APPENDICES
Sec. 29-6. Purpose of article.

It is the purpose of this article to regulate existing and future on-site sewage disposal systems, as defined herein, to ensure that they are constructed, modified, repaired, abandoned, maintained, and serviced in a manner which protects the health, safety and general welfare of the people of Santa Barbara County. It is the intent of the board of supervisors, in adopting the standards described in this article, to ensure that upon permit issuance, all on-site sewage disposal systems are capable of disposing sewage in a subsurface manner and that upon servicing, septic tanks shall be inspected for signs of corrosion, deterioration, damage and disposal field failure. (Ord. No. 4356, § 2)
Sec. 29-8. Permit and inspection requirements.

(a) Permit and Inspection Required.

(1) No person shall construct, reconstruct, repair, modify or abandon any on-site sewage disposal system or graywater system or any portion thereof on any property within the unincorporated area of the county without having first obtained a permit to do so from the administrative authority; provided, however, that this provision shall not apply to emergency work necessary due to the sudden failure of the existing system or a condition of imminent danger, when it is demonstrated to the satisfaction of the administrative authority that such work is urgently necessary and that it is not practical to obtain a permit before commencement of work. In all such cases, notification shall be made before commencement of work by telephone, electronic facsimile or in person to the administrative authority. A written application for permit shall be submitted to the administrative authority within three business days after commencement of work.

(2) It shall be unlawful for any person to cover, conceal or put into use an on-site sewage disposal system, or portion thereof, without having first obtained an inspection and final approval from the administrative authority.

(b) Permit Requirements for New On-Site Sewage Disposal Systems.

(1) Prior to issuance of a permit for construction of an on-site sewage disposal system, a satisfactory percolation or performance test report shall be submitted to the administrative authority. Such percolation or performance test shall be carried out in the area of the property to be used for the proposed on-site sewage disposal field, and shall be representative of the soil zones to be used for the disposal field.

(2) If the on-site sewage disposal system is to utilize the leach line method of disposal, soil percolation tests shall be performed under the supervision of a registered civil or geotechnical engineer.

(3) If the site is unsuitable for leach lines and the drywall method of disposal is to be utilized, performance tests of completed drywells shall be carried out under the supervision of a registered civil or geotechnical engineer or a certified engineering geologist.

(4) A land use permit or coastal development permit for any new structure to be served by a proposed on-site sewage disposal system shall be issued by the Santa Barbara County planning and development department prior to issuance of a permit to construct an on-site sewage disposal system.

(c) Permit Transfer. The permit is not transferable, unless the new property owner makes a new application and the conditions under which the existing approved permit was issued have not changed. If changes are proposed in the design or construction of the on-site sewage disposal system, the new owner shall file an application for a new on-site sewage disposal system permit.

(d) Permit Expiration: Each permit shall expire and become null and void if the work authorized has not been completed within one year from the date of permit issuance. Upon the expiration of the permit, no further work shall be performed until the applicant receives a new permit.

(e) Permit Suspension and Revocation.

(1) The administrative authority may suspend or revoke any permit issued pursuant to this
article, whenever it finds that the permittee has violated any provisions of this article, has misrepresented any material fact in the permit application or supporting documents for such permit, and/or performed any work under the permit that has resulted in a nuisance.

(2) No person whose permit has been suspended or revoked shall continue to perform the work for which the permit was granted until, in the case of suspension, such permit has been reinstated by the administrative authority. The permit shall not be reinstated until the violation has been abated.

(3) Upon suspension or revocation of any permit, if any work already done by the permittee has left an on-site sewage disposal system in such a condition as to constitute an emergency, the administrative authority may order the permittee to perform any work reasonably necessary to protect the public health and safety. No permittee or person who has held any permit issued pursuant to this article shall fail to comply with any such order.

(f) Right of Hearing. Any person whose application for a permit has been denied, suspended, or revoked, may appeal to the administrative authority in writing, within ten working days after notification of the imposition of any denial, suspension, or revocation. Such appeal must specify the grounds upon which it is taken. The administrative authority shall set such an appeal for an office hearing at the earliest practical time, and shall notify the appellant, in writing, of the established time and place at least ten days prior to the date of the hearing.

(g) Permit Application Fees. The board of supervisors may, by resolution, adopt such fees as are allowed under Sections 510 and 4010.8 of the California Health and Safety Code and may prescribe such terms and conditions as may be necessary to enable the County of Santa Barbara to recover the reasonable and necessary costs incurred by the county in administering this article.

(h) Water Quality Standards. These standards adopt by reference the "Individual, Alternative and Community Systems Prohibitions" contained in the "Central Coast Water Quality Control Plan" (commonly referred to as the "Basin Plan") adopted by the State of California Central Coast Regional Water Quality Control Board for new discharges from sewage disposal systems. Repairs or modifications to existing on-site sewage disposal systems shall adhere to these standards to the maximum extent feasible, as determined by the administrative authority.

(i) Permit Exemption for Maintenance Activities. Sewage disposal system maintenance, as defined in this article, may be performed by a qualified contractor without a permit as long as a written report of work performed is submitted to the administrative authority as outlined in this article and such work complies with all applicable county standards for on-site sewage disposal systems in effect at the time. (Ord. No. 4356, § 2)
Sec. 29-9. Septic tank requirements.

(a) Septic Tank Construction. Septic tanks shall be constructed of reinforced concrete, fiberglass, or other durable, corrosion resistant, synthetic material and shall conform to Standard PS-1 of the International Association of Plumbing and Mechanical Officials (IAPMO). Metal and wooden tanks are prohibited.

(b) Septic Tank Integrity. Septic tanks installed with more than three feet of earth cover or beneath surfaces subject to vehicular traffic (e.g., driveways and vehicle turnarounds) shall be engineered to support the additional load. Septic tanks placed in paved driveways shall be provided with "traffic grade" lids.

(c) Septic Tank Installation. Septic tanks shall be installed by a qualified contractor according to the manufacturer's specifications and applicable requirements of the Uniform Plumbing Code, as adopted by Chapter 10 of this code. Earth cover over the tank shall be clean fill material, free of debris and rock.

(d) Access to Septic Tanks.

(1) Septic tanks shall be installed in a location that is accessible for servicing, inspection and pumping.

(2) Septic tanks shall be installed with the top of the tank no deeper than one foot below finish grade whenever possible. If it is demonstrated that the top of a septic tank must be deeper than one foot from grade, each compartment of a septic tank shall be provided with a watertight riser, capable of withstanding anticipated structural loads and extending to within one foot of finish grade.

(3) Risers shall be constructed of concrete, PVC, fiberglass or other approved material, with a minimum inside horizontal measurement of twenty inches. All joints shall be waterproofed with an appropriate sealant and/or interlocking mechanism approved by the administrative authority.

(4) When necessary to extend septic tank risers to finish grade, access lids shall be a cast iron, gas-tight type, securely fastened with stainless steel or other corrosion resistant fasteners resistant to vandals, tampering, and access by children.

(5) Surface water shall be diverted away from the riser cover or septic tank lid by providing a sloping surface away from the riser, or extending the riser at least six inches above grade.

(Ord. No. 4356, § 2)
Sec. 29-10. Drywell and disposal field requirements.

(a) Seepage Pits and Cesspools Prohibited.

(1) Seepage pits are prohibited as a method of sewage disposal, and upon discovery, shall be abandoned or modified under permit and inspection by the administrative authority to conform to the construction standards for drywells included in this article.

(2) Cesspools are prohibited as a method of sewage disposal, and upon discovery, shall be abandoned according to the provisions of this article.

(b) Drywell Approval.

(1) All attempts shall be made to provide for shallow sewage effluent disposal by the leach line method. If the site soil conditions prove unfavorable (e.g., percolation rates slower than sixty minutes/inch, unfavorable historic site information or geologic conditions), drywell disposal may be considered. Drywells may be utilized only if leach lines are not feasible, as determined by a registered civil/geotechnical engineer with the concurrence of the administrative authority. A determination of leach line infeasibility shall include a certified written statement by the engineer which specifies the unfavorable conditions which render leach line disposal infeasible.

(2) Unless specifically required by the administrative authority, a certified statement is not required for a new drywell which conforms to the standards of this article, and is constructed to replace an existing seepage pit or a drywell.

(c) Drywell Construction.

(1) Drywells shall be cylindrical in shape with a diameter of not less than four feet nor more than six feet. Construction of a drywell with a diameter less than four feet or greater than six feet may be permitted with written approval of the administrative authority.

(2) Drywells shall have a centrally located four-inch diameter perforated pipe which extends from the inlet to a point as close to the bottom of the pit as is practical and the space around the pipe shall be filled with rock which may vary in size from three-fourths inch to two and one-half inches. When necessary to meet minimum slope setback requirements, the upper portion of the central pipe shall be unperforated.

(3) Rock fill in drywells shall be covered with building paper or equivalent, and backfilled with a minimum of eighteen inches of clean earth cover, free of debris and rock.

(4) Drywells shall have an effective disposal depth of at least ten feet. Effective disposal depth is defined as total depth subtracted by the distance below the grade to the uppermost disposal pipe perforation.

(5) Multiple drywell installations shall receive septic tank effluent via an approved distribution box installed on a level concrete pad with watertight piping laid on undisturbed or compacted soil. The relative distribution of effluent to each of the drywells shall be approved by the administrative authority.

(d) Drywell Performance Requirements. A disposal field utilizing the drywell method of disposal shall be capable of absorbing at least five times the required septic tank capacity in twenty-four hours, after initial presaturation, as evidenced by a drywell performance test report.
(e) Separation from Subdrains. If subdrains discharge diverted water to subsurface soils, the minimum upslope separation from a new leach field or drywell shall be twenty feet and the minimum downslope separation shall be fifty feet. In all instances, the subdrain shall be located a minimum of ten feet from any leach field or drywell. (Ord. No. 4356, § 2)
Sec. 29-11. Servicing, inspection, reporting and upgrade requirements.

(a) On-Site Sewage Disposal System Servicing. Whenever an on-site sewage disposal system is serviced, both of the following shall occur:

(1) All compartments of the septic tank shall be pumped of all scum and sludge residue by a registered septic tank pumper.

(2) The septic tank shall be inspected for signs of deterioration, corrosion, damage, disposal field failure, or other deficiencies.

(b) On-Site Sewage Disposal System Inspections.

(1) On or after January 1, 2000, any individual who inspects on-site sewage disposal systems and submits reports as required by this article shall be a qualified inspector, as defined by this article.

(2) Prior to January 1, 2000, on-site sewage disposal systems may be inspected and reports submitted by a qualified inspector or by a septic tank pumper holding a valid registration permit from the administrative authority on the effective date of this article.

(c) Report Required. A written report on forms provided by the administrative authority shall be submitted by qualified inspectors, or by septic tank pumped as provided in section 29-11 (b)(2) above, to the administrative authority and the property owner no later than thirty days following servicing of an on-site sewage disposal system. The report shall include:

(1) The name of the property owner, the street address of the property on which the on-site sewage disposal system is located, and the date of servicing.

(2) 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.

(3) A description of any on-site sewage disposal system maintenance performed.

(4) A description of any uncorrected deficiencies in the on-site sewage disposal system. Reported deficiencies shall include, but not be limited to: damaged, corroded or deteriorated septic system components, disposal field in a state of failure, backflow of effluent from the disposal field back into the septic tank, lack of access risers or other upgrades required by this article, or other condition determined to be a significant deficiency or not in compliance with the provisions of this article.

(5) A description of any seepage pit or cesspool on the property.

(d) On-Site Sewage Disposal System Upgrades Required.

(1) All existing seepage pits, whether or not in a state of failure, shall be properly abandoned or modified upon discovery, to conform to the construction standards for drywells included in this article. Abandonment or modification shall be completed under permit and inspection by the administrative authority within thirty days of discovery.

(2) Upon failure of an on-site sewage disposal system, the system shall be repaired and made to conform to the requirements of this article except for variations specifically approved in writing by the administrative authority.
(3) Septic tanks constructed of concrete shall be replaced or structurally modified when the lid or wall is determined to have a remaining thickness of two and one-half inches or less, or to have decreased to one-half or less of its original thickness.

(4) Septic tanks shall be replaced or repaired when the height of the baffle between compartments is equal to the water depth within the tank.

(5) Any septic tank which has more than one foot of cover and is uncovered for purposes of servicing, repair or modification shall be retrofitted with risers and manhole covers as specified in this article.

(e) Notification to Property Owner. Upon notification of an uncorrected deficiency or required upgrade in an on-site sewage disposal system, the administrative authority shall notify the owner in writing of the needed corrections required to comply with the applicable standards in this article.

(f) Action by the Property Owner. Within thirty days of receipt of such written notification, the property owner shall make all corrective actions necessary to comply with the applicable standards in this article, unless otherwise directed by the administrative authority. (Ord. No. 4356, § 2)
5. WASTEWATER AND WATER GOAL, POLICIES, ACTIONS, AND DEVELOPMENT STANDARDS

GOAL WW-TC: Protect Quality Of Surface, Ground, And Ocean Waters From Degradation; Maintain Adequate, Safe Water Supplies; And Protect Groundwater Basins From Prolonged Overdraft. Provide Adequate Wastewater Treatment And Disposal Throughout The Planning Area.

Policy WW-TC-1: Development and infrastructure shall achieve a high level of wastewater treatment, in order to best serve the public health and welfare.

DevStd WW-TC-1.1: Septic system installations shall only occur on parcels that are free of site characteristics listed under “VIII.D.3.i. Individual, Alternative and Community Systems Prohibitions” in the Water Quality Control Plan for Central Coast Basin, Region 3 by the Regional Water Quality Control Board. Adherence to this standard and any other more restrictive applicable standards or zoning regulations as well as the County Wastewater Ordinance shall constitute a finding of consistency with Land Use Development Policy 4 and Coastal Plan Policy 2-6 with regard to wastewater service.

DevStd WW-TC-1.2: To the maximum extent feasible, development shall be sited and designed to avoid the use of wastewater system features (e.g. lift stations and grinder pumps) that require more maintenance than gravity fed laterals or septic systems and whose failure could result in the contamination of surface or groundwater or potential health hazards. Gravity flow of wastewater to septic tank and disposal fields must be available when new lots to be served by septic systems are created. Unless it would preclude reasonable use of property, private operation and maintenance of lift stations and grinder pumps is prohibited.

DevStd WW-TC-1.3: For development proposing public sewer service, prior to approving land use clearance and/or recording final maps, adequate wastewater treatment and disposal capacity (based on County and RWQCB accepted figures) shall be demonstrated for the Carpinteria Sanitary District or Montecito Sanitary District, as appropriate, to serve the specific project along with other approved development.

Action WW-TC-1.4: The County shall work with the Montecito Sanitary District and Local Agency Formation Commission to extend sewer lines to serve residents on the east side of Ladera Lane, west of Toro Creek, within the Urban Boundary.
**Toro Canyon Plan**

**Action WW-TC-1.5:** The County shall work with the Carpinteria Sanitary District and Local Agency Formation Commission to extend sewer lines within designated Rural Neighborhoods (RNs) when consistent with Coastal Plan Land Use Policy 2-10.

**Policy WW-TC-2:** Pollution of surface, ground and ocean waters shall be avoided. Where avoidance is not feasible, pollution shall be minimized.

**DevStd WW-TC-2.1:** To reduce the possibility of prolonged effluent daylighting, two disposal fields shall be built to serve each septic system as required by EHS so that when one field begins to fail, the other field can immediately be put into use. An additional third expansion area shall be set aside where no development can occur, except for driveways on constrained sites as provided below in Development Standard WW-TC-2.3.1. In the expansion area, a disposal field should be constructed when any other disposal field is in a state of failure.

**DevStd WW-TC-2.2:** For remodels of plumbed structures where the existing septic system must be enlarged or where septic system repairs are required due to failure, in addition to the enlargement and/or repair of the existing septic system, an additional disposal field shall be installed to the maximum extent feasible.

**DevStd WW-TC-2.3** Where feasible, measures to decrease the amount of nitrates filtering through soil to groundwater shall be required, including:

1. Shallow-rooted non-invasive plants (maximum root depth of four feet) shall be planted above all leach fields to encourage evapotranspiration of effluent and uptake of nitrates. Impervious surfaces, such as paved driveways, shall not be constructed above leach fields. If site constraints require a driveway to be located above a leach field in order to ensure reasonable use of property, turf block or other suitable pervious surface shall be used.

2. Advanced treatment for the removal of nitrates shall be required on septic systems utilizing drywells as the disposal field. Existing septic systems that utilize drywells that have failed, or that need to be modified or certified, must also install advanced treatment.

**DevStd WW-TC-2.4:** Discretionary development to house or manage animals must have a waste management program prepared according to Environmental Health Services' Guidelines for Management of Animal Wastes and approved by the Environmental Health Services Division.

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Toro Canyon Plan

DevStd WW-TC-2.5: Septic systems and other potential sources of water pollution shall be a minimum of 100 feet from the geologic top of slope of tributary or creek banks (reference point as defined by Planning and Development and Environmental Health Services). Modifications to existing sources of potential water pollution shall meet this buffer to the maximum extent feasible.

Action WW-TC-2.6: The County should mail the Environmental Health Services brochure "Your Septic System: A Reference Guide for Homeowners" to all Toro Canyon properties with septic systems.

DevStd WW-TC-2.7: Development shall not be approved where individual or cumulative impacts of septic systems for new development would cause pollution of creeks and ocean waters, unless this would preclude reasonable use of property.

DevStd WW-TC-2.8: Development shall be designed to reduce runoff from the site by minimizing impervious surfaces, using pervious or porous surfaces, and minimizing contiguous impervious areas.

DevStd WW-TC-2.9: Development shall incorporate best management practices (BMPs) to reduce pollutants in storm water runoff. The BMPs can include, but are not limited to dry wells for roof drainage or other roof downspout infiltration systems, modular paving, unit pavers on sand or other porous pavement for driveways, patios or parking areas, multiple-purpose detention systems, cisterns, structural devices (e.g., grease, silt, sediment, and trash traps), sand filters, or vegetated treatment systems (e.g. bioswales/filters).

DevStd WW-TC-2.10 Construction Best Management Practices shall be included on drainage plans and/or erosion control plans and implemented to prevent contamination of runoff from construction sites. These practices shall include, but are not limited to, appropriate storage areas for pesticides and chemicals, use of washout areas to prevent drainage of wash water to storm drains or surface waters, erosion and sediment control measures, and storage and maintenance of equipment away from storm drains and water courses.

Policy WW-TC-3: Development in Toro Canyon shall incorporate appropriate water efficient design, technology and landscaping.

Action WW-TC-3.1: The County Water Agency shall work with the MWD and the CVWD to promote educational programs that encourage efficient water use.
Toro Canyon Plan

DevStd WW-TC-3.2: In cases where landscape plans are required for development, they shall include appropriate water-conserving features such as those listed in the Water Resources section of the County’s Standard Conditions of Approval and Standard Mitigation Measures.
APPENDIX C

SANTA BARBARA COUNTY
SEPTIC SYSTEM REFERENCE GUIDE
Your Septic System

A Reference Guide for Homeowners

Santa Barbara County
Environment Health Services
Our job is to help ensure that existing and future on-site sewage disposal systems are constructed, modified, repaired, abandoned, maintained and serviced in a manner which protects the health, safety and general welfare of the people of Santa Barbara County.

North County:
2125 S. Centerpointe Parkway #333
Santa Maria, CA 93455-1340
(805) 346-8460

South County:
225 Camino del Remedio
Santa Barbara, CA 93110
(805) 681-4900

Contact us by email at:
PHD-Septic@santa-barbara.ca.us

What Environmental Health Services can provide for you:
- Lists of qualified septic tank panners
- Lists of septic system contractors
- Printed information about septic system maintenance
- Available recent history of your property
- A real-live human to answer your questions

How Your Septic System Works

Septic systems are individual wastewater treatment systems.

Septic systems use a buried settling tank and the soil to treat small wastewater flows, usually from individual homes. They are typically used in rural or large lot settings where centralized wastewater treatment is impractical.

All septic systems are individually designed for each site, but are based on the same principles.

A typical septic system consists of a septic tank, a distribution box and a drainfield, all connected by pipes.

Your septic system treats your household wastewater by temporarily holding it in the septic tank where heavy solids and lighter scum are allowed to separate from the wastewater. This separation process is known as primary treatment.

The solids stored in the tank are partially decomposed by bacteria and later removed, along with the lighter scum, by a professional septic tank pumper. Failure to pump out accumulated solids and scum will eventually result in clogging of the drainfield and failure of the system.

When the partially treated wastewater leaves the tank, it typically flows into a distribution box that divides the flow among a network of drainfield trenches. Drainage holes in each line allow the wastewater to be absorbed into the soil. The wastewater then slowly seeps into the subsurface soil where it is further treated and purified (secondary treatment).

A properly located and functioning septic system does not pollute the groundwater.
Septic systems must be maintained regularly to work properly. Solids and scum that accumulate in the septic tank should be pumped out every three to five years to protect the leachfield from clogging. Neglect or abuse of your septic system can cause it to fail.

Failing septic systems can:

- cause a serious health threat to your family and neighbors;
- reduce the value of your property;
- be very expensive to repair;
- degrade the environment, especially lakes, streams, and groundwater;
- put at risk those whose water supply comes from that groundwater.

Be alert to the warning signs of a failing system:

- sewage surfacing over the drainfield (especially after storms);
- sewage back-ups in the house;
- lush, green growth over the drainfield;
- slow draining toilets or drains;
- sewage odors.
Do's and Don'ts

Do have your tank inspected every 3 to 5 years by a licensed septic tank pumper. If you have a garbage disposal unit, pump the tank at more frequent intervals.

Do keep a record of pumping, inspections, and other maintenance. Use the back page of this brochure to record maintenance dates.

Do practice water conservation. Repair dripping faucets and leaking toilets, run washing machines and dishwashers only when full, avoid long showers, and use water saving features in faucets, showerheads and toilets.

Do learn the location of your septic tank and drainfield. Keep a sketch of it handy for service visits. If your system has a flow diversion valve, learn its location and turn it once a year. Alternating drainfields can add many years to the life of your system.

Do divert roof drains and surface water from driveways and hillsides away from the septic system. Keep sump pumps and house drains away from the septic system as well.

Do use bleach and disinfectants sparingly. Bleach, disinfectants, and drain and toilet bowl cleaners can kill bacteria that are essential to the operation of the septic system.

Don't allow anyone to drive or park over any part of the system. The area over the drainfield should be left undisturbed with only a mowed grass cover. Roots from nearby trees or shrubs may clog and damage your drain lines. Paving over a drainfield will reduce its efficiency and is prohibited.

Don't make repairs to your septic system without obtaining the required health department permit. Always use professional licensed septic system contractors for maintenance and repairs.

Don't use commercial septic tank additives or caustic drain chemicals. These products may hurt your system in the long run.

Don't use your toilet as a trash can by dumping nondegradables down your toilet or drains. Also, don't poison your septic system and the groundwater by pouring harmful chemicals down the drain. They can kill the beneficial bacteria that treat your wastewater. Keep the following materials out of your septic systems:

Oil, Paint, Paint Thinner, Disposable Diapers, Plastics, Gasoline, Pesticides, Grease, Antifreeze, etc.

Remember to always dispose of wastewater from your home into the septic tank. This includes all sink, bath, shower, toilet, washing machine and dishwasher wastewaters.

Any of these waters can contain disease-causing microorganisms or environmental pollutants.

For More Information

Please contact your nearest Santa Barbara County Environmental Health Services office:

Santa Barbara   (805) 681-4900
Santa Maria    (805) 346-8460

Contact us by email: PHD-Septic@co.santa-barbara.ca.us

Record of Service

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APPENDIX D

SEPTIC SYSTEM FOCUS AREA MAPS
STREETS
SURFACE WATER
ONSITE SEWAGE DISPOSAL SYSTEMS
Alternative System/Advanced Treatment
Drywell
Drywell and leachline
Leachline
Unknown

FOCUS AREA
VISTA VALLEJO

APPENDIX
D-11
UNNAMED TRIBUTARY

FOCUS AREA
LAKE MARIE ESTATES
APPENDIX E

SEPTIC TANK INSPECTION REPORT
AND
PERMIT CONVERSION FORMS
County of Santa Barbara
Septic Tank Inspection Report

Date of Service: __________

Permit’s name: ____________________________________________________________

Location of inspection: ________________________________________________

Assessor’s parcel number: ___________________ # of Bedrooms: _____ Year Built/Age: ______

Type of on-site disposal system:
☐ Septic tank with leach field or drywell  ☐ Cesspool  ☐ Other __________

Estimated capacity of septic tank or cesspool: _______ gallons Septage disposal location: __________________________

# of compartments: ____  Amount pumped: _______ gallons Method of measurement: ___________________________

Construction of septic tank or cesspool:
☐ Round  ☐ Rectangular  ☐ Oval  ☐ Other __________

Condition of tank:
Inlet tee present  ☐ No  ☐ Yes  Lids are in good condition  ☐ No  ☐ Yes
Outlet tee present  ☐ No  ☐ Yes  Needs pumping  ☐ No  ☐ Yes
Tank deteriorated  ☐ No  ☐ Yes  House lateral open  ☐ No  ☐ Yes
Corrosion noted  ☐ No  ☐ Yes  Heavy grease build-up  ☐ No  ☐ Yes

Height of baffle above liquid level: ______________

Minimum concrete thickness: ______________ Method of Measurement: __________________________

or to pumping, was effluent level above outflow tee? (Indicates falling system) ☐ No  ☐ Yes

Any signs of past drainage problems? ☐ No  ☐ Yes

Signs of surging effluent? ☐ No  ☐ Yes, location: __________________________

Previous records indicate: ____________________________________________________________

Maintenance Performed:
____________________________________________________________________________

Recommended repairs, replacement, or service (description of uncorrected deficiencies):

1. _______________________________________________ Estimated Cost: $ ______

2. _______________________________________________ Estimated Cost: $ ______

3. _______________________________________________ Estimated Cost: $ ______

Any imminent danger? ☐ No  ☐ Yes

Comments: _________________________________________________________________

Did a Qualified Inspector personally inspect system? ☐ No  ☐ Yes  ☐

Signature of Qualified Inspector: ______________________________________________________

Registration or Contractor’s License # _________________________________________________

Company: ____________________________________ Phone: ______________ Fax: __________
**SANTA BARBARA SANITARY SURVEY**

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## Septic Tank Dimensions

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<tr>
<td>Absorption Area Required:</td>
<td></td>
</tr>
</tbody>
</table>

## Setbacks - Well to

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Septic Tank:</td>
<td></td>
</tr>
<tr>
<td>Absorption Field:</td>
<td></td>
</tr>
</tbody>
</table>

## Soil Profile - Depth To

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bedrock:</td>
<td></td>
</tr>
<tr>
<td>Max groundwater:</td>
<td></td>
</tr>
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</table>

## Field Lines

<table>
<thead>
<tr>
<th>Permitted</th>
<th>Built</th>
<th># of Lines</th>
</tr>
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<tbody>
<tr>
<td>Disposal Field Length:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disposal Field Width:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trench Depth:</td>
<td></td>
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</tbody>
</table>

## Depth

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Type:</td>
<td></td>
</tr>
</tbody>
</table>

## Seepage Pit

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number:</td>
<td></td>
</tr>
<tr>
<td>Diameter:</td>
<td></td>
</tr>
<tr>
<td>Depth:</td>
<td></td>
</tr>
</tbody>
</table>

## Disposal Field

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rocks Below Line:</td>
<td></td>
</tr>
</tbody>
</table>

## Waste Water Flow:

| Seepage Pit Performance (Total): |       |

## Slope

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorption Field Slope:</td>
<td></td>
</tr>
</tbody>
</table>

## Setbacks - Water Course

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Reservoir (Y/N):</td>
<td></td>
</tr>
<tr>
<td>Septic Tank:</td>
<td></td>
</tr>
<tr>
<td>Absorption Field:</td>
<td></td>
</tr>
<tr>
<td>Focus Area</td>
<td>Location</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td><strong>Arroyo Paredon</strong></td>
<td>Cravens</td>
</tr>
<tr>
<td>(outside watershed)</td>
<td></td>
</tr>
<tr>
<td><strong>Goleta</strong></td>
<td>La Buena Tierra</td>
</tr>
<tr>
<td>(la buena Tierra)</td>
<td></td>
</tr>
<tr>
<td><strong>Goleta</strong></td>
<td>La Goleta Rd</td>
</tr>
<tr>
<td>(la Goleta)</td>
<td>La Goleta Rd</td>
</tr>
<tr>
<td><strong>Hope Ranch</strong></td>
<td>Bajada Lane</td>
</tr>
<tr>
<td></td>
<td>camino medio</td>
</tr>
<tr>
<td></td>
<td>Estrella</td>
</tr>
<tr>
<td></td>
<td>Hope ranch private beach</td>
</tr>
<tr>
<td></td>
<td>Hope Ranch Slough &amp; Beach</td>
</tr>
<tr>
<td></td>
<td>Las Olas Beach, Hope Ranch</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Los Palmas Road</td>
</tr>
<tr>
<td></td>
<td>Marina Dr</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Via Roblada</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Via Vistosa</td>
</tr>
<tr>
<td><strong>Mission Canyon</strong></td>
<td>Glendessary</td>
</tr>
<tr>
<td></td>
<td>Las Canoas Rd</td>
</tr>
<tr>
<td></td>
<td>Las Canoas Rd</td>
</tr>
<tr>
<td></td>
<td>Las Canoas Rd</td>
</tr>
<tr>
<td></td>
<td>Las Canoas Rd</td>
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<tr>
<td></td>
<td>Las Canoas Rd</td>
</tr>
<tr>
<td></td>
<td>Las Canoas Rd</td>
</tr>
<tr>
<td></td>
<td>Tunnel Rd</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tunnel Rd</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tunnel Rd</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Questa Engineering Corporation
<table>
<thead>
<tr>
<th>Montecito (Cold Springs)</th>
<th>When</th>
<th>What</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold Springs Rd</td>
<td>2/14/96</td>
<td>surfacing effluent from abandoned system</td>
<td></td>
</tr>
<tr>
<td>Cold Springs Rd</td>
<td>10/2/96</td>
<td>surfacing effluent from abandoned system</td>
<td></td>
</tr>
<tr>
<td>Riven Rock</td>
<td>1/7/93</td>
<td>raw sewage running through creek</td>
<td>no source could be found</td>
</tr>
<tr>
<td>Riven Rock</td>
<td>5/23/97</td>
<td>septic causing odors</td>
<td></td>
</tr>
<tr>
<td>Riven Rock</td>
<td>1/11/00</td>
<td>leachline not properly hooked up and septic system has bad odor</td>
<td>no visible signs of surfacing effluent or odor</td>
</tr>
<tr>
<td>Riven Rock</td>
<td>1/28/99</td>
<td>sewage odor</td>
<td>no violations of health and sanitation laws at time of inspection</td>
</tr>
<tr>
<td>Montecito (orchard ln)</td>
<td>9/14/95</td>
<td>leaking septic</td>
<td>No evidence found to support complaint</td>
</tr>
<tr>
<td>Barker Pass Rd</td>
<td>4/2/98</td>
<td>surfing effluent</td>
<td></td>
</tr>
<tr>
<td>Ranchito vista</td>
<td>2/26/98</td>
<td>mudslide on property and septic tank destroyed</td>
<td>strong septic odor detected; connection between septic tank and disposal field may have been severed</td>
</tr>
<tr>
<td>Sierra Vista</td>
<td>1/10/96</td>
<td>sewage seeping onto road</td>
<td>did not observe any discharge or odor</td>
</tr>
<tr>
<td>Stanwood</td>
<td>11/13/98</td>
<td>discharging into creek</td>
<td>no problems observed</td>
</tr>
<tr>
<td>More Mesa</td>
<td>9/14/95</td>
<td>leaking septic</td>
<td>No evidence found to support complaint</td>
</tr>
<tr>
<td>Louisiana</td>
<td>1/4/98</td>
<td>odor &amp; surfacing sewage</td>
<td>tank uncovered; tank lid replaced</td>
</tr>
<tr>
<td>Painted cave</td>
<td>8/19/99</td>
<td>no septic permits</td>
<td>stop work order issued</td>
</tr>
<tr>
<td>Glenn Rd</td>
<td>6/1/93</td>
<td>no septic permits</td>
<td>No evidence found to support complaint</td>
</tr>
<tr>
<td>Rim Rd</td>
<td>2/22/95</td>
<td>overflowing sewage</td>
<td>greywater system disposing of grey water onto ground surface</td>
</tr>
<tr>
<td>Rim Rd</td>
<td>11/23/99</td>
<td>toilets empty to ground</td>
<td>surfacing effluent from kitchen and laundry; tank deteriorated</td>
</tr>
<tr>
<td>Rincon</td>
<td>4/26/95</td>
<td>overflowing sewage</td>
<td>septic system over 1000' from seepage</td>
</tr>
<tr>
<td>Rincon Point Ln</td>
<td>5/4/95</td>
<td>sewage flowing from septic tank to creek</td>
<td>No evidence found to support complaint</td>
</tr>
<tr>
<td>San Antonio</td>
<td>1/24/95</td>
<td>failing septic system</td>
<td>No evidence found to support complaint</td>
</tr>
<tr>
<td>Los Verdes</td>
<td>3/11/00</td>
<td>failing septic system</td>
<td>switched drywells</td>
</tr>
<tr>
<td>Via Clarice</td>
<td>11/30/98</td>
<td>Surfacing effluent</td>
<td>failing septic</td>
</tr>
</tbody>
</table>
## SANTA BARBARA COUNTY SEPTIC SYSTEM SURVEY
### Complaint Files

<table>
<thead>
<tr>
<th>Location</th>
<th>When</th>
<th>What</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOUTH COAST</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calle cita</td>
<td>1/11/95</td>
<td>water is forcing sewage into neighbors yard</td>
<td>No evidence found to support complaint</td>
</tr>
<tr>
<td>Calle cita</td>
<td>1/24/95</td>
<td>surfacing effluent</td>
<td>dye test conducted</td>
</tr>
<tr>
<td>Calle cita</td>
<td>3/5/96</td>
<td>septic system leaking into the water supply</td>
<td>obvious signs of failure on side yard supply</td>
</tr>
<tr>
<td>Calle cita</td>
<td>10/28/97</td>
<td>odor</td>
<td></td>
</tr>
<tr>
<td>Hope Av</td>
<td>7/11/00</td>
<td>Discharge of sewage onto ground surface</td>
<td>roto rooter cleaned site</td>
</tr>
<tr>
<td>Hope Av</td>
<td>2/26/97</td>
<td>seepage from septic system coming from neighbors property</td>
<td>leaking water pipe</td>
</tr>
<tr>
<td>Russell Way</td>
<td>11/2/99</td>
<td>leaking septic</td>
<td>no sewage spilling but slight odor; new drywell installed</td>
</tr>
<tr>
<td>Sunset</td>
<td>11/8/89</td>
<td>failing septic system</td>
<td>failing septic</td>
</tr>
<tr>
<td>Sunset</td>
<td>6/19/84</td>
<td>septic runoff draining into street</td>
<td>failing septic</td>
</tr>
<tr>
<td><strong>Santa Barbara</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Sunset/Carol)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vista Vallejo</td>
<td>5/24/99</td>
<td>Surfacing effluent</td>
<td>failing septic; new drywell constructed</td>
</tr>
<tr>
<td><strong>Torro Canyon</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camino Cielo</td>
<td>2/26/98</td>
<td>effluent discharging onto neighbor’s property</td>
<td>no effluent observed</td>
</tr>
<tr>
<td>Camino Cielo</td>
<td>5/19/98</td>
<td>illegal septic work</td>
<td>greywater system connected to septic system</td>
</tr>
<tr>
<td>E. Valley Rd</td>
<td>12/13/96</td>
<td>overflowing sewage</td>
<td>no sewage leaking from facility/septic tank &amp; system at this point; tank cover damaged; swale behind facility encourages natural runoff to impact</td>
</tr>
<tr>
<td>East Valley Road</td>
<td>6/5/98</td>
<td>liquid bubbling in rear yard</td>
<td>possibly groundwater</td>
</tr>
<tr>
<td>Torito Rd</td>
<td>1/4/99</td>
<td>septic runoff draining into yard</td>
<td>Dye test unable to confirm septic</td>
</tr>
<tr>
<td>Toro Canyon Rd</td>
<td>11/1/00</td>
<td>septic runoff draining into yard</td>
<td>failing septic system repaired</td>
</tr>
</tbody>
</table>

Questa Engineering Corporation
<table>
<thead>
<tr>
<th>Veronica Springs Rd</th>
<th>When</th>
<th>What</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veronica Springs Rd</td>
<td>9/13/96</td>
<td>Channeling greywater discharges to creek; stockpiling manure at property line</td>
<td>No EHS enforceable violation occurring at time of inspection</td>
</tr>
<tr>
<td>Veronica Springs Rd</td>
<td>9/22/97</td>
<td>Septic system in disrepair; pumper truck services system 2-3 times per week; modified system without</td>
<td>Hit groundwater at 3'; owner looking into modifying the system</td>
</tr>
<tr>
<td>Veronica Springs Rd</td>
<td>2/25/00</td>
<td>Septic system effluent pumped into street after rainstorms</td>
<td>No discharged observed; owner inquired into connecting to sewer</td>
</tr>
<tr>
<td>Veronica Springs Rd</td>
<td>6/7/00</td>
<td>some sort of discharge from address</td>
<td>no sign of sewage of failing septic; complainant getting more water in french drain system</td>
</tr>
<tr>
<td>Veronica Springs Rd</td>
<td>3/11/96</td>
<td>someone draining greywater into veronica creek</td>
<td>no sign of pipe or any grey water was noted</td>
</tr>
<tr>
<td>Location</td>
<td>Event Date</td>
<td>Description</td>
<td>Conclusion</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------</td>
<td>-------------------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Ballard</td>
<td>7/3/95</td>
<td>surfacing effluent</td>
<td>dye test unable to confirm septic failure</td>
</tr>
<tr>
<td>Highway 246</td>
<td>4/3/95</td>
<td>Septic system leaking onto neighbor's property</td>
<td>possibly perched groundwater</td>
</tr>
<tr>
<td>Refugio Road</td>
<td>5/12/98</td>
<td>septic failure, constantly overflowing</td>
<td>standing water from runoff impeded repair of system. Tank submerged in surface water and possible effluent</td>
</tr>
<tr>
<td>Janin Acres</td>
<td>12/1/94</td>
<td>septic runoff draining into neighbors yard</td>
<td>water pooling in front yard of 2568 Janin way and in the backyard of 2570 Janin way. Dye test did not confirm. Possibly perched water or broken</td>
</tr>
<tr>
<td>Cuesta Street</td>
<td>6/20/97</td>
<td>Failure</td>
<td>septic line had been repaired</td>
</tr>
<tr>
<td>Deerhill Drive</td>
<td>4/4/95</td>
<td>sludged up drywell</td>
<td>Confirmed failed septic system</td>
</tr>
<tr>
<td>Edison Street</td>
<td>10/2/96</td>
<td>surfacing effluent</td>
<td>high water use was probably cause of leach field failure. New drywell constructed</td>
</tr>
<tr>
<td>Santa Ynez</td>
<td>1/12/95</td>
<td>overflowing septic tank, chemical toilet used during rainy season</td>
<td>1.5 acre parcel, most of lot had ponding water</td>
</tr>
</tbody>
</table>

Questa Engineering Corporation
APPENDIX G

CONTRACTOR-CONSULTANT QUESTIONNAIRE RESULTS
Santa Barbara County Septic System Survey

Contractor-Consultant Questionnaire

Questa Engineering Corporation has been hired by Santa Barbara County Environmental Health Services to conduct a county-wide survey of septic systems. The overall purpose of the study is to determine the extent of public health hazards and/or water quality problems due to existing septic systems and to identify needed improvements in practices, standards or sewerage facilities in problem areas.

To date the work effort has included extensive review and mapping of file information, bacteriological sampling of surface streams, review of soils, geology, hydrology and water quality data, community meetings and a Homeowner Questionnaire survey. We are also interested in obtaining information from Septic System Contractors and Consultants who work in Santa Barbara County regarding their observations and opinions about different types of problems and areas of particular concern. For this purpose we have enclosed a Contractor-Consultant Questionnaire Survey form that we would like you complete and return to Questa Engineering in the self-addressed, stamped envelope. A copy of the survey form is also available on our web site address listed below.

Completion of the enclosed survey form should be self-explanatory; however, please feel free to call either of the listed contact people at our office (see below) if you have any questions. The information from the questionnaires will be compiled and presented as part of our report to the County. All those participating in the survey will be acknowledged; but no individuals or businesses will be specifically mentioned in our report without obtaining prior consent.

We appreciate you taking the time to complete the survey form. We know your direct experience with septic systems in Santa Barbara County will be helpful to our work and to the overall results of the project.

We would like to have the completed survey sent back to us by May 15th if possible.

Once again, thank you for your participation and don’t hesitate to call with any questions.

Norman Hantzsche, P.E.  Jocelyn Habal, R.E.H.S.
Principal/Managing Engineer  Environmental Health Specialist

Questa Engineering Corporation
(510) 236-6114; (510) 236-2423 fax
nhantzscJ@questa1.com
jhabal@questa1.com
www.questa1.com
Type of Work/Services Provided:

__7__ Septic tank pumping/inspections
__6__ Escrow or other inspections
__5__ Maintenance
__8__ Minor System Repairs
__8__ Major System repairs and new installations:
   __10__ Septic Tanks
   __8__ Pump systems
   __10__ Leachfields
   __9__ Dry Wells
   __7__ Alternative Designs or other: ________________________________

__3__ Site Investigations/Evaluations
   __3__ Percolation testing
   __3__ Soils/geology/groundwater assessment

__3__ Engineering/Design
   __3__ Standard Systems
   __3__ Pump Systems
   __2__ Alternative Treatment/Disposal Systems

__Other: ________________________________________________________________________

Geographical areas of Santa Barbara County where you provide septic system services:

__11__ South Coast
__9__ Santa Ynez Valley
__6__ Santa Maria Area
__11__ South Coast
__6__ Orcutt Area
__6__ Lompoc Area
__2__ Cuyama Area

__Other: __Hollister Ranch, Ventura County, San Luis Obispo,
# A. SEPTIC TANK PROBLEMS OBSERVED

<table>
<thead>
<tr>
<th>TYPE OF PROBLEM</th>
<th>OCCURRENCE FREQUENCY</th>
<th>PARTICULAR GEOGRAPHICAL AREA(S) OF CONCERN (IF ANY)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rare or Never ( )</td>
<td>Occasional ( )</td>
</tr>
<tr>
<td>1. Undersized tanks</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>2. Sub-standard materials/design</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>3. Structural damage/deterioration</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>4. Defective/missing tees, baffle, pipe connections</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>5. Difficult or obstructed access to tank</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Excessive tank depth</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>7. Root intrusion/blockage</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>8. Groundwater infiltration or flooding</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>9. Excessive water use/flow from house</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>10. Excessive solids, scum, grease accumulation</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>11. Close proximity to wells or streams</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>12. Other: (list)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## B. DISPOSAL SYSTEM PROBLEMS OBSERVED

<table>
<thead>
<tr>
<th>TYPE OF PROBLEM</th>
<th>OCCURRENCE FREQUENCY</th>
<th>PARTICULAR GEOGRAPHICAL AREA(S) OF CONCERN (IF ANY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Old, undocumented, non-permitted</td>
<td>3 8 2</td>
<td>Foothills, Santa Barbara</td>
</tr>
<tr>
<td>2. Excessive water use or over irrigation</td>
<td>1 9 2</td>
<td>Montecito, Hope Ranch</td>
</tr>
<tr>
<td>3. Physical damage (e.g. from landscaping, paving, live stock, grading, etc)</td>
<td>5 8</td>
<td>South Coast</td>
</tr>
<tr>
<td>4. Root intrusion, blockage, or piping problems</td>
<td>1 8 3</td>
<td>All areas</td>
</tr>
<tr>
<td>5. Solids carryover from septic tank</td>
<td>1 9 3</td>
<td>All areas</td>
</tr>
<tr>
<td>6. Soil percolation/drainage problem (e.g. rock, clay, shallow soil depth)</td>
<td>1 8 4</td>
<td>South coast</td>
</tr>
<tr>
<td>7. High groundwater/infiltration</td>
<td>6 5 2</td>
<td>Montecito, Santa Barbara Hope Ranch (995 C2&amp;3; D2&amp;3)</td>
</tr>
<tr>
<td>8. Surface drainage/flooding</td>
<td>6 7 1</td>
<td></td>
</tr>
<tr>
<td>9. Steep slopes, slides, erosion</td>
<td>10 2 1</td>
<td>Montecito &amp; S.B. Foothills</td>
</tr>
<tr>
<td>10. Seepage/breakout at cut slopes or embankments</td>
<td>10 2 1</td>
<td>Montecito &amp; S.B. Foothills</td>
</tr>
<tr>
<td>11. Close proximity to wells</td>
<td>10 3 1</td>
<td>Montecito – Hope Ranch</td>
</tr>
<tr>
<td>12. Close proximity to streams/drainages</td>
<td>5 6 2</td>
<td>Montecito</td>
</tr>
<tr>
<td>13. Inadequate land area</td>
<td>6 4 3</td>
<td>All areas</td>
</tr>
</tbody>
</table>
### B. DISPOSAL SYSTEM PROBLEMS OBSERVED (Continued)

<table>
<thead>
<tr>
<th>TYPE OF PROBLEM</th>
<th>OCCURRENCE FREQUENCY</th>
<th>PARTICULAR GEOGRAPHICAL AREA(S) OF CONCERN (IF ANY)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14. Other specific Leachfield problems: (list)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>They don’t work – clogg up from no grease traps</td>
<td>1</td>
<td>All areas</td>
</tr>
<tr>
<td>Diverter valve instead of distribution box</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor orig. design. Houses remodeled w/o increasing size of leachfield/tank as needed</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Grease buildup</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Old systems typically undersized</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Most leachfield failures could be solved by pumping tank properly and making sure outgoing invert is properly installed in tank</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>15. Other specific Dry Well problems: (list)</strong></td>
<td>1</td>
<td>Montecito Area</td>
</tr>
<tr>
<td>They don’t work, clogg up from septic tank overflow of grease and fats</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Old style not gravel filled</td>
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<td>Hope Ranch, Montecito</td>
</tr>
<tr>
<td>Diverter valve not installed on most older systems</td>
<td>1</td>
<td>Hope Ranch, Montecito</td>
</tr>
<tr>
<td>Seasonal ground saturation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grease buildup</td>
<td></td>
<td></td>
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</tbody>
</table>
C. PUMP SYSTEMS – PROBLEMS OBSERVED

<table>
<thead>
<tr>
<th>TYPE OF PROBLEM</th>
<th>OCCURRENCE FREQUENCY</th>
<th>PARTICULAR GEOGRAPHICAL AREA(S) OF CONCERN (IF ANY)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Rare or Never ( )</td>
<td>Occasional ( )</td>
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<tr>
<td></td>
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<td>Common ( )</td>
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<tr>
<td>1. Faulty installation or design</td>
<td>4</td>
<td>7</td>
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<td></td>
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</tr>
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<td></td>
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<tr>
<td>2. Mechanical failure</td>
<td>1</td>
<td>10</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td>South Coast</td>
</tr>
<tr>
<td>3. Homeowner abuse</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South Coast</td>
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<tr>
<td>4. Sewage overflow during power outages</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South Coast</td>
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<tr>
<td>5. Other:</td>
<td></td>
<td></td>
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## D. SEPTIC SYSTEM PROBLEMS – AREA ASSESSMENT

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Overall Problem Rating</th>
<th>Opinion on Long-Term Septic System Management needs</th>
<th>Other Comments</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Med</td>
<td>High</td>
</tr>
<tr>
<td>South Coast</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Rincon Point</td>
<td>4</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Shepards Mesa</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Padaro Lane</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Sand Point Road</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Toro Canyon</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Montecito</td>
<td>2</td>
<td>4</td>
<td>1</td>
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<tr>
<td>-Orchard Lane Area</td>
<td>1</td>
<td>3</td>
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<tr>
<td>-Cold Springs Area</td>
<td>1</td>
<td>2</td>
<td>2</td>
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<tr>
<td>-Sycamore Creek Area</td>
<td>1</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Mission Canyon</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Hope Ranch</td>
<td>3</td>
<td>4</td>
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</tr>
<tr>
<td>Veronica Springs</td>
<td>3</td>
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## D. SEPTIC SYSTEM PROBLEMS – AREA ASSESSMENT (continued)

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Overall Problem Rating</th>
<th>Opinion on Long-Term Septic System Management needs</th>
<th>Other Comments</th>
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</thead>
<tbody>
<tr>
<td>South Coast (Cont'd)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Goleta</td>
<td>Low ( )</td>
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<td>1</td>
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<tr>
<td></td>
<td>Med ( )</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>High ( )</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No Opinion ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Holiday Hills Area</td>
<td></td>
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<td>1</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-La Goleta Rd Area</td>
<td>Low ( )</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Med ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No Opinion ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-La Buena Tierra Area</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Via Chapparal/La Paloma Ave</td>
<td>Low ( )</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Med ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No Opinion ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Barbara</td>
<td>Low ( )</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Med ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No Opinion ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Sunset St/Carol Ave Area</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Vista Vallejo Area</td>
<td>Low ( )</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Med ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No Opinion ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Marcos Pass Area</td>
<td>Low ( )</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Med ( )</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>High ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No Opinion ( )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHER:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| OTHER:                   |                        |                                                   |                |

Other Comments:
- San Marcos Pass Area: Old syts; new d.w. works fine
- South Coast: Systs 40+ old
- Goleta: Systs 40+ old; new d.w. works fine
<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Overall Problem Rating</th>
<th>Opinion on Long-Term Septic System Management needs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low ( )</td>
<td>Med ( )</td>
</tr>
<tr>
<td>North County</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Ynez Valley</td>
<td></td>
<td></td>
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<tr>
<td>-Los Olivos</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>-Ballard</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>-Santa Ynez</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>-Janin Acres</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>-Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Maria</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Lompoc</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Orcutt</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Cachuma Lake</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>OTHER:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OTHER COMMENTS AND RECOMMENDATIONS

1. Design Standards and Regulations:

* All new sewage recycler systems – no septic systems in ground anywhere
  
  • S.B. co. efforts to update ordinance is good
  • Continue to encourage public sewer connectitons
  • I would make minimum depth under 4” perf. Pipe to be no less than 36”

2. Septic system pumper/inspection reporting requirements:

  • need to enforce codes to repair or replace failed systems
  • if septic tank owners were required to have tank pumped every 2 years or not more than 3 years, a competent pumper could be aware of any problems and a reasonable solution and could be implemented on a case by case basis.
  • if pumpers maps show drywells they should be checked for rock

3. Other monitoring/inspection needs:

  • Safety
  • Pumpers handling these inspections at this time do not know what they are doing. Nine times out of ten their assessment of the problem is wrong. I am not referring to EHS inspectors here but rather the “new” pump out “inspectors” should be someone with intimate knowledge of design and above all with experience installing systems in all situations. More common sense is required in this area, rather than purely technical experts.

4. Other:

  • this is a no win situation like using fossil fuels to run engines – it’s a sick joke that gonna wipe us off the face of this planet unless we change our ways.
  • There are a umber of areas in S.B. county where septic systems are experiencing failure, however in some of these areas it is related to old neighborhoods and old systems. Montecito, Hope Ranch, and Padaro Lane are examples where a sewer system should be installed due to poor percolation rates and/or high groundwater
  • I would say that poor design is the rule rather than the exception. Not so much in tank size requirement, but in leach field design, which ultimately determines how well any of these systems perform.
  • Failure due to old neighborhoods and old systems. Montecito/hope ranch/Padaro lane are examples of places that need sewer due to poor percolation rates and/or high groundwater.
Santa Barbara County Septic System Survey
Community Meetings

Questa Engineering Corporation has been hired by Santa Barbara County Environmental Health Services to conduct a county-wide survey of septic systems. The overall purpose of the study is to determine the extent of public health hazards and/or water quality problems due to existing septic systems and to identify needed improvements in practices, standards or sewerage facilities in problem areas.

The purpose of the community meetings will be to discuss the overall purpose and scope of the septic system survey, present and review water quality sampling results and other preliminary findings, and seek additional input from homeowners and others regarding septic system conditions, standards, management practices or specific problems.

<table>
<thead>
<tr>
<th>LOCATION OF COMMUNITY MEETING</th>
<th>WHEN</th>
</tr>
</thead>
</table>
| 1. El Montecito Presbyterian Church  
  1455 East Valley Road, Montecito | April 16  
  6:30 p.m. to 9:00 p.m. |
| 2. Monte Vista School  
  730 North Hope Avenue, Santa Barbara | April 17  
  6:30 p.m. to 9:00 p.m. |

Attached to this meeting announcement is a homeowner questionnaire that we would like you to complete and either mail it back to Questa Engineering or bring it to one of the community meetings.

Your attendance at the community meetings is encouraged and will be very helpful in our efforts to obtain as much information and as many viewpoints as possible, while giving us a chance to explain the work that is being done.

If your property happens to be undeveloped, please disregard the enclosed questionnaire.

Questa Engineering Corporation
(510) 236-6114; (510) 236-2423 fax  
jhabal@questaec.com
www.questaec.com
Santa Barbara County Septic System Survey Homeowner Questionnaire

(1) Property Owner: ________________________________  (10) Assessor’s Parcel Number: ________________

(2) Site Address: _____________________________________________________________________________

(3) Is the property occupied: (a) Year Round: ______________  or (b) Part time: _________________________

(4) Total Number of Bedrooms: ________  (11) Total Number of Permanent Residents: _____________

(5) What type of wastewater disposal system serves the property?

___ Septic Tank with leachfield  ___ Septic Tank with Seepage pit  ___ Other (specify): ____________  ___ Unknown

(6) How is greywater disposed of?

___ Into septic tank - leachfield system  ___ Separate greywater system  ___ Onto ground surface  ___ Other (specify): ____________  ___ Unknown

(7) How old is the wastewater system?

___ Number of Years  ___ Unknown  ___ Slow drainage of plumbing fixtures/backup into house:

___ Year Round  ___ Seasonal  ___ After Heavy Rainfall  ___ Occasional for unexplained reason

(8) Approximate distance (in feet) from septic system (Disposal field):

___ Year Round Creek  ___ Seasonal Creek/Drainages  ___ Water Well

(9) How often is the septic tank pumped

___ More than once a year  ___ Once a year  ___ Every 2 to 5 years  ___ Less frequently

(10) Have any of the following problems been observed with the wastewater system? (if yes, please check applicable period).

___ Slow drainage of plumbing fixtures/backup into house:

___ Year Round  ___ Seasonal  ___ After Heavy Rainfall  ___ Occasional for unexplained reason

(11) Approximately how many years since the septic tank was last pumped? ____________________________

(12) Has on-site system ever been repaired?  Yes or No

(13) If the on-site system has been repaired, was the repair effective?  Yes or No

(14) What type of wastewater disposal system serves the property?

(15) Other comments/suggestions on general or specific septic system conditions and problems in your area. (Attach additional sheets as needed)

Please mail completed survey to Questa Engineering or bring to community meeting.
APPENDIX I

WATER QUALITY SAMPLING PROCEDURES
AND LOCATIONS
SANTA BARBARA COUNTY SEPTIC SYSTEM SURVEY

WATER QUALITY SAMPLING PLAN

SAMPLING PROCEDURES

Surface water samples will consist of grab samples utilizing sterilized polypropylene containers. Samples will be collected at various fixed points across surveyed streams. The appropriate preserved samples will be filled in the field and transported to the laboratory facility.

Sampling will be conducted after a major storm event to obtain water quality information after the stream has stabilized. We anticipate water quality sample collection during at least four storm event sampling periods. Typically one sample will be obtained at each station. It is important to obtain samples after the rain has subsided in order to not have a high concentration of pollutants from runoff.

Sample Containers

All sample containers necessary for the collection, preservation, transport and storage of samples will be supplied by the primary laboratory.

Clean, empty sample containers with caps will be supplied to the field crew in protective cardboard cartons or ice chests by the primary laboratory. The containers will be certified clean by either the laboratory or the container supplier. Each individual carton will contain a laboratory-supplied travel blank. To ensure data quality control, the sampler will utilize the appropriate sample container as specified by the laboratory for each sample type.

Collecting Samples

Provided below are general guidelines that will be followed for sample collection:

1. Label the bottle with the site number, date and time.
2. Remove the cap from the bottle just before sampling. Avoid touching the inside of the bottle or the cap. If you accidentally touch the inside of the bottle, use another one.
3. Sample away from the streambank in the main current. Never sample stagnant water. The outside curve of the stream is often a good place to sample, since the main current tends to hug this bank. In shallow stretches, carefully wade into the center current to collect the sample or use an extension pole.
4. If wading is required, try to disturb as little bottom sediment as possible. Be careful not to collect water that has sediment from bottom disturbance. Stand facing upstream. Collect...
the water sample on your upstream side, in front of you. You may also tape your bottle to an extension pole to sample from deeper water.

5. Hold the bottle near its base and plunge it (opening downward) below the water surface. If you are using an extension pole, remove the cap, turn the bottle upside down, and plunge it into the water, facing upstream. Collect the water sample from a few inches beneath the surface.

6. Turn the bottle underwater into the current and away from you. In slow-moving stream reaches, push the bottle underneath the surface and away from you in an upstream direction.

7. Do not fill the bottle completely. Leave a small air space. Recap the bottle carefully, remembering not to touch the inside.

8. Fill the bottle number and/or site number on the appropriate field data sheet.

**Delivering Samples to the Laboratory**

All bacteriological samples are to be packed and transported to the laboratory the day the samples are collected to provide ample time for samples to be analyzed within the required holding times. Samples will be transported by Questa field personnel directly to the Santa Barbara County Public Health Laboratory located at 315 Camino Del Remedio, Santa Barbara. The Laboratory Director is Michael Hartley. The laboratory phone number is (805) 681-5255.

**Sample Packing and Shipping**

In the event that any samples are taken that require transport to an out-of-area laboratory (e.g., for chemical analysis), sample packaging and shipping procedures will be in accordance with U.S. EPA specifications, as well as U.S. Department of Transportation (DOT) regulations (49 CFR) as summarized here. All samples will be shipped according to low or medium hazard requirements, if appropriate. Artificial ice will be included in coolers containing samples which require temperature control. Samples will be packaged in the following manner:

1. Sample stickers will be securely attached to each sample container

2. The sample containers will be placed in the lined cooler. Bubble-wrap, suitable foam padding, or newspaper will be placed between sample containers to prevent breakage during shipment and handling.

3. The COC will be placed inside a plastic bag and placed inside the cooler.

4. The cooler will be taped shut with clear packaging tape wrapped over the custody seals.
5. The cooler will then be delivered to the overnight courier or directly to the laboratory.

**Safety Considerations**

**Table 2** provides a list of general safety precautions and guidelines that will be provided to and followed by the field personnel participating in the water quality sampling program.

**SAMPLE CUSTODY AND DOCUMENTATION**

**Sample tracking**

During sample acquisition a sample tracking form will be used to record all pertinent information related to each sample. An example of this form is included in **Attachment B**.

Samples will be individually labeled after they are collected. The label includes the project name, job number, date and time the sample was collected, the initials of the individual who performed the sampling, and a unique five digit sample identification number.

At the time of sampling, sample number, collection time and location will be recorded on: (1) a label affixed to the container; (2) a COC form; and, (3) a bound field notebook.

**Field Log Book**

A bound, waterproof log book will be maintained by the members of the sampling team to provide a daily record of sample location, significant events, observations, and field measurements taken during field investigations. All entries will be signed and dated. Field data will be recorded with waterproof ink. Field log books are intended to provide sufficient data and observations to enable project team members to reconstruct events that occurred during the project. The field log book entries will be factual, detailed, and objective. Where appropriate, records of photographs and sketch maps will be included. Log books used by members of the field investigation team will be kept as permanent records.

**Chain of Custody and Sample Labels**

The Chain of Custody (COC) record will be employed as physical evidence of sample custody. The sampler will complete a COC record to accompany each sample shipment from the field to the laboratory. The COC will specify: (a) time, date, and location of sample collection; (b) specific time and date of sample transaction between field and laboratory staff; and, (c) name of receiving party at the laboratory.

Corrections on the COC record will be made by drawing a line through, initialing, and dating the
error, and entering the correct information. Erasures will not be permitted. An example of a COC record form is shown in Attachment B.

Upon receipt of the samples, laboratory personnel will check to insure that the contents of the ice chest(s) are accurately described by the COC and that sample containers are received in good condition. Upon verification of the number and type of samples and the requested analysis, a laboratory representative will sign the COC, indicating receipt of samples.

The COC record form will be completed in triplicate. Upon sample deliver, one copy will be left with the laboratory, one copy will be kept by the sampler, and one copy will be sent to Questa’s Project Manager.

The sample label consists of a unique five-digit number. The sample number will be used to track the sample and its associated analytical laboratory results. The sample label will also contain project number, date of sampling, and sampler name. Prior to sampling, a label will be completed and affixed to the appropriate container.

**Final Evidence Files**

Once the project has been completed, the individual files will be assembled, organized, and securely stored as final evidence for the project. A final evidence file for this project will be maintained by Questa for three years after completion. Laboratory records must also be kept for a minimum of three years.
### TABLE 2
**GENERAL SAFETY CONSIDERATIONS FOR WATER QUALITY SAMPLING**

- Always conduct the sampling with at least one partner. Always let someone else know where you are, when you intend to return, and what to do if you don’t come back at the appointed time.

- Develop a safety plan. Carry a cell phone or find out the location and telephone number of the nearest telephone and write it down. Locate the nearest medical center and write down directions on how to get between the center and your site(s) so you can direct emergency personnel. Have each member of the sampling team complete a medical form that includes emergency contacts, insurance information, and pertinent health information such as allergies, diabetes, epilepsy, etc.

- Have a first aid kit handy.

- Listen to weather reports. Do not conduct the sampling if severe weather is predicted or if a storm occurs while at the site.

- Never wade in swift or high water.

- Park your vehicle in a safe location. Be sure your car doesn’t pose a hazard to other drivers and that you don’t block traffic.

- Put your wallet and keys in a safe place, such as a watertight bag to keep in a pouch strapped to your waist. Without proper precautions, wallet and keys might end up downstream.

- Never cross private property without the permission of the landowner. Sample at public access points such as bridge or road crossings or public parks. Take along an identification card.

- Confirm that you are at the proper site location by checking maps, site descriptions, or directions.

- Watch for irate dogs, farm animals, wildlife, snakes, and insects such as ticks, hornets, and wasps. Know what to do if you get bitten or stung.
TABLE 2 cont’d

- Watch for poison ivy, poison oak, sumac, and other types of vegetation in your area that can cause rashes and irritation.

- Never drink the water in a stream. Assume it is unsafe to drink, and bring your own water from home. After sampling, wash your hands with antibacterial soap.

- Do not walk on unstable stream banks. Disturbing these banks can accelerate erosion and might prove dangerous if a bank collapses. Disturb streamside vegetation as little as possible.

- Be very careful when walking in the stream itself. Rocky bottom streams can be very slippery and can contain deep pools; muddy bottom streams might also prove treacherous in areas where mud, silt, or sand have accumulated in sinkholes. If you must cross the stream, use a walking stick to steady yourself and to probe for deep water or much. Your partner should wait on dry land ready to assist you if you fall. Do not attempt to cross streams that are swift and above the knee in depth.

- Preferably, attach the sample bottle to a dipping pole and sample while standing on dry land.

- If you are sampling from a bridge, be wary of passing traffic. Never lean over bridge rails unless you are firmly anchored to the ground or the bridge with good hand/foot holds.

- If at any time you feel uncomfortable about the condition of the stream or your surrounding, stop monitoring and leave the site at once. Your safety is more important than the data.
APPENDIX J

FOCUS AREA GEOLOGY MAPS
GEOLOGY

Open Water
QTst - Siltstone Unit
QTst? - Siltstone Unit (uncertain)
Qa - Younger alluvium
Qac - Younger Alluvium and Colluvium
Qas - Asphalt Deposits
Qb - Beach Deposits
Qc - Colluvium
Qca - Casitas Formation
Qcg - Conglomerate Unit
Qdf - Debris Flow Deposits
Qe - Estuarine Deposits
Qg - Younger Channel Deposits
Qia - Intermediate Alluvial Deposits
Qls - Landslide Deposits
Qmt - Marine Terrace Deposits
Qmt? - Marine Terrace Deposits (Uncertain)
Qoa - Older Alluvial Deposits
Qog - Older Alluvial Deposits - Conglomerate
Qos - Older Dune Sand Deposits
Qs - Beach Sand Deposits
Qsb - Santa Barbara Formation
Qsb? - Santa Barbara Formation (Uncertain)
Qss - Sandstone Unit
Qtc - Travertine and/or Caliche Deposits
Qtp - Paso Robles Formation
Tcw - Coldwater Sandstone
Tg - Gaviota Formation
Tm - Monterey Formation
Tml - Monterey Formation, lower
Tmm - Monterey Formation, middle
Tmu - Monterey Formation, upper
Tp - Pico Formation
Tr - Rincon Shale
Trs - Rincon Shale
Tspl (Tssp) - Sespe Formation, lower
Tspu (Tsp) - Sespe Formation, upper
Tsq - Sisquoc Formation
Tv - Vaqueros Formation
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af - Artificial Fill
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Tspu (Tsp) - Sespe Formation, upper
Ts - Sisquoc Formation
Tv - Vaqueros Formation
Unmapped
af - Artificial Fill
GEOLOGY

Open Water
QTst - Siltstone Unit
QTst? - Siltstone Unit (uncertain)
Qa - Younger alluvium
Qac - Younger Alluvium and Colluvium
Qas - Asphalt Deposits
Qb - Beach Deposits
Qc - Colluvium
Qca - Casitas Formation
Qcg - Conglomerate Unit
Qdf - Debris Flow Deposits
Qe - Estuarine Deposits
Qg - Younger Channel Deposits
Qia - Intermediate Alluvial Deposits
Qls - Landslide Deposits
Qmt - Marine Terrace Deposits
Qmt? - Marine Terrace Deposits (Uncertain)
Qoa - Older Alluvial Deposits
Qog - Older Alluvial Deposits - Conglomerate
Qos - Older Dune Sand Deposits
Qs - Beach Sand Deposits
Qsb - Santa Barbara Formation
Qsb? - Santa Barbara Formation (Uncertain)
Qss - Sandstone Unit
Qtc - Travertine and/or Caliche Deposits
Qtp - Paso Robles Formation
Tcw - Coldwater Sandstone
Tg - Gaviota Formation
Tm - Monterey Formation
Tml - Monterey Formation, lower
Tmm - Monterey Formation, middle
Tmu - Monterey Formation, upper
Tp - Pico Formation
Tr - Rincon Shale
Trs - Rincon Shale
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GEOLOGY MAP
SANTA YNEZ AND JANIN ACRES FOCUS AREAS
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TspL (Tspss) - Sespe Formation, lower
TspU (Tsp) - Sespe Formation, upper
Tsq - Sisquoc Formation
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