenario.
- Any OWTS that receives high strength wastewater, unless the waste stream is from a commercial food service facility.
- Any OWTS that receive high strength wastewater from a commercial food service facility with a BOD higher than 900 mg/l or that does not have an approved and properly sized and functioning oil/grease interceptor.

OWTS, including conventional systems, require routine maintenance in order to ensure that they function properly and to extend the life of the system. While this LAMP does not require mandatory maintenance for conventional systems; operating permits with regular maintenance and reporting conditions will be required for all other types of systems.

## **Definitions**

- "Alternative Wastewater Treatment System" means an on-site wastewater dispersal field that consists of components other than a Conventional On-site Wastewater Treatment System.
- "California Regional Water Quality Control Board" means the California State agency responsible for ensuring the protection of state waters, both surface and groundwater.
- "Cesspool" means an excavation into the earth without watertight walls or bottom and used for reception of human waste in its raw state.
- "Community sewage system" means any sewage disposal system operated and maintained by any municipality, district, public or private corporation serving a community or part thereof.
- "Construction" means construction, repair, alteration, addition, modification or relocation of a sewage disposal system.
- "Conventional On-site Wastewater Treatment System" means an on-site wastewater treatment system composed of a septic tank and a dispersal field that uses leach lines, seepage pits, or other authorized methods approved by this division and does not include Alternative On-site Wastewater Treatment Systems.
- "Director" means Deputy Director of Environmental Health Division within the County of Madera.
- "Dispersal Field" means a location used for discharge of liquid sewage effluent. Standard dispersal fields include, but are not limited to: leach lines, subsurface drip disposal, shallow pressurized drain fields, or seepage pits.
- **"Division"** means Community and Economic Development Department, Environmental Health Division within the County of Madera.
- **"Effluent"** means the partially treated wastewater discharge from an On-site Wastewater Treatment System.
- **"Expansion area"** means the amount of dedicated space at least equal in size to an existing or proposed OWTS that is capable of supporting an OWTS and will replace the primary OWTS when necessary.
- "Groundwater" means water located below the land surface in the saturated zone of the soil or rock. Groundwater includes perched water tables, shallow water tables, and zones that are seasonally or permanently saturated.
- "IAPMO" means International Association of Plumbing and Mechanical Officials.
- **"Lot"** means a portion of land separated from other portions by description as on a subdivision map, record of survey map, or by metes and bounds, or the purpose of sale, lease, or separate use, and having frontage on an approved street.
- **"LAMP"** is an acronym for a "Local Area Management Program" used for implementation of the Tier 2 standards in the State Water Resources Control Board's Policy for Siting, Design, Operation and Management of On-site Wastewater Treatment Systems.
- **"Leach line"** means a subsurface soil absorption wastewater dispersal system installed in a trench usually consisting of a perforated distribution pipe placed over gravel or other media and backfilled with native material.
- **"NSF"** means the National Sanitation Foundation or NSF International, a not-for-profit, non-governmental organization that develops health and safety standards and performs product certification.

- "On-site Wastewater Treatment Systems (OWTS)" means a system composed of a septic tank and a dispersal field and related equipment and appurtenances. On-site Wastewater Treatment Systems are also referred to as septic systems, on-site sewage disposal systems, individual sewage disposal systems or private sewage disposal systems and may include alternative and supplemental treatment systems.
- "Percolation Test" means a subsurface test conducted to measure the absorption rate of water in soil strata. The test is conducted after initial presaturation and is usually expressed as minutes per inch (MPI).
- "Permit" means a permit issued by the division for any purpose pertaining to OWTS.
- "**Privy**" means a structure over a pit or vault used as a toilet and designed to receive human waste matter.
- "Qualified Contractor" means a contractor holding a license that is current and active from the Contractors State License Board (CSLB) for Plumbing (C-36), Sanitation System (C-42), or General Engineering Contractor (A). A contractor holding a license as a General Building Contractor (B) shall be considered a qualified contractor when constructing, modifying, or abandoning an On-site Wastewater Treatment System as part of a larger construction project involving a new structure or major addition to an existing structure.
- "Qualified Professional" means an individual certified by the State of California as a Professional Engineer, Professional Geologist, Soil Scientist, or Registered Environmental Health Specialist who has accepted responsibility for the design of the OWTS. The Qualified Professional will have affixed his/her signature and stamp to the system plans and plan proposal.
- "Registered Pumper" is a firm or person that pumps and/or hauls septage or wastewater from chemical toilets and has been issued a permit by this Division.
- "Repair" means any action that modifies/replaces the existing dispersal system or replaces an existing septic tank.
- "Seepage pit" means an excavation, typically cylindrical in shape and filled with rock, constructed for the purpose of disposing of sewage effluent from a septic tank or treatment tank.
- "Septic tank" means a water tight receptacle which receives the discharge of a drainage system or a part thereof, which is designed and constructed to retain solids, digest organic matter through a period of retention and bacterial action and allows the liquids to discharge into the soil.
- "Sewage" means any and all waste substance, liquid, semisolid or solid as associated with human habitation or which contains or may be contaminated with human or animal excrement, wastes, offal or any feculent matter. Industrial wastewater shall not be considered as sewage. "State Policy" means State Water Resources Control Board's Policy for Siting, Design, Operation
- "State Policy" means State Water Resources Control Board's Policy for Siting, Design, Operation and Management of On-site Wastewater Treatment Systems.
- "Supplemental Treatment System" means an OWTS that utilizes engineered designs and/or technology to treat effluent to reduce one or more constituents of concern in wastewater. It may also be referred to as an Advanced Treatment System or Enhanced Treatment System. Examples include, but are not limited to, sand filters, textile filters and aerobic treatment units but do not include composting or incinerating toilets.

# **General Policy Recommendations/Provisions**

Any structure, regardless of use, that produces wastewater, shall have adequate wastewater treatment and dispersal. When public sewer connection is not available, adequate treatment and dispersal shall be accomplished by means of an approved OWTS.

As previously stated, the provisions of this LAMP and the Ordinance apply to wastewater flows of 5,000 gpd or less. Projects with flows calculated to exceed 5,000 gpd may be referred to the Regional Water Board for review and approval. Additionally, any OWTS that receives high strength wastewater (unless the waste stream is from a commercial food service facility), and any OWTS that receive high strength wastewater from a commercial food service facility with a BOD higher than 900 mg/l or that does not have an approved and properly sized and functioning oil/grease interceptor will be referred to Regional Water Board for review and approval before an OWTS permit is issued.

Permit records are currently maintained in paper and electronic formats. The Ordinance requires that a permit be obtained to construct, modify, repair or abandon an OWTS. When a permit application is received, the information contained in the application is entered into Madera County's POSSE database. This information includes the property owner's name, the site address, the Assessor's Parcel Number as well as the system specifications. When the project is completed and has received the final approval tag, the application, signed permit and supporting documents are maintained in the electronic files within the POSSE database.

It is the intent of Madera County's Environmental Health Division (MCEHD) to maintain an open dialogue with the Regional Water Board and to consult with them when necessary to ensure that this LAMP is implemented in a manner consistent with the goals and objectives of the State Policy. As identified in Section 3.4 of the State Policy, MCEHD shall retain permanent records of the agency's permitting actions and will make those records available within 10 working days upon written request for review by Regional Water Board.

## **OWTS Permitting Process and Design Criteria**

A permit to install, rebuild, repair, abandon or add on to an existing on-site wastewater treatment system shall expire 180 days from the date it was issued. If a person has not completed the work before the expiration date, the person shall obtain a new permit before resuming work on the system. If the contractor remains the same on the project, the applicant may renew the septic permit for a renewal fee specified by the current MCEHD fee schedule.

The Division may revoke a permit issued under this chapter if the permit was issued in error or on the basis of incorrect, inaccurate or incomplete information or in violation of this chapter or any other law or regulation. The Division may also revoke a permit when there is a change in circumstances or a change to the conditions of the applicant's property since the date of the application, which if those circumstances or conditions had existed at the time the permit was issued, would have been grounds for denial of the permit.

Minimum Distances for Water and Wastewater Disposal Systems will be available in an easy-to-read format in Appendix A of this Policy. To avoid the pollution of groundwater, greater distances may be required. Lesser distances may be approved upon submission of evidence that the installation will not cause pollution and a setback exception is granted by the Division. Refer to Appendix A for the chart that identifies the minimum setback distances amended from Table H 1.7 of the 2013 California Plumbing Code.

Upon approval of the septic application and the issuance of the septic permit, the applicant or permittee must submit a signed copy of the permit to the Division prior to beginning construction. The septic permit will be valid 180 days from the date the permit was issued.

As soon as a permittee installs, rebuilds, repairs or adds on to an existing on-site wastewater treatment system pursuant to the permit and is ready to backfill the work, the permittee shall notify the Division at least 48 hours in advance that the system is ready for inspection before the work is covered.

The permittee shall not backfill (or cause another person to backfill) an on-site wastewater treatment system that has been installed, rebuilt, repaired or added on to before the Division inspects and approves the work.

The property owner, engineer, contractor or other person responsible for the work shall protect any individuals or wildlife from injuries at the site.

#### **Primary and Reserve area requirements**

In addition to primary system design criteria, all OWTS design proposals for both new construction and additions to an existing structure must show at least 100% reserve area for the active OWTS.

# **Conventional/Standard On-Site Wastewater Treatment System**

MCEHD requires that at least a five-foot separation for dispersal fields and ten-foot separation for seepage pits be maintained between the bottom of the OWTS dispersal point and the highest anticipated groundwater level for conventional OWTS. Conventional OWTS has adequate soil and site conditions to support a system that uses a septic tank and gravity to disperse effluent throughout the dispersal system. No pretreatment device is utilized or requires design by a qualified professional. Conventional OWTS includes systems that use a pump to transport effluent received from the septic tank to an uphill dispersal system where the effluent is then dispersed by gravity into an approved system placed in an area with surface and subsurface features complying with the standards in this division.

The most common type of OWTS found in Madera County consists of a septic tank connected to either seepage pits or leach lines depending on the site location:

- On the valley floor (elevation less than 500 feet) applicants must utilize precast concrete septic tanks and at least one seepage pit for effluent dispersal, unless otherwise approved by the Division.
- In Eastern Madera County (e.g. Raymond, Coarsegold, Ahwahnee, Oakhurst, Bass Lake, North Fork, etc.) and/or in areas where elevation exceeds 500 feet, preapproved NSF-40 or IAPMO-certified septic tanks shall be connected to leach fields or IAPMO-approved gravel-less chamber dispersal systems for effluent dispersal.

In some applications, the dispersal field is at a higher elevation than the building site. In this instance, a pump system is used to deliver the effluent to a standard dispersal field where it is distributed by gravity flow. All of these examples would be considered a conventional OWTS because no further sewage treatment is performed between the septic tank and the dispersal field. In all cases, the sewage effluent is discharged below the ground surface and is digested by bacteria in unsaturated soil zones for treatment of the sewage underground. These systems are designed to operate in all weather conditions with minimal maintenance, other than periodic septic tank pumping to remove sludge from the septic tank and leach line rotation (if utilizing R/V or push/pull valves in place of a distribution box), and effluent filter cleaning.

## **Alternative On-Site Wastewater Treatment System**

MCEHD requires that at least a two-foot separation be maintained between the bottom of the OWTS dispersal point and the highest anticipated groundwater level for alternative OWTS with supplemental treatment. An alternative OWTS uses an advanced method of effluent treatment and/or distribution and is designed by a qualified professional. The qualified professional must include his/her/their professional seal or stamp and provide a wet signature on the report which is to be reviewed by MCEHD for approval.

An alternative OWTS is designed to mitigate soil and/or groundwater conditions that render a parcel inappropriate for a conventional septic system, or to mitigate severely inadequate replacement area for repair or replacement of an existing, improperly functioning OWTS. An alternative OWTS does not include a conventional system that only uses a pump to deliver effluent to a non-pressurized dispersal system complying with all surface and subsurface setback requirements.

Alternative OWTS are generally used for those sites that cannot support a conventional OWTS due to condition of soil, hydrology, topography, or limited space. Alternative OWTS use different methods of providing additional sewage treatment beyond what is provided by the septic tank to allow for a reduction in the amount of unsaturated soil below the dispersal system. All alternative OWTS must be certified by the National Sanitation Foundation or other approved third party tester. Due to the complexity of these systems, the applicant must submit a copy of the maintenance contract agreement with a qualified service provider to MCEHD prior to the issuance of the final approval tag.

This LAMP has not considered all plausible future events for various sites and proposed projects. For projects with projected wastewater flows over 5,000 gallons per day (gpd), it will be the Division's determination to refer proposed projects to CVRWQCB for review and approval or to oversee the project at a local level. In the event the project is overseen at a local level, the Division may require an Alternative OWTS to be utilized for such projects and other case-by-case scenarios.

Refer to State Water Resources Control Board Order WQ 2014-0153-DWQ or most current order relating to General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems.

# **Septic Tanks**

All conventional OWTS require the use of a septic tank to allow for the removal of solids in the wastewater prior to being discharged to the dispersal field. Alternative OWTS also require a septic tank unless a settling chamber is a component of the treatment unit. This will provide the minimum design specifications and requirements for septic tanks. Refer to Appendix B for the minimum capacity required for septic tanks which supersedes Table H-2.1 of the California Plumbing Code. Septic tanks must also maintain the following specifications:

- Septic tanks must be certified by the International Association of Plumbing and Mechanical Officials (IAPMO), National Sanitation Foundation (NSF) and/or American Society for Testing and Materials (ASTM) standards.
- The tank shall be watertight and possess two compartments.
- Septic tanks shall be installed per the manufacturer's instructions.
- ❖ The bottom of the excavation for the tank shall extend into native or compacted soils to eliminate potential settling issues.
- Septic tank location must take into account maintenance and pumping requirements including vehicle access; and distance and elevation lift to pumper truck.
- ❖ All tanks must have an uncapped sanitary tee fitting on the inlet tees that must extend at least 14 inches below the liquid level.
- Outlet tees must have an uncapped sanitary tee and must extend at least 12 inches below the liquid level.
- Septic tanks must be installed with a minimum of 12" of soil cover or manufacturer's specification.
- The septic tank inlet compartment shall be easily accessible via a riser installed at or above finished grade. Risers and lids that are at or above grade must be watertight and lockable or require tools to be opened.
- ❖ Septic tank risers must have a current IAPMO, NSF, or ASTM certification or must be reviewed and approved by MCEHD prior to use. Concrete risers and lids must be constructed of Type V concrete or be protected from corrosion from sewer gases. The interior diameter of the riser shall be a minimum of twenty (20) inches.
- ❖ IAPMO, NSF, or ASTM certified effluent filters (3/16" passage or less) are required for new and replacement tanks.
- ❖ If the OWTS design calls for placing a tank beneath areas subject to vehicular traffic such as a driveway, the tank must be rated to withstand such conditions or the installation is to be engineered to support the additional weight. The tank lid and risers used in such installations must be traffic rated as well.

# **Standard Aerobic Treatment Unit Requirements**

Where individual aerobic wastewater treatment units are required or permitted, it is unlawful for any person who owns or operates such unit to permit the unit to revert to a septic system through improper operation or maintenance, or to operate in a manner inconsistent with the design and operation specifications of that unit. The design and sizing of aerobic treatment units shall be approved by MCEHD. An additional condition for issuance of a construction permit of these units, the applicant shall furnish satisfactory proof to the Madera County Environmental Health Division that the system design and construction, materials and performance meet the treatment standards set forth in the current National Sanitation Foundation (NSF) Standard Number 40 or its equivalent for individual aerobic wastewater treatment units and that the applicant will provide warranties, service policies, parts, service, an owner's manual and service label.

The aerobic treatment unit must support at least a 48-hour retention span. Using the calculation for up to a 4 bedroom residence, each bedroom is estimated to produce 150 gallons per day (150gpd x 4 bedrooms) totaling 600 gallons per day. The aerobic treatment unit tank sizing must maintain a minimum capacity of 1200 gallons for up to 4 bedrooms. For residential properties in excess of four bedrooms, an additional 150 gallons per day per bedroom must be factored.

## **Soil Conditions**

The standard criteria for sizing and design are intended to prevent adverse impacts on groundwater from on-site wastewater dispersal systems. The most important factors are the provision of sufficient depth of unsaturated soil below the leach field and seepage pits. Highly permeable soils, such as sands and gravels, provide minimal treatment of the percolating wastewater and normally require greater separation distances to afford proper groundwater protection.

#### **Percolation Testing**

This section will adopt and amend Section H-4.0, H-13, and H-14 of the 2013 California Plumbing Code, or most current available.

Percolation tests shall be performed by a qualified professional and shall be acceptable to MCEHD and performed as set forth in the Manual of Septic Tank Practice, United States Environmental Protection Agency (USEPA) or California Environmental Protection Agency (CALEPA) most current handout regulating the design and installation of septic systems, or as approved by MCEHD. A minimum of 3 percolation tests in each primary and reserve area (total minimum of 6) and at least one deep boring or test pit dug by a backhoe or excavator shall be conducted. The percolation test holes shall be spaced uniformly in the undisturbed soil horizons proposed for the dispersal field(s). Percolation tests shall only be conducted under saturated soil conditions.

Deep borings, backhoe excavations, and percolation tests are used to demonstrate that the dispersal site is located in an area of uniform soil, and that no conditions exist which could adversely affect the performance of the system or result in groundwater degradation.

Unless approved by MCEHD, dispersal systems are **prohibited** in:

- 1. Any area within any easement that is dedicated for surface or subsurface improvement, unless said improvement is designed to work with or be part of said dispersal system.
- 2. Any area not owned or controlled by the OWTS owner(s) unless approved by the Deputy Director of Environmental Health and said area is dedicated for waste disposal purposes.
- 3. Any area occupied or to be occupied by structures.
- 4. Any paved area.
- 5. Any area in which the percolation rate is greater than 60 minutes per inch for leach field, or greater than 30 minutes per inch for seepage pits, or less than 5 minutes per inch unless it can be shown that a sufficient depth and type of soil is available to assure proper filtration.
- 6. Any area in which the soil depth below the bottom of the leach field is less than 5 feet; or less than 10 feet below the bottom of the seepage pit; or 2 feet for Alternative OWTS with supplemental treatment.
- 7. Any area in which the depth to anticipated highest level of ground water below the bottom of the leach field is less than 5 feet, or less than 10 feet below the bottom of a seepage pit. (Greater depths are required if soils do not provide adequate filtration. Lesser depths may be allowed with alternative treatment if it is to "seasonal groundwater" and is approved by the Director.)
- 8. Any area in which the ground slope is greater than 30%.
- 9. Any area where continued use of on-site systems constitutes a public health hazard, an existing or threatened condition of water pollution, or nuisance.

## **Leach Field**

This section will establish procedures for the design and construction of leach field dispersal systems. The procedures are specific for leach lines, and do not apply to other types of dispersal systems.

The requirements for **soil cover** are as follows:

- 1. The minimum cover required over the top of the infiltrative surface is 12 inches.
- 2. The maximum soil cover allowed over the top of the infiltrative surface is 48 inches, measured from the top of the leach rock/gravel-less or chamber/etc. to the ground surface; unless otherwise specified by the manufacturer's specifications.

#### The **dimensions** for leach line systems are as follows:

- 1. Leach lines are to be installed according to the qualified professional's specifications for location, length, width, and depth.
- 2. Leach lines shall be installed with a width of no less than 18 inches and no more than 36 inches.
- 3. The maximum length of leach trench for a new OWTS using leach lines as the dispersal system shall be no more than 100 feet as specified in the California Plumbing Code.
- 4. At least a 100% reserve area shall be required for all leach field dispersal systems.

#### MATERIALS AND CONSTRUCTION CONSIDERATIONS

- 1. All piping and materials used in leach line systems including gravel-less/chamber systems must have IAPMO and/or NSF and/or ANSI approval and must be approved by MCEHD prior to installation.
- 2. Gravel-less/Chamber Systems cannot be installed in areas with clay type soil conditions.
- 3. Leach lines that utilize gravel shall be filled with clean, washed leach line rock to a point at least 4 inches above the top of a 4 inch perforated pipe and shall have a minimum of 24 inches of gravel below the pipe. The rock shall be graded at 1 to 1.5 inches in size and shall be covered with straw, untreated building paper or a geotextile fabric prior to backfill to prevent the infiltration of soil into the rock.
- 4. Where multiple leach lines are proposed and approved by MCEHD, an approved distribution method (e.g. leveled distribution box and/or RV/push-pull valves) must be used to connect the leach lines.
- 5. Leach lines may not be placed under impermeable surfaces. Leach lines that are later covered by impermeable surfaces may not be considered as viable for purposes of determining primary and reserve area requirements.
- 6. Leach line trenches shall be installed with the trench bottom and materials used being level to within 2 inches per 100 feet.
- 7. Leach lines on steep slopes exceeding 30% requires a slope stability report and the system must be designed by a qualified professional. Applicant will be informed to contact Madera County Public Works Department if grading will occur.

# **Leach Field Sizing**

- 1. Residential conventional leach line systems shall be sized based in Appendix D located at the end of this policy which shows the length of leach line, depth of rock, and trench width.
  - a. In the event the site is unable to meet any of the specifications designated within Appendix D, the OWTS must be engineered and designed by a qualified professional.
- 2. Non-residential leach line systems shall be calculated by a qualified professional using expected peak wastewater flows [Table H 2.1(1) in the California Plumbing Code] and drainage fixture units (Table 702.1 in the California Plumbing Code), whichever is larger, unless a reduction justified by the qualified professional is allowed by MCEHD.
- 3. OWTS designed by a qualified professional will be reviewed based on the procedures outlined in Appendix E.

## **Seepage Pits**

Seepage pits are used synonymously with dry wells or drain wells. This type of dispersal method is NOT allowed in bedrock conditions or in Eastern Madera County where elevations exceed 500 feet.

In general, each seepage pit is 3 feet to 4 feet in diameter and its depth will vary depending on the soil conditions and the depth to groundwater but in Madera County's valley floor is typically 30 feet to 50 feet deep. Seepage pits that are greater than 55 feet deep are not recommended and may require special review. The typical construction is 3 feet wide and 50 feet deep, or dependent on soil conditions may be 4 feet wide and 30 feet deep to absorb up to 600 gallons per day (gpd) of effluent.

Each seepage pit typically is gravel filled and has a centrally located, perforated four-inch diameter pipe that extends from the inlet to the bottom of the pit. Refer to Appendix G for the seepage pit construction information. **Note: The use of "hollow" seepage pits is prohibited.** 

Upon the discovery of hollow seepage pits, a destruction permit must be obtained and the hollow seepage pit must be properly destroyed by a qualified contractor. An additional requirement will be to install a new rock-filled seepage pit to replace the hollow seepage pit; a repair/replacement permit is required. See "OWTS Abandonment Standards" following this section.

When multiple seepage pits are necessary in order to provide adequate dispersal capacity, it is important that the wastewater flow to each pit be as equal as possible, or consequently, an approved alternative distribution method must be provided and pre-approved by the Division.

## **OWTS Corrective Actions**

All OWTS have the potential to fail due to age, misuse or improper design and the failure may result in surfacing effluent, wastewater being discharged to the ground surface or wastewater backing up into plumbing fixtures. These failures will require corrective action to mitigate any risk to public health or contamination of the environment. This section will detail the corrective action that will be required in the event an OWTS fails and enforcement actions that will be taken if the corrective action is not completed within acceptable time frames.

#### **CORRECTIVE ACTION REQUIREMENTS**

- 1. MCEHD will complete an investigation within 48 hours to determine the validity of the complaint or other notification of a failing or substandard OWTS.
- 2. Any OWTS that is found to be failing shall have a Notice of Violation issued to the property owner or business requiring action to eliminate the immediate health hazard through pumping of the septic tank by a licensed sewage hauler or elimination of wastewater flows to the failing OWTS. The Notice of Violation will also require a repair to be completed to the OWTS as needed within a reasonable time frame.
- 3. The proposed repair shall be evaluated by MCEHD to ensure it meets the minimum design requirements of this LAMP or is in substantial conformance to the greatest extent practicable.
- 4. As mentioned earlier in this LAMP, groundwater separation requirements to the bottom of the dispersal system and the highest anticipated groundwater level for repairs shall be as follows:
  - A. 5 feet for leach field and 10 feet for seepage pit conventional OWTS
  - B. 2 feet for alternative OWTS with supplemental treatment
  - C. Less than 2 feet separation cannot be allowed through this LAMP and will require a waste discharge permit through the RWQCB.
- 5. The repair shall be completed under permit and inspected by MCEHD.
- 6. Failure to complete the required corrective action within the time frames given will result in additional enforcement action which may include forced closure of the facility, administrative fines and/or penalties assessed by Environmental Health's Fee Schedule.

#### SUBSTANDARD SYSTEMS

All OWTS within Madera County that do not meet minimum design requirements of this LAMP shall be deemed substandard. Sites with substandard OWTS shall be prohibited from having future additions or modifications to the property that would potentially increase wastewater flow to the OWTS or decrease the amount of usable area available for the OWTS. Refer to the reference chart in Appendix H concerning septic tank deficiencies.

# **OWTS Abandonment Standards**

Unless properly abandoned, an OWTS that is no longer in-use represents a safety hazard. The lids and the top of a septic tank deteriorates over time and may collapse if a vehicle drives or an individual walks over it, possibly leading to a serious injury or death. Therefore, MCEHD makes it a priority to ensure that these structures are properly abandoned to prevent such incidents. Every abandoned septic system, or part thereof, shall be plugged or capped with watertight fittings in an approved manner. The abandonment of the OWTS shall not occur prior to obtaining the required permit from the Division.

An existing OWTS, or a portion thereof, shall be properly abandoned, under the following conditions:

- Upon the discovery of a hollow seepage pit or cesspool
- ❖ When the structure is connected to the public sewer; or
- ❖ When the building or structure served by the OWTS is demolished, unless the owner demonstrates their intention to use the OWTS again.

The abandonment standards for a septic tank, hollow seepage pit, cesspool include:

- ❖ The tank, hollow seepage pit, or cesspool must be pumped by a licensed sewage hauler to remove all contents.
- ❖ A tank may be removed entirely; or
- ❖ If left in place, the top of the tank is removed, the bottom punctured or cracked to allow for drainage and the shell filled with inert material such as clean soil, sand, cement, etc.
- ❖ In the event the abandoned septic tank is filled with concrete or cement slurry, perforation of the bottom or removal of a wall shall not be required
- ❖ The cesspool/hollow seepage pit shall be filled with clean earth, sand, gravel, concrete or other material approved by the Division.

Standards for abandoning the dispersal field include:

- ❖ Seepage pits are to be excavated to a depth of 2 feet below grade and the center pipe cut. The center pipe and the excavation are then to be backfilled with clean soil or other approved fill material.
- Leach lines composed of gravel and pipe may be abandoned in place with its ends capped off.

If gravel-less/chambers were used, the gravel-less/chambers must be removed and the trench backfilled. Gravel-less/Chambers may remain in place with MCEHD approval but suggested they be removed and properly disposed.

## **OWTS Limitations**

MCEHD's oversight of OWTS is limited to those systems as defined in this LAMP. Limitations exist for the use of OWTS related to the amount and type of wastewater flows that will be generated, types of systems, availability of public sewer and setbacks to public water supplies. The following are not allowed to be authorized by MCEHD and any such system or deviations can only be approved by the RWQCB.

- 1. Cesspools of any kind or size.
- 2. OWTS receiving a projected flow over 5,000 gallons per day, upon case-by-case scenario.
- 3. OWTS that utilize any form of effluent disposal that discharges on or above the post installation ground surface such as sprinklers, exposed drip lines, free-surface wetlands, or a pond.
- 4. Slopes greater than 30 percent without a slope stability report approved by a qualified professional.
- 5. Decreased leaching area for IAPMO certified dispersal systems using a multiplier less than 0.70.
- 6. OWTS utilizing supplemental treatment without requirements for periodic monitoring or inspections.
- 7. OWTS dedicated to receiving significant amounts of wastes dumped from RV holding tanks.
- 8. Separation of the bottom of dispersal system to groundwater less than 2 feet with alternative OWTS with supplemental treatment, or less than 5 feet with conventional OWTS, or less than 10 feet with seepage pits.
- 9. Installation of new or replacement OWTS where public sewer is available within 200 feet.
  - A. Public sewer availability is defined as follows:
  - i. The property on which the structure is located abuts a public sewer.
  - ii. The property is within the boundaries of the sewer district or annexation has been approved by the sewer district.
  - iii. No easements must be obtained to access the sewer line.
  - B. Exceptions:
  - i. When the public or community sewer system is under a connection ban.
  - ii. When the public or community sewer system does not agree to provide a service connection.
  - iii. The applicant for an OWTS shall make an effort to ensure that the operation of the OWTS will not have an adverse effect on adjacent properties and must maintain applicable setbacks.
- 10. For replacement OWTS that do not meet the horizontal separation requirements in Appendix A, the replacement OWTS shall meet the horizontal separation to the greatest extent practicable. In such case, the replacement OWTS shall utilize supplement treatment and other mitigation measures, unless the Division and/or RWQCB finds that there is no indication that the previous system is adversely affecting the public water source, and there is limited potential that the replacement system

could impact the water source based on topography, soil depth, soil texture, and groundwater separation.

11. For new OWTS, installed on parcels of record existing before May 13, 2013 which is the effective date of the State's OWTS Policy, that cannot meet the horizontal separation requirements in Appendix A, the OWTS shall meet the horizontal separation to the greatest extent practicable and shall utilize supplemental treatment for pathogens as specified in Section 10.8 of the State's OWTS Policy and any other mitigation measures prescribed by MCEHD.

# **Data Collection/Reporting/Notifications**

As a condition of MCEHD oversight of OWTS within Madera County, MCEHD has certain responsibilities related to data collection and reporting to the Central Valley Regional Water Quality Control Boards (RWQCB) as well as in some instances to the owners of water systems and the State Water Resources Control Board Division of Drinking Water (SWRCB). This Chapter will detail the data that must be collected and the procedure for reporting to RWQCB and notifications to owners of water systems and SWRCB.

#### **REPORTING TO RWQCB**

On an annual basis, MCEHD will collect data for and report in tabular spreadsheet format the following information. A copy of the report will be provided to the Central Valley RWQCB.

- 1. The number and location of complaints pertaining to OWTS.
- 2. The number, location and description of permits issued for new and replacement OWTS and under which Tier the permit was issued. All permits issued by MCEHD will be considered Tier 2 permits for the purposes of reporting pursuant to State Policy section 3.3.3.
- 3. The number, location and description of permits issued for OWTS where a setback exception from the approved LAMP was granted.
- 4. The applications and registrations issued for sewage haulers as part of the local septic tank cleaning registration program.

MCEHD will provide available OWTS records to the CVRWQCB within ten days of being requested.

In addition, MCEHD must maintain a water quality assessment program to determine the general operation status of OWTS and to evaluate the impact of OWTS discharges, and assess the extent to which groundwater and local surface water quality may be adversely impacted. The assessment program will include monitoring and analysis of water quality data, review of complaints, failures and OWTS inspections. The water quality data can be obtained from the flowing sources within MCEHD's Water Program:

- a. Routine water samples taken by community water systems.
- b. Any other sampling data deemed relevant or necessary for the protection of ground/surface water supplies.

A summary of the data shall be submitted on an annual basis. An evaluation of the monitoring program and an assessment of whether water quality is being impacted by OWTS shall be submitted every 5 years.

#### NOTIFICATIONS TO OWNERS OF WATER SYSTEMS AND SWRCB

Existing or proposed OWTS in close proximity to public water wells and surface water drinking water supplies have some potential to cause an impact on the water quality from that water source and the owner of that system or the SWRCB, if the owner of the system cannot be identified, will be notified under the following conditions.

- 1. Prior to issuance of a permit to install a new or replacement OWTS that is within a horizontal sanitary setback to the public well; or within 1,200 feet of an intake point for a surface water treatment plant for drinking water, in the drainage catchment in which the intake point is located, or located such that it may impact water quality at the intake point, to allow the water system owner to provide comments to MCEHD. Notification will be done electronically or in writing by MCEHD with a copy of the permit application that includes:
- a. A topographical plot plan for the parcel showing the OWTS components, property boundaries, proposed structures, physical address, and name of property owner.
- b. The estimated wastewater flows, intended use of proposed structure generating the wastewater
- c. An advisement that the public water system owner or SWRCB shall have 15 days from receipt of the permit application to provide recommendations and comments to MCEHD.
- 2. Upon discovery of a failing OWTS MCEHD will notify the owner(s) within 72 hours of a public water system and the SWRCB in the event of a failing OWTS within 150 feet of a public water well, or 2,500 feet of a surface water drinking water intake. Notification will be done electronically or in writing and will include proposed corrective action that will be taken to mitigate the failure.

# **OWTS near Impaired Water Bodies**

Existing, new and replacement OWTS that are near impaired water bodies may be addressed by a Total Maximum Daily Load (TMDL) and its implementation program, or special provisions contained in a LAMP. If there is no TMDL or special provisions, new or replacement OWTS within 600 feet of impaired water bodies listed in Attachment 2 of the State's OWTS Policy must meet the applicable specific requirements found in Tier 3 of the State's OWTS Policy. Currently, there is no impaired water bodies in Madera County listed in Attachment 2 of the State's OWTS Policy. At such time as an impaired water body is listed, MCEHD will follow the applicable specific requirements found in Tier 3 of the State's OWTS Policy or develop and obtain approval from the RWQCB of its own Advanced Protection Management Program.

# **Septic Pumper Trucks**

#### SEPTIC PUMPER TRUCKS PERMITTING REQUIREMENTS

There are specific requirements that the trucks must have in order to pass inspection and qualify for a permit to operate within Madera County. It is important to note that trucks from other counties that operate within Madera County are required to be inspected and permitted through MCEHD.

Existing Septic Tank Pumper Trucks that were permitted the prior year are still required to pass an inspection annually. In addition to paying the annual operating permit fee, pumper trucks must have all of the following (at minimum), at the time of the inspection:

- 1. Legible Name, address, and sewage holding capacity on each side and rear of tank of vehicle, 4 inch high minimum letter size.
- 2. Discharge Valve capped
- 3. Discharge Valve cap chained to vehicle
- 4. Exterior of vehicle and tank clean, and in good repair
- 5. Pump, Tank, Tank Lid or Cover, and accessories apparently free of leaks
- 6. Valid Registration, Insurance, and Vehicle Identification (VIN #) on vehicle
- 7. Provide Pumping/Disposal Report for inspector to review (see below).
  - (a) California Health & Safety Code, Section 117435:
    - The name and address of the owner or tenant of each and every one of the premises where a septic tank, cesspool, or sewage seepage pit has been cleaned out by the registrant or his or her employees or by others on his or her behalf and the date of each cleaning.
    - 2) The location where the cleanings are disposed of and by whom.
    - 3) Discharges of waste that may result in violation of laws or ordinances required to be known by the registrant pursuant to Section 117420.
- 8. Provide the following sanitation kit for customer and public protection:
  - 1) Shovel, garden hose, and sanitation bucket (with labeled disinfecting solution) to be equipped on the vehicle at all times.
  - 2) Disposable single use latex or non-latex gloves. Discard after each use and before driving.
  - 3) Hand sanitizers, anti-bacterial hand wipes and/or soap and water
  - 4) First aid kits
  - Garbage containers for wastes, used gloves, hand wipes.
     Containers shall be secured to prevent littering of the roadways.

# **Chemical, Composting, and Incinerating Toilets**

Chemical Toilets may be allowed for temporary or limited use areas, such as construction sites (for use by on-site employees), mobile or temporary agricultural uses, temporary campsites, and special events, provided the portable toilets meet the same setback requirements as a septic tank. For special events, see Appendix C in this LAMP to determine the number of chemical toilets that will be required.

Composting or incinerating toilets would be considered only in those situations where site conditions preclude the use of conventional or supplemental wastewater treatment systems. In those limited circumstances oversight would occur in one of the following manners:

- If the proposal was part of a project under discretionary review, such as a Conditional Use Permit, a recommended condition of approval of the permit would include a requirement for ongoing maintenance and inspection.
- If the proposal was part of a ministerial permit process, final approval of the permit would require that a Notice to Property Owner be recorded with the Title of the property stating that the property was served by a composting or incinerating toilet and that routine, ongoing inspection and maintenance of the system was required.

# **Conclusion**

As identified in MCC 13.54.320 under "Conflicting Regulations", where this is a conflict between the regulations of this Chapter and any other Chapter of local, state, or federal regulation, the greater or more stringent regulation shall apply and shall be enforced by persons authorized in this chapter. Where this LAMP is a conflict between the State Policy, the greater or more stringent policy shall apply and be enforced.

# **APPENDIX A**

Minimum Horizontal Distance in Clear Required From:	Septic Tank	Dispersal Field	Seepage Pit
Buildings or structures <sup>1</sup>	5 ft	8 ft	8 ft
Front property line <sup>2</sup>	25 ft	25 ft	25 ft
Side property line <sup>2, 12</sup>	25 ft [10 ft] <sup>2</sup> {50 ft} <sup>12</sup>	25 ft [10 ft] <sup>2</sup> {50 ft} <sup>12</sup>	25 ft [10 ft] <sup>2</sup> {75 ft} <sup>12</sup>
Back property line <sup>2, 12</sup>	25 ft [20 ft] <sup>2</sup> {50 ft} <sup>12</sup>	25 ft [20 ft] <sup>2</sup> {50 ft} <sup>12</sup>	25 ft [20 ft] <sup>2</sup> {75 ft} <sup>12</sup>
Domestic well not serving a water system	100 ft	100 ft	150 ft
Public or domestic well serving a water system <sup>13</sup>	150 ft	150 ft	150 ft See footnote 13
Flowing stream <sup>3</sup>	100 ft	100 ft	150 ft
Drainage course of ephemeral stream <sup>9</sup>	50 ft	50 ft	50 ft
Unlined pond, lake or reservoir	100 ft	200 ft	200 ft
Storm water flood retention basin that retains water for 48 hours or less	100 ft	100 ft	100 ft
Large trees 8	10 ft	10 ft	10 ft
Seepage pit	5 ft	4,7	20 ft <sup>7</sup>
Disposal field	-	4,7	5 ft
On site domestic water service line	5 ft	5 ft	5 ft
Distribution valve	-	5 ft	5 ft
Pressure public water main	10 ft	10 ft	10 ft
Downslope cut banks or major slope changes <sup>5</sup>	10 ft	6	6
Public Water System Surface Water Intake	See footnotes 10 and 11 below	See footnotes 10 and 11 below	See footnotes 10 and 11 below

- <sup>1</sup> Including porches and steps, whether covered or uncovered, breezeways, roofed porte-cocheres, roofed patios, carports, covered walks, covered driveways and similar structures or appurtenances. Also see section 313, California Plumbing Code.
- <sup>2</sup> Distances apply unless otherwise allowed by the Administrative Authority. Distances in brackets apply to lots with a community water system. Where any side of a lot which is on a community water system faces or abuts a lot or parcel on individual water, setback distances shall be computed for such facing or abutting sides as if on individual water wells.
  - Measured from the line which defines the limit of a 10-year frequency flood.
  - Determined by rock depth of disposal field.
  - <sup>5</sup> Measured from top of bank or major slope change.
- <sup>6</sup> Four times the elevation difference between the finished grade of the disposal field and the elevation at the cut bank or major slope change.
  - Sidewall to sidewall.
- <sup>8</sup> Distances stated are a minimum as setbacks should be maintained from the dripline of the tree unless otherwise allowed by administrative authority.
- Measured from the edge of the drainage course or stream.
- Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake point, within the catchment of a drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir lake or flowing water body.
- <sup>11</sup> Where the effluent dispersal system is located more than 1,200 feet but less than 2,500 feet from a public water systems' surface water intake point, within the catchment of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake, or flowing water body.
- <sup>12</sup> Distances apply unless otherwise allowed by the Administrative Authority. Distances in curly brackets apply to lots abutting an undeveloped lot. Setback distances shall be computed for such facing or abutting sides as if on individual water wells.
- <sup>13</sup> 200 feet for a trench or seepage pit >10' deep, per SWRCB Policy section 9.4.10.2; a 2-year microbial travel study required for seepage pit >20' deep within 600 feet of public water well, per SWRCB Policy section 9.4.10.3.

# **APPENDIX B**

The minimum liquid capacity of septic tanks shall conform to the following tables. (These tables supersede Table H-2.1 of the California Plumbing Code.)

	Table H-2.1 (Amended)  Capacity of Septic Tanks					
Single Family Dwellings	Multiple Dwelling Units or Apartments	Other Uses	Minimum Septic Tank Capacity in:			
Number of Bedrooms <sup>1</sup>	Units (one Bedroom each) <sup>1,2</sup>	Maximum Fixture Units Served per Table 702.1 <sup>3</sup>	Gallons			
1 to 4	1 to 3	33	1,500			
	4	45	2,000			
	5	55	2,250			
	6	60	2,500			
	7	70	2,750			
	8	80	3,000			
	9	90	3,250			
	10	100	3,500			

<sup>&</sup>lt;sup>1</sup> Extra bedroom, 150 gallons (558 liters) each.

<sup>&</sup>lt;sup>2</sup> Extra dwelling units over 10, 250 gallons (946 liters) each.

<sup>&</sup>lt;sup>3</sup> Extra fixture units over 100, 25 gallons (95 liters) per fixture unit.

# **APPENDIX C**

# PORTABLE TOILET CALCULATOR FOR SPECIAL EVENTS

	Number of Hours									
Maximum	1	2	3	4	5	6	7	8	9	10
Attendance										
250	2	2	2	2	2	3	3	3	3	3
500	2	3	3	4	4	4	4	4	4	5
1000	3	4	5	6	6	7	7	7	7	7
2000	5	8	10	11	12	13	13	14	14	14
3000	7	12	15	16	18	18	19	20	20	21
4000	10	16	19	22	24	25	25	27	27	28
5000	12	20	24	27	29	31	32	33	33	34
6000	14	24	28	33	35	37	37	39	41	41

# **APPENDIX D**

# Madera County Environmental Health Conventional Septic System Specification

WIDTH	ROCK UNDER PIPE	LENGTH	ABSORB 50 TON		
24 INCHES	2 FEET	186 TOTAL FEET	744 SQ FEET		
24	3	132	660		
24	4	102	612		
24	5	84	588		
36 INCHES	2 FEET	124 TOTAL FEET	620 SQ FEET		
36	3	88	528		
36	4	69	483		
36	5	56	448		
TEST HOLE DEPTH	ROCK UNDER PIPE	TRENCH SEPARATION	ON		
8 FEET	2 FEET	6 FEET SIDEWALL TO	O SIDEWALL		
9	3	8			
10	4	10			
11	5	12			
YOSEMITE LAKE PA	RK (YLP) DISPERAL FI	ELD SPECIFICATIONS			
WIDTH	ROCK UNDER PIPE	LENGTH	ABSORB 50 TON		
24 INCHES	2 FEET	200 FEET	800 SQ FEET		
TEST HOLE DEPTH					
8 FEET					
GRAVEL-LESS CHAMBER UNIT SPECIFICATIONS					
8 feet separation (sidewall to sidewall)					
Total linear feet of 150', minimum 2 lines					
Must reach minimu	Must reach minimum 8' test hole depth				
NO Chamber units are allowed in Clay type soil conditions.					

# **APPENDIX E**

#### **Alternative On-site Wastewater Treatment Systems Guidelines**

Alternative designed systems are applicable where conditions on existing lots/parcels do not meet minimum standards as a Conventional OWTS due to soil, hydrology, topography and/or limited in space. Alternative design systems may only be designed by "Qualified Professionals" who are knowledgeable and experience in the field of On-site Wastewater Treatment Systems.

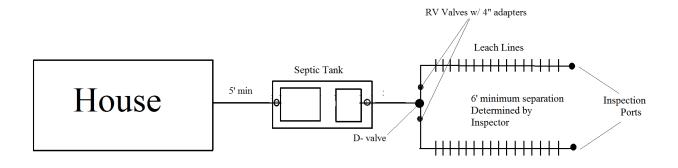
Submittal of Alternative On-site Wastewater Treatment Systems must contain the following:

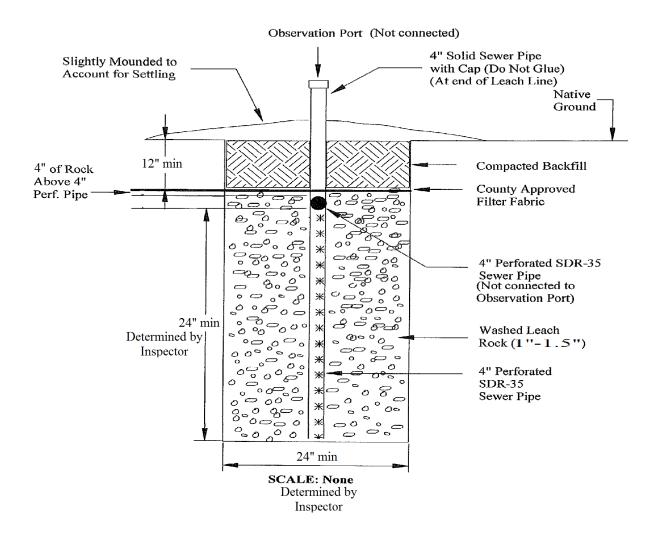
- Detailed site map (scale, and North arrow);
- Site address and tax assessor's parcel number;
- Owner's name, mailing address, and phone number;
- Consultant's name, mailing address and phone number;
- Type of proposed construction (residential vs. commercial);
- Purpose of project (e.g. new dwelling, new structure, guesthouse, an addition, or repair)
- Specify scope of work;
- Proposed Alternative design details;
- Identify all potable and non potable water sources including waterways;
- Any soils testing information, such as borings or percolation tests, plotted on the design;
- Calculations sheets, justifying the design;
- Specifications of all OWTS components being utilized;
- Signature and stamp of Qualified Professional.

Responsibility for construction inspection lies with the Qualified Professional. After installation, the Qualified Professional shall certify in writing to the Environmental Health Division that the OWTS was located and installed in compliance with the approved plans and specifications. Minor deviations from the approved plan and specification arising from prior unknown site conditions shall be accurately included in the certification and "as built" plans. Major deviations shall be reported to the Environmental Health Division prior to installation and new written approval shall be required.

# **APPENDIX F**

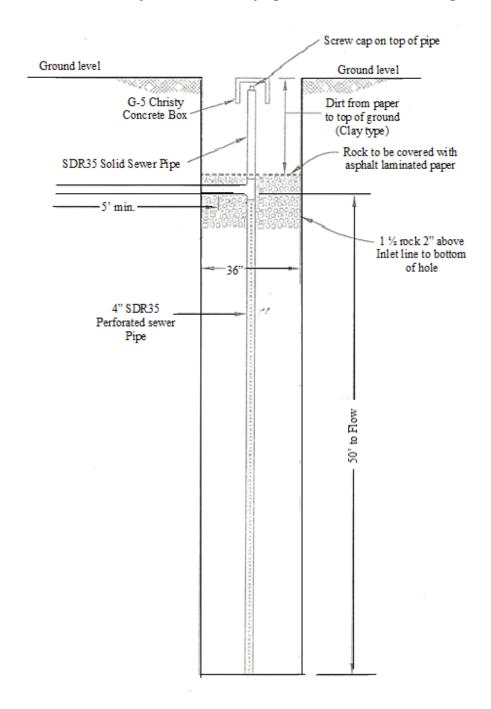
#### **Leach Line Construction Diagram**





# **APPENDIX G**

# **Madera County Standard Seepage Pit Construction Diagram**



# **APPENDIX H**

# **OWTS Deficiencies Guidelines**

<u>Deficiency</u>	Typical Corrective Action	Permit Required
Inadequate access to both compartments	Install watertight risers and/or lids to meet current code requirements	No
Access ports deeper than 24 inches	Install watertight risers at or above finished grade	No
Deteriorated access lid(s)	Replace lids	No
Deteriorated top of tank	Replace/Repair	Yes
Deteriorated baffle between compartments	Replace/Repair	Yes
Other		
Severely damaged or deteriorated septic tank	Replace septic tank	Yes
Unfilled seepage pit	Fill with rock or abandon	Yes
Cesspool (permeable sides and bottom)	Abandon and replace with approved septic tank and dispersal field	Yes
Failed dispersal field with discharge to surface	Add new field with diverter valve	Yes

System constructed without required permit	Obtain permit and submit septic certification by qualified contractor	Yes
Discharge of graywater to ground surface or drainage course	Direct wastewater to approved OWTS	Yes
Septic tank constructed of metal or wood	Replace septic tank	Yes
Septic tank located under structure	Requires abandonment and replacement with an approved septic tank or removal or relocation of structure	Yes
Dispersal field not adequately absorbing	Clear blockage/repair pipe	No
septic tank effluent	Replace/Repair dispersal field	Yes
Inadequate tank capacity	Destroy and replace with properly sized tank	Yes
Missing inlet/outlet tee(s)	Replace missing tee(s)	No
Other		