

**STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401**

**RESOLUTION NO. R3-2013-0005**

**AMENDING THE WATER QUALITY CONTROL PLAN REGARDING THE ONSITE  
WASTEWATER SYSTEM IMPLEMENTATION PROGRAM**

WHEREAS, the California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board) finds:

1. The Central Coast Water Board adopted the *Water Quality Control Plan for the Central Coastal Basin* (Basin Plan) on March 14, 1975. The Basin Plan designates beneficial uses and water quality objectives, implementation programs for achieving water quality objectives addressing point source and nonpoint source discharges, prohibitions, and incorporates statewide plans and policies. The Basin Plan is periodically reviewed and revised. The Central Coast Water Board has determined that the Basin Plan requires further revision and amendment.
2. The Basin Plan contains an implementation program setting forth criteria regarding siting and design of onsite wastewater systems. The Central Coast Water Board updated its policy regarding siting and design of onsite wastewater systems on September 16, 1983, by adopting Resolution No. 83-12. The text and requirements specified in Resolution No. 83-12 are included in the Basin Plan as provisions of Chapters 4 and 5.
3. On May 9, 2008, the Central Coast Water Board adopted Resolution No. R3-2008-0005, revising the Basin Plan onsite wastewater system criteria. On March 20, 2009, the Central Coast Water Board adopted Resolution No. R3-2009-0012, revising the Basin Plan onsite implementation program. On May 5, 2011, the Central Coast Water Board adopted Resolution No. R3-2011-0004, revising the Basin Plan onsite implementation program with additional clarifying language and renumbered sections.
4. The State Water Resources Control Board (State Water Board), on June 19, 2012, adopted the *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy). The OWTS Policy includes a conditional waiver of the requirements to submit a report of waste discharge, obtain waste discharge requirements, and pay fees for discharges from onsite wastewater systems covered by the OWTS Policy. The OWTS Policy was approved by the California Office of Administrative Law on November 13, 2012, and became effective on May 13, 2013.
5. This Resolution No. R3-2013-0005 revises onsite wastewater sections of the Basin Plan; incorporates by reference the *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* into the Basin Plan; and rescinds Resolution No. R3-2008-0005, Resolution No. R3-2009-0012, and Resolution No. R3-2011-0004.

6. Area of Applicability - The effect of this amendment will be throughout the Central Coast Region, where onsite systems are used to treat and dispose of wastewater.
7. CEQA - The Central Coast Water Board's discretionary decisions are typically subject to the requirements of CEQA. The Secretary for Natural Resources has certified the basin planning process as an exempt regulatory program, and therefore the Water Boards are exempt from the specific CEQA requirement to prepare an environmental impact report or negative declaration when the Water Board is complying with the procedures identified in the certified regulatory program (Cal. Code Regs., tit. 23, §§3720-3781) [Pub. Res. Code §21080.5; Cal. Code Regs., tit. 14, §15251(g)].
8. A Substitute Environmental Document (SED) was prepared by the State Water Board for the OWTS Policy in accordance with the Water Board's certified regulatory program (Cal. Code Regs., tit. 23 §§3777-3781). The State Water Board approved the OWTS Policy and the SED on June 19, 2012. The proposed amendment removes existing Basin Plan provisions regulating onsite systems and incorporates the OWTS Policy. No substantive changes or modifications to the previously approved OWTS Policy are proposed, no substantial changes with respect to circumstances under which the project will be undertaken have occurred and no new information triggers the need for supplemental or subsequent CEQA analysis.
9. This amendment is completely within the scope of the OWTS Policy as analyzed by the State Water Board in the SED. As such, the recommended actions do not require further environmental review pursuant to the certified regulatory program or CEQA (Pub. Res. Code §21166; Cal. Code Regs. tit. 14, §§15161, 15163).
10. The subject amendment to the Basin Plan will result in no potential for adverse effect, either individually or cumulatively, on wildlife and is therefore exempt from fee payments to the Department of Fish and Wildlife under the California Fish and Game Code.
11. The State Water Board, in adopting the OWTS Policy, considered a wide range of factors affecting water quality and the availability of treatment measures to protect beneficial uses and public health, consistent with the goals and requirements set forth in State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. The State Water Board analyzed the potential environmental impacts of reasonably foreseeable methods of compliance with the OWTS Policy, concluding that alternatives to the OWTS Policy do not accomplish the objectives of adopting consistent standards that will ensure public health and protection of beneficial uses of the state's waters while establishing an effective implementation process that considers cost and technological capabilities.
12. The State Water Board found that the OWTS Policy sets standards that could allow potentially significant direct water quality impacts from pathogen or nitrogen contamination, as well as cumulative water quality and public health impacts. The State Water Board also found that available mitigation measures would not meet the goals of the OWTS Policy, and that specific overriding economic, legal, social technological or other benefits outweigh any adverse environmental impacts resulting from new or continuing discharges in compliance with the OWTS Policy. With respect to local agency management programs, the State Water Board rejected mitigation measures that would remove too much local agency flexibility, render too many sites unsuitable for new and replaced OWTS, and/or impose significant costs without corresponding environmental benefit. The State Water Board

concluded that effective implementation of protections to allow continued use of OWTS for wastewater disposal in areas not suitable for centralized treatment systems is an important public benefit, and the protections afforded by the OWTS Policy provide the best treatment to ensure the highest water quality consistent with the maximum benefit to the people of the state. The State Water Board concluded that the OWTS Policy establishes a statewide, risk-based, tiered approach for the regulation and management of OWTS installations and replacements and sets the level of performance and protection expected from OWTS.

13. The OWTS Policy requires local agencies implementing management programs to monitor and assess water quality to ensure that beneficial uses are protected. The assessments must evaluate the impact of OWTS discharges and assess the extent to which groundwater and local surface water quality may be adversely impacted. Local agencies must report the results to the applicable Regional Water Board, and identify any changes in the local agency management program that will be undertaken to address impacts from OWTS. The Regional Water Board may also require modifications to an approved local agency management program as appropriate.
14. Consistent with the State Water Board's findings and the requirements of the OWTS Policy, this amendment is consistent with maximum benefit to the people of the State; will not unreasonably affect present and anticipated beneficial uses; will not result in water quality less than that prescribed in applicable state policies, including the OWTS Policy; and requires OWTS dischargers to use the best practicable treatment or control of the discharge necessary to avoid a pollution or nuisance and to maintain the highest water quality consistent with the maximum benefit to the people of the State.
15. Public Notice - Interested persons and the public have been informed of the Central Coast Water Board's intent to revise the Basin Plan implementation program for onsite wastewater systems. Efforts to inform the public and solicit public comment include a public notice of the amendments providing the public with a comment period in excess of 45 days in advance of the Central Coast Water Board hearing. Notice of public hearing was given by posting on the Water Board website, by mailing a copy of the notice to all persons requesting such notice and applicable government agencies, and by publishing notice in newspapers throughout the Central Coast region. The public also had the opportunity to comment on the OWTS Policy during the State Water Board adoption process.
16. On May 30-31, 2013, the Central Coast Water Board held a public hearing and considered all the evidence and comments concerning this matter. Notice of this hearing was given to all interested persons in accordance with CCR, Title 14, §15072.
17. The Basin Plan amendment must be submitted for review and approval by the State Water Board and the California Office of Administrative Law (OAL). The Basin Plan amendment will become effective upon approval by OAL. This Resolution will become effective upon adoption.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. Pursuant to California Water Code §13240, the Central Coast Water Board, after considering the record, including oral testimony at the hearing, hereby adopts the Basin Plan amendment set forth in Attachments A and B to this Resolution adopting the State OWTS Policy into the Basin Plan.

2. Pursuant to California Water Code §13240, the Central Coast Water Board, after considering the record, including oral testimony at the hearing, hereby rescinds Resolution No. R3-2008-0005, Resolution No. R3-2009-0012, and Resolution No. R3-2011-0004 previously adopted by this Board.
3. The Central Coast Water Board's Executive Officer is directed to forward copies of the Basin Plan amendment to the State Water Board in accordance with the requirements of California Water Code §13245.
4. The Central Coast Water Board requests the State Water Board approve the Basin Plan amendments in accordance with requirements of California Water Code §13246, and forward it to OAL for approval. The State Water Board, on behalf of the Central Coast Water Board, shall file a Notice of Decision with the Secretary of Resources and the Governor's Office of Planning and Research (State Clearinghouse) after approval by OAL.
5. If during the approval process the State Water Board or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Central Coast Water Board Executive Officer may make such changes, and shall inform the Central Coast Water Board of any such changes.

I, Kenneth A. Harris Jr., Interim Executive Officer of the California Regional Water Quality Control Board, Central Coast Region, do hereby certify that the foregoing is a full, true and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Central Coast Region on May 30, 2013.

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Interim Executive Officer

Attachments: A. Revised Basin Plan Chapters 4 and 5 (onsite sections only)  
B. Revisions to Basin Plan Chapters 4 and 5 (onsite sections only)

## CHAPTER 4. IMPLEMENTATION PLAN

(onsite wastewater section only)

### VIII.D. INDIVIDUAL, ALTERNATIVE, AND COMMUNITY ONSITE WASTEWATER SYSTEMS

#### VIII.D.1. ONSITE WASTEWATER SYSTEM REQUIREMENTS

Requirements for siting, design, operation, maintenance, and management of onsite wastewater systems are specified in the State Water Resources Control Board's *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy). The OWTS Policy sets forth a tiered implementation program with requirements based upon levels (tiers) of potential threat to water quality. The OWTS Policy includes a conditional waiver of waste discharge requirements for onsite systems that comply with the policy.

The OWTS Policy, including future revisions, is incorporated into this Basin Plan and shall be implemented according to the policy's provisions.

#### VIII.D.2. DISCHARGE PROHIBITIONS

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

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.

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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 groundwater 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.

The County of Santa Cruz shall submit for approval by May 13, 2016, a Local Agency Management Program to be implemented in lieu of the Wastewater Management Plan for the San Lorenzo River Watershed, referenced above. Beginning in 2017 annual reports shall be consistent with the requirements specified in the OWTS Policy and the Regional Board approved Local Agency Management Program in lieu of reporting requirements stated above.

3. Discharges of waste from individual and community sewage disposal systems are prohibited effective November 1, 1988, in the Los Osos/Baywood Park area, and more particularly described as: Groundwater Prohibition Zone. (Prohibition Boundary Map included as

Attachment "A" of Resolution No. 83-13 which can be found in Appendix A-30.)

Failure to comply with any of the compliance dates established by Resolution 83-13 will prompt a Regional Board hearing at the earliest possible date to consider adoption of an immediate prohibition of discharge from additional individual and community sewage disposal systems.

### VIII.D.3. SUBSURFACE DISPOSAL EXEMPTIONS

The Regional Board or Executive Officer may grant exemptions to prohibitions of waste discharges from new or existing onsite systems within the specific prohibition areas cited above. 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 systems in a particular area will not individually or collectively or directly or indirectly result in pollution or nuisance or affect water quality adversely.

Requests for exemptions will not be considered until the local agency has reviewed the system and submitted the proposal for Regional Board review. Dischargers requesting exemptions must submit a Report of Waste Discharge. Exemptions will be subject to filing fees as established by the State Water Code.

Further information concerning individual, alternative, or community onsite sewage disposal systems can be found in Chapter 5 in the Management Principles and Control Actions sections. State Water Resources Control Board plans and policies, discharge prohibitions, and Regional Board policies also apply depending on individual circumstances.

## CHAPTER 5. PLANS AND POLICIES

(new onsite wastewater section only)

### **I.M. ONSITE WASTEWATER POLICY**

The *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy), Resolution No. 2012-0032, was adopted by the State Water Resources Control Board on June 19, 2012. This Policy implements California Water Code, Chapter

4.5, Division 7, §13290-13291.7 by establishing statewide regulations and standards for permitting onsite wastewater systems. The OWTS Policy specifies criteria for existing and new onsite systems and establishes a conditional waiver of waste discharge requirements for onsite systems that comply with the policy.

## CHAPTER 4. IMPLEMENTATION PLAN

(onsite wastewater section only)

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

#### VIII.D.1. ONSITE WASTEWATER SYSTEM REQUIREMENTS

Requirements for siting, design, operation, maintenance, and management of onsite wastewater systems are specified in the State Water Resources Control Board's Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy). The OWTS Policy sets forth a tiered implementation program with requirements based upon levels (tiers) of potential threat to water quality. The OWTS Policy includes a conditional waiver of waste discharge requirements for onsite systems that comply with the policy.

The OWTS Policy, including future revisions, is incorporated into this Basin Plan and shall be implemented according to the policy's provisions.

~~On-site 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. On-site 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 on-site 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.~~

~~On-site 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 on-site 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 systems may be used to 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 developments 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 treat sanitary wastewater equal to or greater than 2500 gallons per day (average daily flow). Systems of this type and size may be subject to waste discharge requirements.

Alternatives to conventional on-site system designs have been used when site constraints prevent the use of conventional systems. Examples of alternative systems include mound and evapotranspiration systems. Remote subdivisions, commercial centers, or industries may utilize conventional collection systems with community treatment systems and subsurface disposal fields for sanitary wastes. Alternative and community systems can pose serious water quality problems if improperly 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.

#### **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 sewerage 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 WASTEWATER DISPOSAL SYSTEM**

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Local governing jurisdictions should provide programs to assure conformance with this Basin Plan and local regulations. Inspection programs should assure site suitability tests are performed as necessary, and that tests are in accordance with standard procedures. Inspection should also assure proper system installation. Proper design and construction should be certified by the inspector. 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 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.

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 owners should be aware of the nature and requirements of their 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, local agencies should require septic system as-built plans as a condition of new construction final inspection. Plans would be kept on file for future use of property owners.

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 should have prohibition area terms entered into the county record for each affected parcel. When a prospective buyer conducts a title search, terms of the prohibition would appear in the preliminary title report.

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. But system expansion may not be possible if land is not set aside for this purpose. For these reasons, dedicated system expansion areas are also appropriate.

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 CC&R's.

All on-site system owners 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 on-site system operation and maintenance guidelines. Basin Plan information should be available at local agency health and building departments.

Local agencies should conduct an on-site 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. On-site 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 on-site 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 be done under permit from the local agency. To the extent practicable, the local agency should require failing systems to be brought into compliance with Basin Plan recommendations. 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 until the existing on-site 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.

#### **VIII.D.2.b. ON-SITE WASTEWATER MANAGEMENT PLANS**

On-site wastewater management should be implemented in urbanizing areas to investigate long-term cumulative impacts resulting from continued use of individual, alternative, and community on-site disposal 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 plans should be a comprehensive planning tool to specify on-site disposal system limitations to prevent ground or surface water degradation. Wastewater management plans should:

- Contain a ground/surface water monitoring program.
- Identify sites suitable for conventional septic systems.
- Project on-site disposal system demand.
- Determine 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.
- Recommend establishment of septic tank maintenance districts, as needed.
- Identify alternate means of disposing of sewage in the event of irreversible degradation from on-site disposal 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.

On-site wastewater disposal zones, as discussed in Section 6950-6981 of the Health and Safety Code, may be an appropriate means of implementing on-site Wastewater Management Plans.

On-site Wastewater Management Plans shall be approved by the Regional Board.

**VIII.D.2.c. SEPTIC TANK MAINTENANCE DISTRICTS**

It may be appropriate for unsewered community on-site systems to be maintained by local sewage disposal 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 maintenance districts should be responsible for operation and maintenance in conformance with this Water Quality Control Plan. Administrators should insure proper construction, installation, operation, and maintenance of on-site disposal systems. Maintenance districts should establish septic tank 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**

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

Recommendations are arranged in sequence under the following categories: site suitability; system design; construction; individual system maintenance; community system design; and local agencies.

Mandatory criteria are listed in the "Individual, Alternative, and Community Systems

Prohibitions" section.

**VIII.D.3.a. SITE SUITABILITY**

Prior to permit approval, site investigation should determine on-site system suitability:

1. At least one soil boring or excavation per on-site 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<sup>1</sup> bottom at each proposed location.
2. 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 drainfield bottom.
3. For leachfields, at least three percolation test locations should be used to determine system acceptability. Tests should be performed at proposed subsurface disposal system sites and depths.
4. 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 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 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.
- 6. For new land divisions, lot sizes less than one acre should not be permitted.

**VIII.D.3.b. SYSTEM DESIGN**

On-site systems should be designed according to the following recommendations:-

- 1. Septic tanks should be designed to remove nearly 100 percent of settleable solids and should provide a high degree of anaerobic decomposition of colloidal and soluble organic solids.
- 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 min./in	Loading Rate g.p.d./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<sup>1</sup> design should be based only upon usable permeable soil layers.
- 1 "Drainfield" refers to either a leachfield or seepage pit
- 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.<sup>1</sup>

<sup>1</sup> "Effective trench depth" means depth below the bottom of the trench pipe.

- 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.

**VIII.D.3.c. DESIGN FOR ENGINEERED SYSTEMS**

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- ~~1. Mound systems should be installed in accordance with criteria contained in Guidelines for Mound Systems by the State Water Resources Control Board.~~
- ~~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. Systems shall be designed by a registered civil engineer competent in sanitary engineering.~~~~

### **VIII.D.3.d. CONSTRUCTION**

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

- ~~1. Subsurface disposal systems should have a slightly sloped finished grade to promote surface runoff.~~
- ~~2. Work should be scheduled only when infiltrative surfaces can be covered in one day to minimize windblown silt or rain clogging the soil.~~
- ~~3. In clayey soils, work should be done only when soil moisture content is low to avoid smeared infiltrative surfaces.~~
- ~~4. Bottom and sidewall areas should be left with a rough surface. Any smeared or compacted surfaces should be removed.~~
- ~~5. Bottom of trenches or beds 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.~~
- ~~9. 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.~~
- ~~10. Risers to the ground surface and manholes should be installed over the septic tank inspection ports and access ports.~~
- ~~11. Drainfield should include an inspection pipe to check water level.~~

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

### **VIII.D.3.e. INDIVIDUAL SYSTEM MAINTENANCE**

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

- ~~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.~~

- ~~3. Drainfields should be alternated when drainfield inspection pipes reveal a high water level.~~
- ~~4. Disposal of septage (solid residue pumped from septic tanks) should be accomplished in a manner acceptable to the 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.~~

#### **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 on-site 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 on-site 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. ADDITIONAL CONSIDERATIONS**

- 1. ~~Water conservation and solids reduction practices are recommended. Garbage~~

~~grinders should not be used in homes with septic tanks.~~

- 2. ~~Metering and water use costs should be used to encourage water conservation.~~
- 3. ~~Grease and oil should not be introduced into the system. Bleach, solvents, fungicides, and any other toxic material should not be poured into the system.~~
- 4. ~~Reverse osmosis unit blow-down should not be discharged to on-site wastewater treatment systems overlying usable ground water. Off-site (factory regeneration) practices are recommended for water softeners.~~
- 5. ~~If on-site water softener regeneration is necessary, minimum salt use in water softeners is recommended. This can be accomplished by minimizing regeneration time or limiting the number of regeneration cycles.~~

**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.~~
- 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	501

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1-4	201
5-29	8
>30	5

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 <sup>2</sup>	501
Gravels with few fines <sup>3</sup>	201
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<sup>2</sup> 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 <sup>4</sup> where geologic conditions permit water migration	100
Reservoir <sup>5</sup> spillway elevation	200
Springs, natural or any part of man-made spring	100

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.

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<sup>1</sup> 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.-

1. 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.

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 on-site systems constitutes a public health hazard, an existing or threatened condition of water pollution, or nuisance.~~

~~**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.2. DISCHARGE PROHIBITIONS**

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

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

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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 on-site 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 on-site disposal systems,
- g. Inclusion of nitrogen reduction in Waste Discharge Permits,
- h. Livestock and stable management,
- i. Protection of groundwater 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.

The County of Santa Cruz shall submit for approval by May 13, 2016, a Local Agency Management Program to be implemented in lieu of the Wastewater Management Plan for the San Lorenzo River Watershed, referenced above. Beginning in 2017 annual reports shall be consistent with the requirements specified in the OWTS Policy and the Regional Board approved Local Agency Management Program in lieu of reporting requirements stated above.

3. Discharges of waste from individual and community sewage disposal systems are prohibited effective November 1, 1988, in the Los Osos/Baywood Park area, and more particularly described as: Groundwater Prohibition Zone, depicted in the (Prohibition Boundary Map included as Attachment "A" of Resolution No. 83-13 which can be found in Appendix A-30.)

Failure to comply with any of the compliance dates established by Resolution 83-13 will prompt a Regional Board hearing at the earliest possible date to consider adoption of an immediate prohibition of discharge from additional individual and community sewage disposal systems.

### VIII.D.3.j. SUBSURFACE DISPOSAL EXEMPTIONS

The Regional Board or Executive Officer may grant exemptions to prohibitions of waste discharges from ~~for: (1) engineered new on-site disposal systems for sites unsuitable for standard systems; and (2) new or existing on-site systems within the specific prohibition areas cited above.~~ 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 agency has reviewed the system and submitted the proposal for Regional Board review. Dischargers requesting exemptions must submit a Report of Waste Discharge. Exemptions will be subject to filing fees as established by the State Water Code.

~~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 on-site sewage disposal systems can be found in Chapter 5 in the Management Principles and Control Actions sections. State Water Resources Control Board Plans and Policies, Discharge Prohibitions, and Regional Board Policies may also apply depending on individual circumstances.

## CHAPTER 5. PLANS AND POLICIES

(new onsite wastewater section only)

### I.M. ONSITE WASTEWATER POLICY

The Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy), Resolution No. 2012-0032, was adopted by the State Water Resources Control Board on June 19, 2012. This Policy implements California Water Code, Chapter

4.5, Division 7, §13290-13291.7 by establishing statewide regulations and standards for permitting onsite wastewater systems. The OWTS Policy specifies criteria for existing and new onsite systems and establishes a conditional waiver of waste discharge requirements for onsite systems that comply with the policy.