Resolutions No. R3-2008-0005, No. R3-2009-0012, and No. R3-2011-0004 revisions to the *Water Quality Control Plan, Central Coast Basin* shown by underline (additions), strikeout (deletions) and shaded (existing language moved).

CHAPTER 4. IMPLEMENTATION PLAN

VIII.D. INDIVIDUAL, ALTERNATIVE, AND COMMUNITY ONSITE WASTEWATER ~~DISPOSAL~~ SYSTEMS

Onsite ~~sewage disposal systems and other similar methods for liquid waste disposal are sometimes viewed as interim solutions in urbanizing areas, yet may be required to function for many years. Onsite systems can be a viable long-term waste disposal method with proper siting, design, construction, and management. In establishing on- site system regulations, agencies must consider such systems as permanent, not interim systems to be replaced by public sewers. The reliability of these systems is highly dependent on land and soil constraints, proper design, proper construction, and proper operation and maintenance.~~

~~If onsite sewage treatment facilities are not carefully managed, problems can occur, including:~~

- ~~odors or nuisance;~~
- ~~surfacing effluent;~~
- ~~disease transmission; and,~~
- ~~pollution of surface and ground waters.~~

~~Odors and nuisance can be objectionable and annoying and may obstruct free use of property. Surfacing effluent (effluent which fails to percolate and rises to the ground surface) can be an annoyance, or health hazard to the resident and neighbors. In some cases, nearby surface waters may be polluted.~~

~~Onsite sewage disposal systems are a potential mechanism for disease transmission. Sewage is capable of transmitting diseases from organisms which are discharged by an infected individual. These include dysentery, hepatitis, typhoid, cholera, and gastro-intestinal disorders.~~

~~Pollution of surface or ground waters can result from the discharge of onsite system wastes. Typical problem waste constituents are total dissolved solids, phosphates, nitrates, heavy metals, bacteria, and viruses. Discharge of these wastes will, in some cases, destroy beneficial surface and ground water uses.~~

~~Subsurface disposal~~ wastewater systems may be used to treat and dispose of wastewater from: (1) individual residences; (2) multi-unit residences; (3) institutions or places of commerce; (4) industrial sanitary sources; and, (5) small communities. All individual and multi-unit residential, commercial, institutional and industrial developments with a discharge flow rate less than 2,500 gallons per day and community systems not regulated by waste discharge requirements ~~are subject to criteria in this section of the Basin Plan~~. ~~Commercial, institutional, and industrial developments with a discharge flow rate less than 2500 gallons per day generally are not regulated by waste discharge requirements; therefore, they must comply with these criteria. Community systems must also comply with criteria relating to this subject within the Basin Plan.~~ Community systems are defined for the purposes of this Basin Plan as: (1) residential wastewater treatment systems for more than 5 units or more than 5 parcels; or~~,~~ (2) commercial, institutional or industrial systems ~~to~~ treating sanitary wastewater equal to or greater than 2,500 gallons per day (average daily flow). ~~Systems of this type and size may be subject to waste discharge requirements.~~

Conventional onsite wastewater systems consist of septic tanks and leachfield or seepage pits and are typically designed to treat and dispose of domestic wastewater. Alternatives to conventional onsite system designs are ~~have been~~ used when site constraints prevent the use of conventional systems. Examples of alternative systems include (but are not limited to) enhanced treatment systems, mound or ~~and~~ evapotranspiration disposal systems, or at-grade disposal systems. ~~Remote subdivisions, commercial centers, or industries may utilize conventional collection systems with community treatment systems and subsurface disposal fields for sanitary wastes.~~ Conventional and a~~A~~lternative and community systems can pose serious water quality problems if improperly designed, installed, and/or managed.

Failures have been common in the past and are usually attributed to the following:

- Systems are inadequately or improperly sited, designed, or constructed.
- Long-term use is not considered.
- Inadequate operation and maintenance.

The following definitions are used throughout this section of the Water Quality Control Plan.

Alternative onsite system consists of additional (beyond conventional) treatment and/or disposal features engineered to overcome site constraints. A conventional onsite system that requires a pump to reach the leach area is not considered "alternative".

Application area shall be calculated no greater than the trench bottom and side walls below the bottom of the leach pipe, minus the first foot on each side. In seepage pits the application area refers to the total gravel depth in a seepage pit, minus any impervious, bedrock or clay lenses encountered in the sidewalls.

At-grade disposal systems consist of distribution pipe and bed at the native ground surface level and cover provided by filled material. At-grade disposal systems are similar to mound systems without the sand layer.

Certified professional is a person who demonstrates special qualifications (through education, experience, exam, etc.) needed to successfully perform the task at hand.

Conventional onsite system consists of a septic tank and leachfield or seepage pit.

Detrimental Water Quality Impact is any significant increase in waste concentrations or impairment of beneficial uses of a water body.

Discharger is the owner and/or operator of an onsite wastewater system.

Drainfield is used interchangeably with ~~refers to either a~~ leachfield, leach area or disposal area ~~seepage pit.~~

Effective trench depth means depth below the bottom of the leach trench distribution piping minus the first foot.

Engineered systems are treatment and disposal systems that require special design features to overcome site limitations (topography, soil conditions, shallow groundwater or setback variances).

Existing onsite system is any onsite system approved and/or installed prior to adoption of these criteria on (State Board approval date).

Failed or failing onsite system is any system that displays symptoms of inadequate dispersion, treatment or assimilation of wastewater. These may include, but are not limited to, surfacing effluent, lush growth above the leach area, sluggish house drains, impacts to surface or groundwater from the onsite discharge, odors, frequent pumping, or backflow into tank when pumped. Standard pumping frequency is recommended every five years unless system-specific characteristics support an alternative frequency.

Fill is material deposited to raise the existing or excavated ground level.

Inflow and infiltration refers to non-wastewater (stormwater, groundwater, streams, seawater) entering the wastewater system through cracks, roof drains or other openings.

Low permeability ~~**impervious material**~~ is defined as having a percolation rate slower than 120 minutes per inch or having a clay content (% passing 200 sieve) of 60 percent or greater.

Local governing jurisdiction shall refer to the local governing jurisdiction, typically city or county, vested with legislative authority for onsite wastewater system permitting.

Monitoring shall refer to any sort of quality or performance assessment, including visual inspections.

New onsite system is an onsite wastewater system placed on property that has not previously been developed, or expansion of an existing onsite system to accommodate an increase in wastewater generation, after adoption of these

criteria date of State Board approval). Repair or replacement of an existing onsite system does not constitute a new onsite system.

Onsite disposal area shall include the direct application area (trench, pit, bed) and surrounding 100' radius from any point in the application area that may be influenced by discharge from the disposal system.

Reservoir - A pond, lake, ~~tank,~~ basin, or other space either natural or created in whole or in part by the building of engineering structures, which is used for storage, regulation, and control of ~~water, recreation, power, flood control, or~~ drinking supply water.

Septage is material removed from a septic tank; usually the accumulated scum, sludge and liquid within the tank.

Sidewall is the side portion of the leach area below the bottom of the distribution piping, or total gravel depth beneath the first hole in the central pipe of a seepage pit.

Threatened condition is one that if left uncorrected may cause or contribute to water quality or public health impacts.

Watercourse – ~~(1)~~ A natural or man-made ~~artificial~~ channel for passage of water. ~~(2) A running stream of water. (3) A natural stream fed from permanent or natural sources, including rivers, creeks, runs, and rivulets.~~ There must be a stream, usually flowing in a particular direction (though it need not flow continuously) ~~in a definite channel, having a bed or banks and~~ usually discharging into some stream or body of water.

VIII.D.1. ONSITE SYSTEM IMPLEMENTATION PROGRAM

California Water Code §13260(a) requires that any person discharging waste or proposing to discharge waste that could affect the quality of the waters of the State, shall file with the appropriate Regional Board a report of waste discharge, unless the Regional Board waives such requirement.

California Water Code §13263 requires the Regional Board to prescribe waste discharge requirements, or waive waste discharge requirements, for the discharge. The waste discharge requirements must implement relevant water quality control plans and the Water Code.

California Water Code §13269 authorizes the Central Coast Water Board to waive the submittal of reports of waste discharge and waste discharge requirements for specific types of discharges where such a waiver is consistent with applicable state and regional water quality control plans and is in the public interest.

California Water Code §13269 requires that waivers shall be conditional and may be terminated at any time by the Central Coast Water Board. Waivers may be granted for discharges of waste to land, but may not be granted for discharges of waste subject to the NPDES requirements of the federal Clean Water Act. The waiver must also include monitoring unless the Regional Board determines that the discharges do not pose a significant threat to water quality.

On April 15, 1983, the Central Coast Water Board adopted a waiver of waste discharge requirements for onsite systems that was incorporated into the Basin Plan. (1983 Waiver). That 1983 Waiver waived the requirements to submit a report of waste discharge and obtain waste discharge requirements for individual sewage disposal systems and for sanitary waste disposal from certain small community, institutional, commercial, and industrial facilities if the systems met certain specified conditions. In summary, the systems were required to meet standard criteria of the governing local jurisdiction that is implementing the Basin Plan requirements pursuant to a memorandum of understanding with the Water Board or was an individual project that complies with the Basin Plan. On January 1, 2003, the 1983 Waivers terminated by operation of law due to an amendment to Water Code §13269. Since termination of the 1983 Waiver, the Central Coast Water Board has been developing revised Basin Plan criteria and a renewed conditional waiver of waste discharge requirements. Onsite wastewater systems have continued to be permitted by local governing jurisdictions consistent with the 1983 Waiver and the Basin Plan criteria and some have been subject to individual waste discharge requirements or waivers issued by the Central Coast Water Board.

This section of the Basin Plan sets forth a revised Implementation Program for onsite wastewater systems to ensure protection of waters of the state, including criteria and conditional waivers of waste discharge requirements and reports of waste discharge for existing and new onsite wastewater systems. Onsite wastewater systems covered by these renewed conditional waivers are: individual residences, multi-unit residences, institutions or places of commerce, industrial sanitary sources, and small community systems not regulated by waste discharge requirements.

The Central Coast Water Board finds that the Conditional Waivers set forth in this Implementation Program comply with Water Code §13269, are in the public interest, and are consistent with the Basin Plan because:

1. Waivers granted for discharges that do not pose a significant threat to water quality enable staff resources to be used effectively and avoid unnecessary expenditures of limited resources.

2. It was adopted in compliance with Water Code §13242 and §13269 and other applicable law.

3. It requires compliance with the Basin Plan.

4. It includes conditions that are intended to reduce and prevent pollution and nuisance and protect the beneficial uses of the waters of the State.

5. Dischargers may not discharge any waste not specifically regulated by this Conditional Waiver except in compliance with the Water Code.

6. Dischargers who violate the conditions of this Conditional Waiver are subject to enforcement pursuant to Water Code §13350 and other applicable law.

7. The discharges from onsite wastewater systems all discharge the same type of waste.

8. It provides a method for coordinating regulation with local governing jurisdictions that routinely permit and oversee onsite wastewater systems, thereby reducing overlapping regulation.

It is appropriate to regulate onsite wastewater systems by way of a Conditional Waiver rather than with individual waste discharge requirements because there are over 100,000 discharges of the listed categories. Issuing individual waste discharge requirements to each of those would use significant staff resources and is not necessary in most circumstances because such systems are regulated by local governing jurisdictions. The conditions imposed in this Conditional Waiver will be protective of waters of the state. This Conditional Waiver will simplify and streamline the regulatory process without compromising the protection of water quality.

Although a discharge may qualify for waiver enrollment, the Central Coast Water Board retains the right to regulate that discharge through other programs or Central Coast Water Board actions (such as enforcement orders, individual waste discharge requirements, general orders). The Central Coast Water Board may terminate a discharger's enrollment in a waiver at any time and require the discharge to obtain waste discharge requirements or terminate the discharge. Dischargers not eligible for the Conditional Waiver must apply for waste discharge requirements or waiver of waste discharge requirements in accordance with Water Code §13260.

Local governing jurisdictions also regulate onsite systems. The Central Coast Water Board and local governing jurisdictions typically coordinate the regulation of onsite systems. Appropriately developed and implemented memoranda of understanding between the Central Coast Water Board and local governing jurisdiction (e.g., counties and cities) provide practical and enforceable tools to compel compliance with the Basin Plan criteria for onsite systems and ensure water quality protection.

The Central Coast Water Board may approve and execute individual memoranda of understanding with local governing jurisdiction in the Region based substantially on the requirements specified in Chapter 4, Section VIII.D of the Basin Plan (sections pertaining to onsite wastewater systems). Individual memoranda of understanding shall commit the local governing jurisdiction to amending its municipal code and onsite wastewater system program, if necessary, in order to be substantially equivalent to the Basin Plan. If and when statewide criteria are adopted pursuant to California Water Code §13291, this Basin Plan

section and the memoranda of understanding will be reviewed to determine if they need to be modified. Individual memoranda of understanding shall incorporate additional measures to be taken by the local governing jurisdiction to identify and address areas of degraded groundwater or surface water quality, where onsite wastewater systems are a potential source of pollution.

This Implementation Program sets forth (1) a conditional waiver of the requirement to submit reports of waste discharge and to obtain waste discharge requirements for existing onsite systems regulated under the 1983 Waivers, (2) a conditional waiver of the requirement to obtain waste discharge requirements, but not the requirement to submit reports of waste discharges, for those systems regulated directly by the Central Coast Water Board, and (3) a conditional waiver of the requirements to submit reports of waste discharge and obtain waste discharge requirements for those systems that are regulated by local governing jurisdictions that comply with the conditions of this section.

In compliance with Water Code §13269, the conditional waivers set forth in this Basin Plan shall expire five years after [**State Board approval date**] and may be renewed.

VIII.D.1.a. CONDITIONAL WAIVER FOR EXISTING ONSITE WASTEWATER SYSTEMS

The Central Coast Water Board waives the requirement to submit reports of waste discharge and obtain waste discharge requirements for those onsite wastewater systems that existed as of [**date of approval by State Board**] that meet the eligibility criteria and comply with the conditions set forth below.

As set forth in this Implementation Program, the Water Board expects that local governing jurisdictions will continue to directly regulate most existing onsite wastewater systems. The Water Board will continue to take direct action as appropriate to protect water quality, including enforcement actions and requiring submittal of reports of waste discharge requirements, and/or issuance of individual waste discharge requirements or conditional waivers.

ELIGIBILITY CRITERIA

1. The onsite wastewater system existed as of [**date of approval by State Board**].

2. The onsite wastewater system is installed at an individual residence, multi-unit residence, institution or place of commerce, industrial sanitary source, or small community not regulated by waste discharge requirements.

3. The onsite wastewater system was required to meet the standard criteria of the local governing jurisdiction that was implementing the Basin Plan criteria or complied with the Basin Plan consistent with the 1983 Waiver.

4. The local governing jurisdiction takes the following actions:

    a. Ensures site suitability tests are performed prior to repairs and replacements, and that tests are performed in accordance with standard procedures.

    b. Ensures proper system siting (VIII.D.3.a.), design (VIII.D.3.b.), construction (VIII.D.3.d.), and installation for repairs and replacements.

    c. Adequately informs property owners regarding proper installation (of repairs and replacement), operation and ongoing maintenance of their onsite wastewater systems.

CONDITIONS

Dischargers to existing systems shall comply with the following conditions.

1. Properly operate and maintain the onsite system to prevent failure.

2. Notify the local governing jurisdiction of system failures.

3. Seek appropriate permits regarding repairs and replacements of failing systems.

4. Ensure that repairs and replacements comply with the Criteria for New Systems (Section VIII.D.>>) to the greatest extent practicable.

5. Manage and maintain the onsite wastewater system in a manner consistent with the Water Board approved onsite management plan implemented by the local governing jurisdiction.

RECOMMENDATIONS

The Water Board expects that:

1. Local ~~agencies~~ governing jurisdictions may ~~can~~ use ~~either~~ staff inspectors or individuals under contract with the local government. ~~Either way~~ A standard detailed checklist should be completed by the inspector to ~~certify compliance~~ verify the onsite wastewater system was constructed in conformance with the Basin Plan and local governing jurisdiction requirements.

2. ~~Home~~ Property owners should be made aware of the nature and requirements of their onsite wastewater system.

3. Prospective property buyers should be informed of any enforcement action affecting parcels or houses they wish to buy. Local ~~agnecies~~ governing jurisdictions should ensure the ~~have prohibition area~~ terms of the enforcement action are entered into the county record for each affected parcel. When a prospective buyer conducts a title search, terms of the enforcement action would appear in the preliminary title report.

4. All onsite wastewater system owners should ~~need to~~ be aware of proper operation and maintenance procedures. Local governing jurisdictions should mount a continuing public education program to provide home owners with onsite wastewater system operation and maintenance guidelines. Basin Plan information should be available at local governing jurisdiction health and building departments.

VIII.D.1.b. CONDITIONAL WAIVER FOR NEW ONSITE WASTEWATER SYSTEMS REGULATED DIRECTLY BY THE CENTRAL COAST WATER BOARD

The Central Coast Water Board waives the requirement to obtain waste discharge requirements, but not the requirement to submit reports of waste discharge, for new onsite wastewater systems directly regulated by the Water Board that meet the eligibility criteria and comply with the conditions set forth below.

The Central Coast Water Board's Executive Officer is authorized to enroll applicants in the onsite wastewater system conditional waiver that meet the eligibility criteria and comply with the following conditions

ELIGIBILITY CRITERIA

For an onsite wastewater system to be eligible for a conditional waiver of waste discharge requirements:

1. The onsite wastewater system is installed at an individual residence, multi-unit residence, institution or place of commerce, industrial sanitary source, or small community not regulated by waste discharge requirements.

2. The discharger receives enrollment notification from the Executive Officer.

CONDITIONS

1. The onsite wastewater system is sited (VIII.D.3.a.), designed (VIII.D.3.b.), constructed (VIII.D.3.d.) and maintained (VIII.D.3.e.) in a manner consistent with criteria specified in the Basin Plan, Chapter 4, Section VIII.D.

2. The applicant submits a report of waste discharge to the Central Coast Water Board that provides documentation of consistency with each Basin Plan criterion.

3. The applicant submits with the report of waste discharge a fee corresponding to the lowest applicable fee for waste discharge requirements (threat and complexity rating of III-C) identified in the State Water Board's fee schedule set forth in Title 23 California Code of Regulations.

4. The applicant enrolled in the Conditional Waiver complies with conditions specified in an approved onsite management plan implemented by the local governing jurisdiction, if available,

The Central Coast Water Board or its Executive Officer may terminate the discharger's enrollment in the Conditional Waiver at any time. Dischargers not eligible for the Conditional Waiver must apply for waste discharge requirements or waiver of waste discharge requirements in accordance with Water Code requirements.

VIII.D.1.c. CONDITIONAL WAIVER FOR NEW ONSITE WASTEWATER SYSTEMS REGULATED BY LOCAL GOVERNING JURISDICTIONS

The Central Coast Water Board waives the requirements to submit a report of waste discharge and associated Water Board fee, and to obtain waste discharge requirements or receive enrollment notification for new systems that meet the eligibility criteria and comply with the conditions set forth below.

ELIGIBILITY CRITERIA

For an onsite wastewater system to be eligible for a conditional waiver of the requirements to submit a report of waste discharge and obtain waste discharge requirements:

1. The onsite wastewater system is installed at an individual residence, multi-unit residence, institution or place of commerce, industrial sanitary source, or small community not regulated by waste discharge requirements.

2. The local governing jurisdiction has adopted or updated local ordinances that incorporate the Criteria for New Systems set forth in Section VIII.D.3. of the Basin Plan.

3. The local governing jurisdiction implements an onsite wastewater management plan approved by the Water Board (VIII.D.2.b.) to ensure conformance with the Basin Plan criteria set forth in Section VIII.D.3. and local regulations, and has entered into a memorandum of understanding with the Central Coast Water Board regarding onsite wastewater system management.

CONDITIONS

1. The onsite wastewater system is permitted by a local governing jurisdiction that implements the criteria for new systems (Section VIII.D.3.)

2. The onsite wastewater system is permitted by a local governing jurisdiction that implements an onsite wastewater management plan approved by the Central Coast Water Board.

3. The local governing jurisdiction has entered into a memorandum of understanding with the Central Coast Water Board regarding onsite wastewater system management.

4. The onsite wastewater system meets the criteria in Basin Plan Chapter 4, Section VIII.D. for site suitability (VIII.D.3.a.), design (VIII.D.3.b.), alternatives (VIII.D.3.c.), construction (VIII.D.3.d.), maintenance (VIII.D.3.e.), and use considerations (VIII.D.3.f.)

5. The onsite wastewater system is sited, designed, managed and maintained in a manner consistent with the Water Board approved onsite management plan implemented by the local governing jurisdiction.

6. The applicant submits any required application and fee to the local governing jurisdiction.

PROHIBITIONS

1. Local governing jurisdiction approval and discharger installation of new alternative systems are prohibited subsequent to final approval of these criteria on **[insert State Board approval date]** unless consistent with either a locally implemented onsite wastewater management plan approved by the Central Coast Water Board, or the Water Board has adopted waste discharge requirements or issued a conditional waiver of waste discharge requirements for the system.

~~VIII.D.1. CORRECTIVE ACTIONS FOR EXISTING SYSTEMS~~

~~Individual disposal systems can be regulated with relative ease when they are proposed for a particular site. For new systems, regulations generally provide for good design and construction practices. A more troublesome problem is presented by older septic tank systems where design and construction may have been less~~

~~strictly controlled or where land development has intensified to an extent that percolation systems are too close together and there is no room left for replacement leaching areas. Where this situation develops to an extent that public health hazards and nuisance conditions develop, the most effective remedy is usually a sewer system. Where soil percolation rates are particularly fast, ground water degradation is possible, particularly increases in nitrate concentrations.~~

~~Sewer system planning should be emphasized in urbanizing areas served by septic tanks. A first step would be a monitoring system involving surface and ground waters to determine whether problems are developing. Where septic tank systems in urbanized areas are not scheduled for replacement by sewers and where public health hazards are not documented, septic tank maintenance procedures are encouraged to lessen the probability that a few major failures might force sewering of an area which otherwise could be retained on individual systems without compromising water quality. Often a few systems will fail in an area where more frequent septic tank pumping, corrections to plumbing or leach fields, or in-home water conservation measures could help prevent failure. Improvements of this kind should be enforced by a local septic tank maintenance district or local governing jurisdiction.~~

~~A septic tank subjected to greater hydraulic load can fail due to washout of solids into percolation areas and plugging of the infiltrative surface. In some cases, excess wash water could be diverted to separate percolation areas by in-home plumbing changes. Dishwashers, garbage grinders, and washing machines could be eliminated. Water saving toilets, faucets, and shower heads are available to encourage low water use. Water use costs may also be structured to encourage more frugal use of water.~~

VIII.D.2. LOCAL GOVERNING JURISDICTION ACTIONS

VIII.D.2.a. DISCLOSURE AND COMPLIANCE OF EXISTING ONSITE WASTEWATER ~~DISPOSAL~~ SYSTEM

The Water Board, on March 20, 2009, adopted a Basin Plan Implementation Program establishing a conditional waiver for onsite wastewater systems that meet the conditions (Basin Plan Section VIII.D.1). For an onsite wastewater system to be eligible for a conditional waiver of Report of Waste Discharge and Waste Discharge Requirements, ~~L~~local governing jurisdictions ~~should provide~~ must develop and implement programs to assure conformance with this Basin Plan (as found in the following sections) and local regulations and enter into memorandum of understanding with the Central Coast Water Board. Such programs shall include (but not be limited to) procedures to:

- ~~Inspection programs should as~~Ensure site suitability tests are performed as necessary, and that tests are performed in accordance with standard procedures.

- ~~Inspection should also as~~Ensure proper system siting, design, contruction and installation~~.~~;and ~~Proper design and construction should be certified by the inspector.~~

- Adequately inform property ~~All onsite system~~ owners ~~need to be aware of~~ regarding proper installation, operation and ongoing maintenance ~~procedures~~ of their onsite wastewater systems.

~~Concerned homeowners can be a tremendous asset in assuring proper construction. When a septic system permit is issued by the local agency, a handout specifying proper construction techniques should be made available to the general public. Systems must be inspected by the local agency before covering (backfilling).~~

Local ~~agencies can~~ governing jurisdictions may use ~~either~~ staff inspectors or individuals under contract with the local government. ~~Either way, a~~ A standard detailed checklist should be completed by the inspector to ~~certify compliance~~ verify the onsite wastewater system was constructed in conformance with the Basin Plan and local governing jurisdiction requirements.

~~Site suitability determinations should specify: (1) whether approval is for the entire lot or for specific locations of the lot; (2) if further tests are necessary; and, (3) if alternatives are necessary or available.~~

~~Where agency approval is necessary from various departments, final sign-offs should be on the same set of plans.~~

~~Home~~ Property owners should be aware of the nature and requirements of their onsite wastewater disposal system. Plans should be available in city or county offices showing placement of soil absorption systems. ~~Since this is only feasible for new construction, l~~Local agencies should require ~~septic~~ onsite wastewater system as-built plans as a condition of new construction final inspection.

Prospective property buyers should be informed of any enforcement action affecting parcels or houses they wish to buy. ~~For example, a parcel in a discharge prohibition area may be unbuildable for an indefinite period, or a developed parcel may be subject to significant user charges from a future sewer system.~~ Local ~~agencies~~ governing jurisdictions should ~~have prohibition area~~ ensure the terms of the enforcement action are entered into the county record for each affected parcel. When a prospective buyer conducts a title search, terms of the ~~prohibition~~ enforcement action would appear in the preliminary title report.

All onsite wastewater system owners need to be aware of proper operation and maintenance procedures. Local governing jurisdictions should mount a continuing public education program to provide homeowners with onsite wastewater system operation and maintenance guidelines. Basin Plan information should be available at local ~~agency~~ governing jurisdiction health and building departments.

Dual leaching capabilities provide an immediate remedy in the event of system failure. For that reason, dual leachfields are considered appropriate for all systems. Furthermore, should wastewater flows increase, this area can be used until the system is expanded. ~~For these reasons, d~~Dedicated system expansion areas are also appropriate. To protect this set-aside area from encroachment, the local ~~agency~~ governing jurisdiction ~~should~~ shall require restrictions on future use of the area as a condition of land division or building permit approval. For new subdivisions, Covenants, Conditions and Restrictions (CC&R's) or additional map sheets recorded with the Parcel or Tract Final Map might provide an appropriate mechanism for protecting a set aside area. Future buyers of affected property would be notified of property use restrictions by reading the CC&R's or Final Map.

~~Local agencies should conduct an onsite system inspection program, particularly in areas where system failures are common or where systems with poor soils are approved. An agency inspector should periodically check each septic tank for pumping need and each system for proper operation. Homeowners should be alerted where evidence of system failure exists. Where nuisance or a potential public health hazard exists, a followup procedure should insure the situation is corrected. Onsite systems should be constructed in a location that facilitates system inspection.~~

~~Another approach is periodically to mail homeowners a brochure reminding them how to maintain and inspect their onsite system. Homeowners should be notified that they should periodically check their septic tank for pumping need. Homeowners should also be notified of other problems indicative of system failure. Some examples include wet spots in drainfield area, lush grass growths, slowly draining wastewater, and sewage odors.~~

Many existing systems do not comply with current or proposed standards. Repairs to failing systems ~~should~~ shall be done under permit from the local ~~agency~~ governing jurisdiction. ~~To the extent practicable, t~~The local governing jurisdiction shall ~~agency should~~ require failing systems to be brought into compliance with Basin Plan ~~recommendations~~ or repair criteria consistent with locally implemented onsite management plan (approved by the Central Coast Water Board). ~~This could be a condition of granting a permit for repairs.~~

Land use changes ~~on properties used for commerce, small institutions, or industries~~ should not be approved by the local ~~agency~~ governing jurisdiction until the existing onsite system meets criteria of this Basin Plan and local ordinances. ~~A land use permit or business license could be used to alert the local agency of land use changes.~~

Within the following sections, criteria are specified for RECOMMENDATIONS, REQUIREMENTS and PROHIBITIONS.

RECOMMENDATIONS

1. Inform property buyers of the existence, location, operation, and maintenance of onsite disposal systems. Prospective home or property buyers should also be informed of any enforcement action (e.g., Basin Plan prohibitions) ~~affecting parcels or houses they wish to buy~~ through the County Record.

2. ~~Local governing jurisdictions should~~ Conduct ~~mount a continuing~~ public education programs to provide property ~~home~~ owners with ~~onsite system~~ operation and maintenance guidelines.

3. It may be appropriate for ~~unsewered community~~ onsite systems to be maintained by local onsite ~~sewage disposal~~ maintenance districts.

4. ~~Adopt a~~ Standard soil ~~percolation~~ testing procedures should be adopted.

5. Onsite Wastewater Management Plans should be prepared and implemented for ~~in~~ urbanizing and high density areas ~~to investigate long-term cumulative impacts resulting from continued use of individual, alternative, and community~~ served by onsite wastewater ~~disposal~~ systems.

REQUIREMENTS

6. ~~To the extent practicable, the~~ Local ~~agency~~ governing jurisdictions shall ~~should~~ require replacements or repairs to failing systems to be in substantial conformance ~~compliance~~ (to the greatest extent practicable) with the Basin Plan ~~recommendations~~ criteria for site suitability (VIII.D.3.a.), design (VIII.D.3.b.), alternatives (VIII.D.3.c.), construction (VIII.D.3.d.), maintenance (VIII.D.3.e.), and use considerations (VIII.D.3.f.) or the local onsite wastewater management plan.

7. Local governing jurisdictions shall ensure that alternative onsite system owners are ~~shall be~~ provided an informational maintenance or replacement document by the system designer or installer ~~appropriate governing jurisdiction~~. This document shall cite homeowner procedures to ensure maintenance, repair, or replacement of critical items within 48 hours following failure.

8. Local ordinances shall ~~should~~ be updated to reflect Basin Plan criteria for management plans (VIII.D.2.b.), site suitability (VIII.D.3.a.), design (VIII.D.3.b.), alternatives (VIII.D.3.c.), construction (VIII.D.3.d.), maintenance (VIII.D.3.e.), and use considerations (VIII.D.3.f.)

PROHIBITIONS

9. New alternative systems are prohibited unless consistent with a locally implemented onsite wastewater management plan approved by the Central Coast Water Board or waste discharge requirements issued or waived by the Water Board.

VIII.D.2.b. ONSITE WASTEWATER MANAGEMENT PLANS

As set forth in Section VIII.D.1, the Water Board, adopted a conditional waiver of the requirements to submit a report of waste discharge and obtain waste discharge requirements for certain onsite wastewater systems where the local governing jurisdiction develops and implements an onsite wastewater management plan that is approved by the Water Board. This section sets forth the purpose and content of the onsite wastewater management plan that must be included prior to Water Board approval. Approval of onsite system wastewater management plans shall be based upon (but not limited to) the inclusion of the elements set forth below. A guidance document, titled "Central Coast Water Board Checklist for Developing & Reviewing Onsite Wastewater Management Plans" is provided to assist local governing jurisdictions in developing the plan.

1. For a conditional waiver to apply to onsite wastewater systems, onsite wastewater management plans shall ~~should~~ be implemented in urbanizing areas to investigate and reduce or prevent long-term cumulative impacts resulting from continued use of individual, alternative, and community onsite wastewater systems. ~~A wastewater disposal study should be conducted to determine the best Wastewater Management Plan that would provide site or basin specific wastewater re-use. This study should identify basin specific criteria to prevent water quality degradation and public health hazards and provide an evaluation of the effects of existing and~~

~~proposed developments and changes in land use.~~ ~~These~~ Onsite wastewater management plans should be a comprehensive planning tool to specify onsite disposal system limitations to prevent ground or surface water degradation.

~~2. Onsite wastewater management should be implemented in urbanizing areas to investigate long-term cumulative impacts resulting from continued use of individual, alternative, and community onsite wastewater disposal systems.~~

2. Onsite ~~W~~wastewater management plans shall ~~should~~ include (but not be limited to) the following elements:

- Survey and evaluation of information regarding effectiveness of existing onsite systems.
- ~~Contain a~~ Water quality (groundwater and surface water) ~~monitoring~~ evaluation program.
- ~~Identify sites suitable for conventional septic systems.~~
- Projections of onsite disposal system demand and determinateions of ~~sites and~~ methods to best meet demand.
- ~~Project maximum population densities for each subdrainage basin to control degradation or contamination of ground or surface water.~~
- Recommendations and requirements for existing onsite wastewater system inspection, monitoring, maintenance and repairs including procedures to ensure that replacements or repairs to failing systems are done under permit from the local governing jurisdiction and in substantial conformance (to the greatest extent practicable) with Basin Plan criteria for site suitability (VIII.D.3.a.), design (VIII.D.3.b.), alternatives (VIII.D.3.c.), construction (VIII.D.3.d.), maintenance (VIII.D.3.e.), and use considerations (VIII.D.3.f.) or the local onsite wastewater management plan.
- Recommendations and requirements for new onsite wastewater systems reflecting Basin Plan conditions and criteria (VIII.D.3).
- ~~Identify a~~Alternate~~ive~~ means of disposing of sewage in the event of disposal system failure and/or irreversible degradation from onsite disposal ~~systems~~.
- Procedures to assure that land use changes ~~on properties used for commerce, small institutions, or industries, should not be~~ are not approved by the local ~~agency~~ governing jurisdiction until existing onsite wastewater systems meet criteria of this Basin Plan and local ordinances.
- Education and outreach programs~~.~~ including procedures to inform property buyers of the existence, location, operation, and maintenance of onsite disposal systems. Prospective home or property buyers should also be informed of any enforcement action (e.g., Basin Plan prohibitions) through the County Record. The education and outreach program shall also include procedures to ensure that alternative onsite system owners ~~shall be~~ are provided an informational maintenance or replacement document by the ~~appropriate governing jurisdiction~~ system designer or installer. This document shall cite homeowner procedures to ensure maintenance, repair, or replacement of critical items within 48 hours following failure.
- Enforcement options.
- Septage management.
- Program administration, staffing, records keeping, installation and repairs tracking, and financing.
- ~~Recommend establishment~~ Consideration of the appropriateness of onsite ~~septic tank~~ maintenance districts~~, as needed~~.
- Adoption of standard soil testing procedures.
- Adoption or update of local ordinances ~~should be updated~~ to reflect Basin Plan criteria for management plans (VIII.D.2.b.), site suitability (VIII.D.3.a.), design (VIII.D.3.b.), alternatives (VIII.D.3.c.), construction (VIII.D.3.d.), maintenance (VIII.D.3.e.), and use considerations (VIII.D.3.f.)

- ~~Local agencies should require~~ Procedures to assure that ~~septic system~~ onsite wastewater system as-built plans are required as a condition of new construction final inspection, and procedures to assure that plans are available in city or county offices showing placement of soil absorption systems.

~~For areas where watershed-wide plans are not developed, conditions could be placed on new divisions of land or community systems to provide monitoring data or geologic information to contribute to the development of a Wastewater Management Plan.~~

~~Wastewater disposal alternatives should identify costs to each homeowner. A cost-effectiveness analysis, which considers socio-economic impacts of alternative plans, should be used to select the recommended plan.~~

Consideration of use of o~~O~~nsite wastewater disposal zones, as discussed in ~~Section~~ §6950-6981 of the Health and Safety Code, may be an appropriate means of implementing onsite ~~W~~wastewater ~~M~~management ~~P~~plans.

~~Onsite Wastewater Management Plans shall be approved by the Regional Board.~~

VIII.D.2.c. ONSITE WASTEWATER SYSTEM ~~SEPTIC TANK~~ MAINTENANCE DISTRICTS

It may be appropriate for unsewered community onsite systems to be maintained by local ~~sewage disposal~~ onsite wastewater system maintenance districts. These special districts could be administered through existing local governments such as County Water Districts, a Community Services District, or a County Service Area.

~~Septic tank~~ Onsite wastewater system maintenance districts ~~should be~~ are responsible for operation and maintenance in conformance with this Water Quality Control Plan. ~~Administrators~~ Such districts should insure proper construction, installation, operation, and maintenance of onsite ~~disposal~~ wastewater systems. Maintenance districts should establish ~~septic tank~~ onsite system surveillance, maintenance and pumping programs, ~~where appropriate;~~ provide repairs to plumbing or leachfields~~;~~, and encourage water conservation measures.

VIII.D.3. CRITERIA FOR NEW SYSTEMS

Onsite ~~sewage disposal~~ wastewater system problems can be minimized with proper site location, design, installation, operation~~,~~ and maintenance. The following section ~~recommends~~ includes criteria for all new ~~individual subsurface~~ onsite wastewater disposal systems ~~and community sewage disposal systems~~. Local governing jurisdictions ~~should~~ shall incorporate these guidelines into their local ordinances. These ~~recommendations~~ criteria and guidelines will be used by the Central Coast Water ~~Regional~~ Board for ~~Regional~~ Water Board regulated systems and exemptions.

Local governing jurisdictions may authorize alternative onsite systems if the agency acts consistent with locally implemented onsite wastewater management plans approved by the Central Coast Water Board and with the Basin Plan criteria specified in VIII.D.3.c.

For any onsite system, limited disposal options are available for septage (solids periodically removed from septic tanks). As a component of a wastewater management plan, long-term septage disposal plans shall be considered and developed by local governing jurisdictions.

Onsite wastewater system criteria ~~Recommendations~~ are arranged in sequence under the following categories: site suitability~~;~~, onsite system design~~;~~, design for alternative and engineered systems, construction~~;~~, ~~individual~~ onsite system maintenance~~;~~, use considerations, onsite wastewater system prohibition areas, and subsurface disposal exemptions ~~community system design; and local agencies~~. Within each category, criteria are specified for RECOMMENDATIONS, REQUIREMENTS and PROHIBITIONS.

~~Mandatory criteria are listed in the "Individual, Alternative, and Community Systems Prohibitions" section.~~

VIII.D.3.a. SITE SUITABILITY

RECOMMENDATIONS

~~Prior to permit approval, site investigation should determine onsite system suitability:~~

~~1. At least one soil boring or excavation per onsite system should be performed to determine soil suitability, depth to ground water, and depth to bedrock or impervious layer. Soil borings are particularly important for seepage pits. Impervious material is defined as having a percolation rate slower than 120 minutes per inch or having a clay content 60 percent or greater. The soil boring or excavation should extend at least 10 feet below the drainfield[1] bottom at each proposed location.~~

1. For new land divisions, ~~protect~~ onsite disposal systems and expansion areas should be protected from encroachment by provisions in covenants, conditions, and restrictions (CC&Rs), recorded in Final Maps or similar mechanisms. ~~To protect this set-aside area from encroachment, the local agency should require restrictions on future use of the area as a condition of land division or building permit approval. For new subdivisions, Covenants, Conditions and Restrictions (CC&R's) might provide an appropriate mechanism for protecting a set aside area. Future buyers of affected property would be notified of property use restrictions by reading the CC&R's.~~

2. Percolation test holes ~~For leachfields,~~ (at least three ~~percolation test locations~~ per system) should be ~~used~~ drilled with a hand auger. ~~to determine system acceptability. Tests should be performed at proposed subsurface disposal system sites and depths.~~A hole could be hand augered or dug with hand tools at the bottom of a larger excavation made by a backhoe.

3. Natural ground slope of the disposal area should not exceed 20 percent.

4. An excavation should be made to detect mottling or presence of underground channels, fissures, or cracks. Soils should be excavated to a depth of 4-5 feet below drain field bottom.

~~[1] "Drainfield" refers to either a leachfield or seepage pit.~~

REQUIREMENTS

5. At least one soil boring or excavation per onsite system ~~should~~ shall be performed to determine soil suitability, depth to groundwater, and depth to bedrock or impervious layer. Soil borings are particularly important for seepage pits. The soil boring or excavation should extend at least 10 feet below the drain field bottom at each proposed location and be performed during or shortly after the wet season to characterize the most limiting conditions.

6. For leachfields, at least three percolation test locations ~~should~~ shall be used to determine system acceptability.

7. Percolation tests shall ~~should~~ be continued until a stabilized rate is obtained.

8. Percolation ~~T~~tests shall ~~should~~ be performed at ~~proposed subsurface disposal sites and depths~~ a depth corresponding to the bottom of the subsurface disposal area.

9. If no restrictive layers intersect, and geologic conditions permit surfacing, the setback distance from a cut, embankment, or steep slope (greater than 30 percent) should be determined by projecting a line 20 percent down gradient from the sidewall at the highest perforation of the discharge pipe. The leachfields shall ~~should~~ be set-back far enough to prevent this projected line from intersecting the cut within 100 feet, measured horizontally, of the sidewall. If restrictive layers intersect cuts, embankments or steep slopes, and geologic conditions permit surfacing, the setback shall ~~should~~ be at least 100 feet measured from the top of the cut.

~~5. Natural ground slope of the disposal area should not exceed 20 percent.~~

10. Prior to permit approval, site investigation shall determine onsite system suitability (consistency with recommendations, requirements and prohibitions specified in this section). Seepage pits should be utilized only

after careful consideration of site suitability.

11. Distances between trench bottom and highest seasonal usable groundwater, including perched groundwater, shall not be less than the separation specified by appropriate percolation rate:

Percolation Rate (minutes/inch)*	Distance (feet)
~~<1~~	~~50~~
1-4	20
5-29	8
>30	5

*Onsite disposal in soils with percolation rates faster than one minute per inch are prohibited without additional (alternative) treatment.

12. Onsite disposal systems on slopes greater than 20 percent shall be designed by a certified professional.

PROHIBITIONS

13. For new land divisions (including lot splits) served by onsite systems, lot sizes less than one acre are prohibited ~~should not be permitted~~ unless authorized under an onsite management plan approved by the Central Coast Water Board. For the purpose of this prohibition, secondary units are considered "de-facto" lot splits and shall not be constructed on lots less than two acres in size unless consistent with onsite management plans.

14. Onsite wastewater disposal shall not be located in areas subject to inundation from a 25-year ~~ten-year~~ flood.

15. Onsite disposal systems shall not be installed where natural ground slope of the disposal area exceeds 30 percent.

16. ~~For~~ Leachfields are prohibited in soils where percolation rates are slower than 120 min/in unless parcel size is at least two acres. Disposal systems designed to accommodate slow percolation rates (such as evapotranspiration systems) shall be evaluated as alternative systems.

17. Onsite discharge is prohibited on any site unable to maintain subsurface disposal.

18. Onsite discharge is prohibited where lot sizes, dwelling densities or site conditions cause~~ing~~ detrimental impacts to water quality.

19. Onsite discharge is prohibited within a water supply reservoir watershed where ~~the density for each land division~~ parcel size is less than one ~~2.5~~ acre~~s~~, unless consistent with an for areas onsite wastewater management plan approved by the Central Coast Water Board.

20. Onsite discharge is prohibited in any area where continued use of onsite systems constitutes a public health hazard, an existing or threatened condition of water pollution, or nuisance.

21. Onsite discharge is prohibited where soils or formations with ~~contain continuous~~ channels, cracks, ~~or~~ fractures, or percolation rates allow inadequately treated waste to surface or degrade water quality.*

* Unless a setback distance of at least 250 feet to any domestic water supply well or surface water is ~~as~~ensured.

22. ~~For~~ Seepage pits are prohibited in soils or formations containing 60 percent or greater clay (a soil particle less than two microns in size) unless parcel size is at least two acres.

23. For seepage pits, distances between pit bottom and usable groundwater, including perched groundwater, shall not be less than separation specified by appropriate soil type:

Soil Type	Distance (feet) additional (alternative) treatment required
Gravels	
Gravels with few fines*	20
Other	10

* Gravels with few fines - Soils with 90 percent to 94 percent coarse fraction larger than a No. 4 sieve.

24. Onsite discharge in soils with percolation rates faster than one minute per inch is prohibited without additional treatment consistent with an onsite management plan implemented by the local governing jurisdiction and approved by the Central Coast Water Board.

25. Onsite discharge is prohibited in fill unless specifically engineered as a disposal area.

VIII.D.3.b. ONSITE SYSTEM DESIGN

~~Onsite systems should be designed according to the following~~

RECOMMENDATIONS

1. Dual disposal fields (200 percent of original calculated disposal area) should be installed.

2. For commercial and institutional systems, pretreatment may be necessary if wastewater is significantly different from domestic wastewater.

3. Distance between drainfield trenches should be at least two times the effective trench depth. Distance between seepage pits (nearest sidewall to sidewall) should be at least 20 feet.

4. Application area used in design calculations should be no greater than defined in section VIII.D.

5. Seepage pit application rate should not exceed 0.3 gallons per day (gpd) per square foot.

REQUIREMENTS

6. ~~Septic~~ Onsite wastewater treatment tanks ~~should~~ shall be water-tight, and designed to remove ~~nearly 100 percent of~~ settleable solids and should provide a high degree of anaerobic decomposition of colloidal and soluble organic solids.

7. The minimum design flow rate ~~should~~ shall be 375 gallons per day for a 3-bedroom house, and 75 gpd should be added for each additional bedroom.

8. Drainfield design shall be based only upon usable permeable soil layers.

9. Leachfield loading application rate shall ~~should~~ not exceed the following:

Percolation Rate (minutes/inch)	Loading Rate (gpd/sq.ft.)
1 - 20	0.8
21 - 30	0.6
31 - 60	0.25
61 - 120	0.10

10. If curtain drains divert groundwater to subsurface soils, the upslope separation from a leachfield or pit shall be at least 20 feet and the down slope separation shall be at least 50 feet.

11. Onsite system design shall allow access for inspection and cleaning. Septic tanks must be accessible for pumping.

12. For commercial, institutional, ~~or sanitary~~ industrial and community systems ~~not basing~~, design shall be based on daily peak flow.

13. Dual disposal systems shall be ~~are~~ installed (200 percent ~~of total~~ of original calculated disposal area) for community systems.

14. All onsite disposal ~~For individual~~ systems ~~on new land divisions, and commercial, institutional, and sanitary industrial systems without an~~ shall reserve an expansion area ~~set aside~~ (additional 100% ~~percent~~ disposal capacity ~~replacement area~~) to be set aside and protected from all uses except future drainfield repair and replacement. Community systems shall install dual drainfields ~~disposal systems~~ (200% ~~percent of total~~ original calculated disposal capacity ~~area~~) and reserve replacement area (3rd 100% disposal capacity).

15. Community systems shall provide duplicate individual equipment components for components subject to failure (such as pumps).

16. Distances between trench/pit bottom and bedrock or other low permeability ~~layer~~ material shall be at least ~~less than~~ ten feet.

17. Where site conditions permit migration of wastewater to water, setback distances from disposal trench/pit shall be at least ~~less than~~:

	Minimum Setback Distance (feet)
Domestic water supply wells ~~in unconfined aquifer~~	100
Watercourse[4] where geologic ~~conditions permit water migration~~	100
Drinking water supply reservoir Spillway[5] elevation	200
Springs, natural or any part of a man-made spring	100

18. Community systems shall be designed with adequate capacity to accommodate the build-out population.

19. Community wastewater treatment and disposal facilities shall be operated by a public agency. ~~(~~If a demonstration is made to the Central Coast Water ~~Regional~~ Board that an existing public agency is unavailable and formation of a new public agency is unreasonable, a private entity with adequate financial, legal, and institutional resources to assume responsibility for waste discharges may be acceptable~~)~~.

PROHIBITIONS

20. Onsite discharge to ~~For~~ leachfields is prohibited where soil percolation rates are slower than 60 minutes per inch unless the system is designed for an effluent application rate of ~~is~~ 0.1 gpd per square foot of application area, or less.

21. Discharge shall ~~does~~ not exceed 40 grams per day of total nitrogen, on the average, per ~~½~~ acre ~~of total development overlying~~ served by onsite system overlying groundwater recharge areas, except where a local governing jurisdiction has adopted a Wastewater Management Plan ~~subsequently~~ approved by the Central Coast Water ~~Regional~~ Board .

22. Community system seepage pits are prohibited unless additional (alternative) treatment is provided consistent with an onsite management plan implemented by the local governing jurisdiction and approved by the Central Coast Water Board. Such seepage pits shall have at least 15 vertical feet between pit bottom and highest usable groundwater, including perched groundwater.

23. Inflow and infiltration shall be precluded from the system unless design specifically accommodates such excess flows.

24. Onsite wastewater systems are prohibited in any subdivision unless the subdivider clearly demonstrates the installation, operation and maintenance ~~use~~ of the onsite system will be properly functional and in ~~the best public interest, that beneficial uses will not be adversely affected, and~~ compliance with all Basin Plan ~~prohibitions is demonstrated~~ criteria for new onsite systems (VIII.D.3.)

25. Curtain drains that discharge to ground surface or surface water are prohibited within 50 feet down slope of onsite system disposal areas.

~~2. Tank design must allow access for inspection and cleaning. The septic tank must be accessible for pumping.~~

~~3. If curtain drains discharge diverted ground water to subsurface soils, the upslope separation from a leachfield or pit should be 20 feet and the down slope separation should be 50 feet.~~

~~4. Leachfield application rate should not exceed the following:~~

~~Percolation Rate (minutes/inch)~~	~~Loading Rate (gpd/sq.ft.)~~
~~1 - 20~~	~~0.8~~
~~21 - 30~~	~~0.6~~
~~31 - 60~~	~~0.25~~
~~61 - 120~~	~~0.10~~

~~5. Seepage pit application rate should not exceed 0.3 gpd/sq. ft.~~

~~6. Drainfield[1] design should be based only upon usable permeable soil layers.~~

~~7. The minimum design flow rate should be 375 gallons per day per dwelling unit.~~

~~8. In clayey soils, systems should be constructed to place infiltrative surfaces in more permeable horizons.~~

~~9. Distance between drainfield trenches should be at least two times the effective trench depth.[2]~~

~~10. Distance between seepage pits (nearest sidewall to sidewall) should be at least 20 feet.~~

~~11. Dual disposal fields (200 percent of original calculated disposal area) are recommended.~~

~~12. For commercial systems, small institutions, or sanitary industrial systems, design should be based on daily peak flow.~~

~~13. For commercial and institutional systems, pretreatment may be necessary if wastewater is significantly different from domestic wastewater~~.

~~14. Commercial systems, institutional systems, or domestic industrial systems should reserve an expansion area (i.e. dual drainfields must be installed and area for replacement of drainfield must be provided) to be set aside and protected from all uses except future drainfield repair and replacement.~~

~~15. Nutrient and heavy metal removal should be facilitated by planting ground cover vegetation over shallow subsurface drainfields. The plants must have the following characteristics: (1) evergreen, (2) shallow root systems, (3) numerous leaves, (4) salt resistant, (5) ability to grow in soggy soils, and (6) low or no maintenance. Plants downstream of leaching area may also be effective in nutrient removal~~.

~~[1] "Drainfield" refers to either a leachfield or seepage pit.~~

VIII.D.3.c. DESIGN FOR ALTERNATIVE AND ENGINEERED SYSTEMS

RECOMMENDATIONS

1. Mound systems, evapotranspiration systems, and other alternative onsite systems should be designed and installed in accordance with ~~criteria contained in Guidelines for Mound Systems by~~ guidelines available from the State Water Resources Control Board.

REQUIREMENTS

2. ~~Evapotranspiration systems should be installed in accordance with criteria contained in Guidelines for Evapotranspiration Systems by the State Water Resources Control Board. Exceptions are:~~

   ~~a. For evapotranspiration systems, each month of the highest precipitation year and lowest evaporation year within the previous ten years of record should be used for design.~~

   ~~b.~~ Alternative onsite wastewater s~~S~~ystems shall be designed by a ~~registered civil engineer~~ certified professional competent in alternative onsite wastewater system design ~~sanitary engineering~~.

3. Alternative and engineered onsite wastewater systems shall be located, designed, installed, operated, maintained, and monitored in accordance with a locally implemented onsite management plan approved by the Central Coast Water Board.

PROHIBITIONS

4. Alternative and engineered onsite wastewater systems are prohibited, except where consistent with a locally implemented onsite management plan approved by the Central Coast Water Board.

VIII.D.3.d. CONSTRUCTION

RECOMMENDATIONS

~~Water quality problems resulting from improper construction can be reduced by following these practices:~~

1. Construction activities should follow recommendations and precautions described in the Environmental Protection Agency's Design Manual: Onsite Wastewater Treatment and Disposal Systems.

2. ~~Subsurface disposal~~ Onsite wastewater systems should have a slightly sloped finished grade to promote surface runoff.

3. Surface runoff should be diverted around open trenches/pits to limit siltation of the trench bottom area.

4. Work should be scheduled only when infiltrative surfaces can be covered in one day to minimize windblown silt or rain clogging the soil.

5. In clayey soils, work should be done only when soil moisture content is low enough to avoid smear~~ed~~ing of infiltrative surfaces.

6. Bottom and sidewall areas should be left with a rough surface. Any smeared or compacted surfaces should be removed.

7. Bottom of trench~~es~~ or bed~~s~~ distribution piping should be level throughout to prevent localized overloading.

~~6. Two inches of coarse sand should be placed on the bottom of trenches to prevent compacting soil when leachrock is dumped into drainfields. Fine sand should not be used as it may lead to system failure.~~

~~7. Surface runoff should be diverted around open trenches/ pits to limit siltation of bottom area.~~

~~8. Prior to backfilling, the distribution system should be tested to check the hydraulic loading pattern.~~

8. Properly constructed distribution boxes or junction fittings should be installed to maintain equal flow to each trench. Distribution boxes should be placed with extreme care outside the leaching area to insure settling does not occur.

9. Risers to the ground surface and manholes should be installed over the septic tank inspection ports and access ports.

10. Drainfield should include an inspection pipe to check water level.

11. Nutrient and heavy metal removal should be facilitated by planning ground cover vegetation over shallow subsurface drainfields. The plants must have the following characteristics: (1) evergreen, (2) shallow root systems, (3) numerous leaves, (4) salt resistant, (5) ability to grow in soggy soils, and (6) low or no maintenance. Plants downstream of leaching area may also be effective in nutrient removal.

~~Additional construction precautions are discussed within the Environmental Protection Agency's Design Manual: Onsite Wastewater Treatment and Disposal Systems~~.

~~[2]"Effective trench depth" means depth below the bottom of the trench pipe.~~

REQUIREMENTS

12. Prior to backfilling, the distribution system should be tested to check the hydraulic loading pattern.

13. Disposal systems ~~must~~ shall be inspected by the ~~local~~ permitting agency prior to covering to ensure proper construction. Designers and/or installers of engineered onsite wastewater systems shall provide a letter to the permitting authority stating that the onsite system was installed in conformance with the approved plans.

VIII.D.3.e. ~~INDIVIDUAL~~ ONSITE SYSTEM MAINTENANCE

~~Individual septic tanks should be maintained as follows:~~

RECOMMENDATIONS

1. Septic tanks should be inspected every two to five years to determine the need for pumping. ~~If garbage grinders or dishwashers discharge into the septic tank, inspection should occur at least every two years.~~

2. Septic tanks should be pumped whenever: (1) the scum layer is within three inches of the outlet device; or (2) the sludge level is within eight inches of the bottom of the outlet device, or (3) every five years, whichever is sooner.

3. Drainfields should be alternated when drainfield inspection pipes reveal a high water level or every six months, whichever is sooner.

REQUIREMENTS

4. Onsite wastewater systems shall be maintained in accordance with approved onsite management plans. Where onsite management plans have not been approved by the Central Coast Water Board, onsite systems shall be maintained as described in

requirements 5 and 6 below.

5. Disposal of septage (solid residue pumped from septic tanks) ~~should~~ shall be accomplished in a manner acceptable to the Central Coast Water Board Executive Officer. ~~In some areas, disposal may be to either a Class I or Class II solid waste site; in others, septage may be discharged to a municipal wastewater treatment facility.~~

6. Records of maintenance, pumping, septage disposal, etc. shall be maintained by the onsite system owner and available upon request.

~~**VIII.D.3.f. COMMUNITY SYSTEM DESIGN**~~

~~Community systems should be designed and maintained to accommodate the following items:~~

~~1. Capacities should accommodate build-out population.~~

~~2. Design should be based upon peak daily flow estimates.~~

~~3. Design should consider contributions from infiltration throughout the collection system.~~

~~4. Septic tanks should be pumped when sludge and scum levels are greater than 1/3 of the depth of the first compartment.~~

~~5. Operation and maintenance should be in accordance with accepted sanitary practice.~~

~~6. Maintenance manuals should be provided to system users and maintenance personnel.~~

~~7. Discharge should not exceed 40 grams per day total nitrogen, on the average, per acre of total development overlying ground water recharge areas, unless local governing jurisdictions adopt Wastewater Management Plans subsequently approved by the Regional Board.~~

~~**VIII.D.3.g. LOCAL AGENCIES**~~

~~Recommendations for local governing jurisdictions:~~

~~1. Adopt a standard percolation test procedure.~~

~~The California State Water Resources Control Board Guidelines for Evapotranspiration Systems provides a percolation test method recommended for use to standardize test results. A twelve-inch diameter percolation test hole may be used.~~

~~2. Percolation tests should be continued until a stabilized rate is obtained.~~

~~3. Percolation test holes should be drilled with a hand auger. A hole could be hand augered or dug with hand tools at the bottom of a larger excavation made by a backhoe.~~

~~4. Percolation tests should be performed at a depth corresponding to the bottom of the subsurface disposal area.~~

~~5. Seepage pits should be utilized only after careful consideration of site suitability. Soil borings or excavations should be inspected either by permitting agency or individual under contract to the permitting agency.~~

~~6. Approve permit applications after checking plans for erosion control measures.~~

~~7. Inspect systems prior to covering to assure proper construction.~~

~~8. Require replacements or repairs to failing systems to be in conformance with Basin Plan recommendations, to the extent practicable.~~

~~9. For new land divisions, protect onsite disposal systems and expansion areas from encroachment by provisions in covenants, conditions, and restrictions.~~

~~10. Inform property buyers of the existence, location, operation, and maintenance of onsite disposal systems. Prospective home or property buyers should also be informed of any enforcement action (e.g. Basin Plan prohibitions) through the County Record.~~

~~11. Conduct public education programs to provide property owners with operation and maintenance guidelines.~~

~~12. Alternative system owners shall be provided an informational maintenance or replacement document by the appropriate governing jurisdiction. This document shall cite homeowner procedures to ensure maintenance, repair, or replacement of critical items within 48 hours following failure.~~

~~13. Where appropriate, septic tank systems should be maintained by local septic tank maintenance districts.~~

~~14. Wastewater Management Plans should be prepared and implemented for urbanizing and high density areas, including applicable portions of San Martin, San Lorenzo Valley, Carmel Valley, Carmel Highland, Prunedale, El Toro, Shandon, Templeton, Santa Margarita/Garden Farms, Los Osos/Baywood Park, Arroyo Grande, Nipomo, upper Santa Ynez Valley, and Los Olivos/Ballard.~~

~~15. Ordinances should be updated to reflect Basin Plan criteria.~~

VIII.D.3.~~h~~f. ~~ADDITIONAL~~ USE CONSIDERATIONS

1. Water conservation and solids reduction practices ~~are recommended~~ should be implemented by all onsite system users. Garbage grinders should not be used in homes with septic tanks. Where grinders are used, septic tank capacity and inspection/pumping frequency should be increased.

2. Metering and water use costs should be used to encourage water conservation in areas served by onsite systems.

3. Bleach, solvents, fungicides~~,~~ and any other toxic material, g~~G~~rease and oil should not be ~~introduced~~ discharged into ~~the~~ onsite wastewater systems. ~~should not be poured into the system.~~

4. ~~Reverse osmosis unit blow-down~~ Self-regenerating water softeners should not be used where discharged is to onsite ~~wastewater treatment~~ systems ~~overlying usable ground water. Off-site (factory regeneration) practices are recommended for water softeners~~. If ~~onsite~~ water softener~~ing~~ ~~regeneration~~ is necessary, use of canister-type softeners will protect the treatment and disposal systems and underlying groundwater from unnecessary accumulation of salts. ~~minimum salt use in water softeners is recommended. This can be accomplished by minimizing regeneration time or limiting the number of regeneration cycles~~.

PROHIBITIONS

5. Self-regenerating water softener brine discharge to onsite wastewater systems is prohibited unless consistent with an onsite wastewater management plan approved by the Central Coast Water Board and implemented by the local governing jurisdiction.

~~**VIII.D.3.i. INDIVIDUAL, ALTERNATIVE AND COMMUNITY SYSTEMS PROHIBITIONS**~~

~~**Discharges from new soil absorption systems installed after September 16, 1983 in sites with any of the following conditions are prohibited:**~~

~~1. Soils or formations contain continuous channels, cracks, or fractures.[4]~~

~~2. For seepage pits, soils or formations containing 60 percent or greater clay (a soil particle less than two microns in size) unless parcel size is at least two acres.~~

~~3. Distances between trench bottom and usable ground water, including perched ground water, less than separation specified by appropriate percolation rate:~~

~~Percolation Rate, min/in~~	~~Distance, ft~~
~~<1~~	~~50[4]~~
~~1-4~~	~~20[4]~~
~~5-29~~	~~8~~
~~>30~~	~~5~~

~~[4] Unless a set-back distance of at least 250 feet to any domestic water supply well or surface water is assured.~~

~~4. For seepage pits, distances between pit bottom and usable ground water, including perched ground water, less than separation specified by appropriate soil type:~~

~~Soil~~	~~Distance,ft.~~
~~Gravels[2]~~	~~50[4]~~
~~Gravels with few fines[3]~~	~~20[4]~~
~~Other~~	~~10~~

5. Distances between trench/pit bottom and bedrock or other impervious layer less than ten feet.

6. For leachfields, where percolation rates are slower than 120 min/in, unless parcel size is at least two acres.

7. For leachfields, where soil percolation rates are slower than 60 min./in. unless the effluent application rate is 0.1 gpd/ft^2 or less.

8. Areas subject to inundation from a ten-year flood.

9. Natural ground slope of the disposal area exceeds 30 percent.

10. Setback distances less than:

	Minimum Setback Distance, ft
Domestic water supply wells in unconfined aquifer	100
Watercourse[4] where geologic conditions permit water migration	100
Reservoir[5] spillway elevation	200
Springs, natural or any part of man-made spring	100

11. While new septic tank systems should generally be limited to new divisions of land having a minimum parcel size of one acre, where soil and other physical constraints are particularly favorable, parcel size shall not be less than one-half acre.

12. Within a reservoir[5] watershed where the density for each land division is less than 2.5 acres for areas without approved Wastewater Management Plans.

13. For individual systems on new land divisions, and commercial, institutional, and sanitary industrial systems without an area set aside for dual leachfields (100 percent replacement area).

14. Commercial, institutional, or sanitary industrial systems not basing design on daily peak flow estimate.

15. Any site unable to maintain subsurface disposal.

16. Any subdivision unless the subdivider clearly demonstrates the use of the system will be in the best public interest, that beneficial water uses will not be adversely affected, and compliance with all Basin Plan prohibitions is demonstrated.

17. Lot sizes, dwelling densities or site conditions causing detrimental impacts to water quality.

18. Any area where continued use of onsite systems constitutes a public health hazard, an existing or threatened condition of water pollution, or nuisance.

[1] Unless a set-back distance of at least 250 feet to any domestic water supply well or surface water is assured.

[2] Gravels - Soils with over 95 percent by weight coarser than a No. 200 sieve and over half of the coarse fraction larger than a No. 4 sieve.

[3] Gravels with few fines - Soils with 90 percent to 94 percent coarse fraction larger than a No. 4 sieve.

[4] Watercourse - (1) A natural or artificial channel for passage of water. (2) A running stream of water. (3) A natural stream fed from permanent or natural sources, including rivers, creeks, runs, and rivulets. There must be a stream, usually flowing in a particular direction (though it need not flow continuously) in a definite channel, having a bed or banks and usually discharging into some stream or body of water.

[5] Reservoir-A pond, lake, tank, basin, or other space either natural or created in whole or in part by the building of engineering structures, which is used for storage, regulation, and control of water, recreation, power, flood control, or drinking.

Discharges from community subsurface disposal systems (serving more than five parcels or more than five dwelling units) are prohibited unless:

1. Seepage pits have at least 15 vertical feet between pit bottom and highest usable ground water, including perched ground water.

2. Sewerage facilities are operated by a public agency. (If a demonstration is made to the Regional Board that an existing public agency is

~~unavailable and formation of a new public agency is unreasonable, a private entity with adequate financial, legal, and institutional resources to assume responsibility for waste discharges may be acceptable).~~

~~3. Dual disposal systems are installed (200 percent of total of original calculated disposal area).~~

~~4. An expansion area is included for replacement of the original system (300 percent total).~~

~~5. Community systems provide duplicate individual equipment components for components subject to failure.~~

~~6. Discharge does not exceed 40 grams per day of total nitrogen, on the average, per 1/2 acre of total development overlying ground water recharge areas excepting where a local governing jurisdiction has adopted a Wastewater Management Plan subsequently approved by the Regional Board.~~

VIII.D.3.g. ONSITE WASTEWATER SYSTEM PROHIBITION AREAS

In order to achieve water quality objectives, protect present and future beneficial water uses, protect public health, and prevent nuisance, discharges are prohibited in the following areas:

PROHIBITIONS

1. Discharges from individual sewage disposal systems are prohibited in portions of the community of Nipomo, San Luis Obispo County, which are particularly described in Appendix A-27.

2. Discharges from individual sewage disposal systems within the San Lorenzo River Watershed shall be managed as follows: Discharges shall be allowed, providing the County of Santa Cruz, as lead agency, implements the "Wastewater Management Plan for the San Lorenzo River Watershed, County of Santa Cruz, Health Services Agency, Environmental Health Service", February 1995 and "San Lorenzo Nitrate Management Plan, Phase II Final Report", February 1995, County of Santa Cruz, Health Services Agency, Environmental Health Service (Wastewater Management Plan) and assures the Regional Board that areas of the San Lorenzo River Watershed are serviced by wastewater disposal systems to protect and enhance water quality, to protect and restore beneficial uses of water, and to abate and prevent nuisance, pollution, and contamination.

~~In fulfilling the responsibilities identified above, the County of Santa Cruz shall submit annual reports beginning on January 15, 1996. The report shall state the status and progress of the Wastewater Management Plan in the San Lorenzo River Watershed. The County of Santa Cruz annual report shall document the results of:~~

~~a. Existing disposal system performance evaluations,~~
~~b. Disposal system improvements,~~
~~c. Inspection and maintenance of onsite systems,~~
~~d. Community disposal system improvements,~~
~~e. New development and expansion of existing system protocol and standards,~~
~~f. Water quality monitoring and evaluation,~~
~~g. Program administration management, and~~
~~h. Program information management.~~

~~The report shall also document progress on each element of the Nitrate Management Plan, including:~~

~~a. Parcel size limit,~~
~~b. Wastewater Management Plan implementation,~~
~~c. Boulder Creek Country Club Wastewater Treatment Plant Upgrade,~~
~~d. Shallow leachfield installation,~~
~~e. Enhanced wastewater treatment for sandy soils,~~
~~f. Enhanced wastewater treatment for large onsite disposal systems,~~
~~g. Inclusion of nitrogen reduction in Waste Discharge Permits,~~
~~h. Livestock and stable management,~~
~~i. Protection of ground water recharge areas,~~
~~j. Protection of riparian corridors and erosion control,~~
~~k. Nitrate control for new uses,~~
~~l. Scotts Valley nitrate discharge reduction, and~~
~~m. Monitoring for nitrate in surface and ground water.~~

3. Discharges from individual and community sewage disposal systems are prohibited effective November 1, 1988, in the Los Osos/Baywood Park area depicted in the

Prohibition Boundary Map included as Attachment "A" of Resolution No. 83-13 which can be found in Appendix A-30.

VIII.D.3.~~j~~h. SUBSURFACE DISPOSAL EXEMPTIONS

The ~~Regional~~ Central Coast Water Board ~~or Executive Officer~~ may grant exemption to prohibitions for: (1) engineered new onsite wastewater ~~disposal~~ systems for sites unsuitable for standard systems; and (2) new or existing onsite systems within the specific prohibition areas cited ~~above~~ in section VIII.D.3.g. To obtain an exemption, the discharger must submit a report of waste discharge to the Water Board and the local governing jurisdiction that provides ~~Such exemptions may be granted only after presentation by the discharger of~~ sufficient justification, including geologic and hydrologic evidence that the continued operation of such system(s) in a particular area will not individually or collectively, directly or indirectly, result in pollution or nuisance, or affect water quality adversely.

Individual, alternative, and community systems shall not be approved for any area where it appears that the total discharge of leachate to the geological system, under fully developed conditions, will cause: (1) damage to public or private property; (2) ground or surface water degradation; (3) nuisance condition; or, (4) a public health hazard. Interim use of septic tank systems may be permitted where alternate parcels are held in reserve until sewer systems are available.

Requests for exemptions will not be considered until the local ~~entity~~ governing jurisdiction has reviewed the system and submitted the proposal for ~~Regional~~ Central Coast Water Board review. Dischargers requesting exemptions must submit a Report of Waste Discharge, supplementing the local governing jurisdiction's submittal. Exemptions will be subject to filing fees as established by the State Water Code.

Discharges from onsite wastewater systems regulated by waste discharge requirements or a conditional waiver of such requirements may be exempt from the requirements of this chapter. The waste discharge requirements or conditional waiver will act in lieu of exemption, and separate exemption is not required.

~~Engineered systems shall be designed only by registered engineers competent in sanitary engineering. Engineers should be responsible for proper system operation. Engineers should be responsible for educating system users of proper operation and maintenance. Maintenance schedules should be established. Engineered systems should be inspected by designer during installation to insure conformance with approved plans.~~

~~Some engineered systems may be considered experimental by the Regional Board. Experimental systems will be handled with caution. A trial period of at least one year should be established whereby proper system operation must be demonstrated. Under such an approach, experimental systems are granted a one year conditional approval.~~

Further information concerning individual, alternative, or community onsite sewage disposal systems can be found in Chapter 5 in the Management Principals and Control Actions sections. State Water Resources Control Board Plans and Policies, Discharge Prohibitions, and ~~Regional~~ Central Coast Water Board Policies may also apply depending on individual circumstances.