



May 4, 2012

State Water Resources Control Board
Chair Hoppin and Board Members
1001 I Street, 15th Floor, P.O. Box 2231
Sacramento, CA 95812
Via Email: [commentletters@waterboards.ca.gov]



Re: Comments on the Draft State Policy for Water Quality Control for Siting, Design, Operation and Management of Onsite Wastewater Treatment Systems (“OWTS” Policy) and Substitute Environmental Document (SED)

Dear Chair Hoppin and Board Members,

On behalf of Heal the Bay and Heal the Ocean, we appreciate the opportunity to review and provide the following comments on the proposed Final Draft State Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS) (“Draft Policy” or “Policy”). We appreciated the opportunity to participate in the AB 885 Workshop held May 2nd. We also are encouraged by the productive conversations that followed, which we hope will lead to a realistic and effective policy that we all can endorse. As an outcome of these conversations, we have set up conference calls with various stakeholders, including environmental health officials, to flesh out meaningful language in the coming weeks before the adoption hearing that addresses some of the common concerns shared by our organizations and Board members. During the workshop we presented many of the comments contained in this letter for board consideration.

As we have stated previously, Heal the Bay and Heal the Ocean believe that statewide, OWTS regulations are urgently needed to prevent further wastewater contributions to impaired water bodies, particularly those 303(d)-listed, and to protect beneficial uses of these water bodies. If drafted and implemented correctly, AB 885 regulations will effectively regulate OWTS in areas throughout California, especially in those areas most threatened by these systems. In turn, this will lead to major positive improvements for water quality, public health, and aquatic habitats.

We appreciate the willingness of the State Board staff, Board members and other stakeholders to address the critical issues in the Draft Policy that are expressed in this letter. Addressing these remaining issues is critical to ensure that the regulation of OWTS in California is adequately protective of water quality, public health, and aquatic habitats in order for the Draft Policy to meet the intent of AB 885. Specifically, we are adamant that the Draft Policy include:

- 1 → • Requirements for existing systems (with or without a 303(d) listing or TMDL);

- 2 → Requirements to upgrade to advanced treatment within 5 years, unless covered under a TMDL or actively pursuing a sewer connection;
- 3 → More protective requirements and performance criteria for large commercial and residential advanced treatment systems, including a nutrient target of 10 mg/L as nitrogen for advanced treatment systems;
- 4 → A schedule for final compliance with nutrient and bacteria TMDLs;
- 5 → Requirements to develop implementation plans with compliance deadlines for EPA- adopted nutrient and bacteria TMDLs.

In order to address these concerns and others, we suggest language revisions to the Final Policy. The reasoning behind these changes and other concerns are explained in more detail below. We also include specific suggested language changes in the form of redlines in an attachment to these comments; many of which we presented at the May 2nd workshop. These redline suggestions may change somewhat in the coming weeks, as an outgrowth of stakeholder discussions.

Overarching Comments and Concerns

- 6 → Requirements of the Policy should be clearer and more prescriptive to improve water quality above the status quo. While we agree it is important that the Policy contain flexibility to address situations unique to geographic locales, we believe the Policy allows loopholes to true regulation by punting all decisions regarding how to address OWTS pollution to local agencies and Regional Boards. For instance, the decision of whether or not to require system upgrades is given to local agencies.
- 7 ←
- 8 → Similarly, the timeline for compliance with TMDLs is decided by local agencies. Even the decision to draft a TMDL for an impaired water body is left up to the local agencies through the development of Attachment 2 of the Policy. As explained below, this conflicts with provisions of the Clean Water Act. Instead, the Draft Policy should contain minimum requirements that should be universally applied.

TMDL Development and Compliance

One of the main purposes of the Policy should be to drive the development and implementation of TMDLs in order to improve water quality in water bodies impacted by OWTS. Rather than incentivize the development of TMDLs, Section 10.3 appears to offer local agencies a loophole for avoiding TMDL development. If no TMDL is adopted, actions are determined by a Tier 2 Local Agency OWTS Management Plan (“LAMP”) Advanced Protection Management Program. This is extremely inappropriate, as it relies on local enforcement of the policy far too much, on occasions when local enforcement looks to the State for guidance – all of which could lead to environmental degradation and is in direct conflict with the Clean Water Act. The Clean Water Act requires all water bodies on the 303(d) list to have a TMDL. Instead, the Policy should require system upgrades, as explained below in the *Upstream Requirements and Upgrades* section of this letter. Specifically, the Policy should clearly define a maximum compliance schedule of five years for water bodies listed in Attachment 2. The compliance deadline outlined in a TMDL should supersede the suggested timeframe up to a limit of a ten-year compliance period, in the event that a sewer connection is being actively pursued. The goal of

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this approach is to incentivize the creation of TMDLs in regions with OWTS where TMDLs are not yet established.

12 → One glaring omission in the Policy is that it does not address existing TMDLs that were drafted by the EPA and, thus, do not contain an implementation plan. The Malibu Creek Nutrient TMDL is one example. EPA adopted this TMDL in 2002, and there is no associated implementation schedule with compliance deadlines. The following EPA-drafted nutrient and bacteria TMDLs need to be considered

13 → for insertion into a new table in Attachment 2 in order to require Tier 3 minimum requirements:

1. Long Beach City Beaches and Los Angeles River Estuary TMDLs for Indicator Bacteria;
2. Los Angeles Area Lakes Nitrogen, Phosphorus, Mercury, Trash, Organochlorine Pesticides and PCBs TMDLs;
3. Lost River (North Coast California) Nutrients and pH TMDLs
4. Malibu Creek Nutrient and Bacteria
5. San Diego Creek, Newport Bay Sediment TMDL (which addresses nutrient impairments)

These existing EPA-adopted TMDLs should have a stated deadline by which the Regional Board must draft an implementation plan – not to exceed 2 years from the adoption of this Policy. Even with established TMDLs (EPA and Regional Board-adopted), all OWTS should be allowed no more than five years to comply with the Policy – unless a sewer connection is being pursued.

15 → Attachment 2 provides a list of existing nutrient and/or bacteria impairments on the 303(d) list for situations where the regional boards believe an OWTS may contribute to the impairment, and thus, a TMDL should be developed expeditiously. How will this list be updated as new findings come to light? The Policy should specify that the Regional Board shall review this list every two years to determine whether or not additional impaired waterbodies should be added to this list. This information should be submitted to the State Board.

Monitoring

Heal the Bay and Heal the Ocean had asked for monitoring for all tiers, and are looking forward to learning how the detection of septic system impacts to water quality might be more effectively undertaken through LAMP programs during our upcoming discussion with stakeholders. We have

17 → concerns regarding the need for specific monitoring requirements, especially for existing systems within setbacks that pose risks to waterbodies. At a minimum these requirements must be included in LAMPs, especially in the Advanced Protection Management Program. The Policy should specify that monitoring under a LAMP shall specifically include both new and existing systems within the jurisdiction of the local agency.

18 → In addition, the Policy should outline monitoring requirements for Tier 3. Receiving waters should be monitored upstream and downstream of Tier 3 OWTS. Effluent monitoring of Advanced Systems for TSS, bacteria, and nutrients should be performed on an established, regular basis. The Policy should

20 → contain a minimum monitoring frequency. Annual reports of this monitoring should be submitted to

20 → the appropriate OWTS management or oversight agency. At least one monitoring well should exist between an OWTS and an impaired water body in Tier 3 OWTS, unless there is a regional groundwater monitoring plan for the high risk area. Annual groundwater sampling should be required for systems within 600 feet of an impaired water body. The proposed policy should require Tier 1, 2, 3, and 4 OWTS owners with an onsite domestic well on their property to monitor groundwater by sampling and analyzing water quality every 5 years. As part of the requirements for Tier 2 systems, the local management agency should be required to develop and implement a regional monitoring plan within 2 years of policy approval. ← 21

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Inspections

In general, the Policy puts the burden of proof of impairment on the environment instead of on local agencies and OWTS owners. Inspections should **not** be used to prove that OWTS within 600 feet of a water body impaired for nutrients or bacteria contribute to the impairment. Instead, it should be assumed that existing systems in Tier 3 already cause or contribute to the impairment unless further investigation and soil and groundwater data prove otherwise. The Draft Policy should therefore:

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- Require regular inspections for moderate-risk (all systems within the setbacks outlined in Tier 1) and high-risk (Tier 3) existing OWTS;
 - OWTS owners in high-risk and moderate-risk¹ areas should have their systems inspected at least once every 3 years;
 - Tier 3 OWTS should also be required to report maintenance activities every year;
 - OWTS owners in Tier 3 should have 1 year from the adoption of the AB 885 regulations to have their systems inspected.

For low-risk OWTS in Tiers 0 and 1, inspections should only be required upon sale of the property. The Tier 2 inspection requirements will be determined by the local management agencies, but should at least require inspections upon sale of property.

Tier-Related Comments and Concerns

In prior letters and at the recent Board Workshop on this Policy, Heal the Bay and Heal the Ocean have advocated for the following changes. We look forward to discussing with staff and stakeholders these suggestions and requests regarding the tiers.

Tier 0

The Draft Policy Should Contain More Protective Requirements for Moderate- to High-Risk Existing Systems.

Heal the Ocean and Heal the Bay believe inspections are a critical component of combating septic system pollution and preventing future impairments. Monitoring of moderate-risk systems is crucial to identify systems that are contributing to water quality degradation and to prevent new impairments

¹ Moderate-risk OWTS are systems more than 600 feet from waterbodies impaired by OWTS, but close enough to other waterbodies to pose risks and impact beneficial uses by being within the setbacks described in sections 7.5.2-7.5.10 of the Policy.

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caused by septic systems. As written, the proposed policy puts all existing system into Tier 0, as long as they discharge less than 10,000 gallons per day (gpd) and do not qualify as Tier 3 or 4. This is not a protective approach for groundwater or surface waters. This means that as currently drafted, a seepage pit from the 1950's sited two feet from a flowing waterbody not yet found to be impaired will not have so much as an inspection to ensure it is functioning properly. Existing OWTS can pose a moderate to severe threat to water bodies, even if the waterbody is not yet 303(d)-listed and the OWTS is not classified as needing corrective action. For instance, areas with a high density of old systems and shallow groundwater are primed for water quality impacts from OWTS, and some of these high-risk areas may not yet have been identified. There are numerous existing systems that impact surface waters not listed as impaired. Perhaps more importantly, thousands of existing systems are degrading groundwater quality, and since groundwater quality is regulated separately from surface waters, and is monitored infrequently (if ever), it is critical to manage these systems before they lead to aquifer degradation that is putting public health at risk and/or leading to more severe regulatory outcomes like OWTS bans. Specifically, we recommend that any existing system within the setbacks outlined in section 7.5 should be monitored and inspected. At a minimum those with greater potential to impact water quality (see attachment) should be inspected by an independent qualified professional contractor to ensure that water quality is not being impacted. This is a reasonable approach that would allow OWTS management on a local level and would help close a glaring gap in the Policy.

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Also, the Policy allows for systems discharging too high of a discharge rate to be considered Tier 0. Instead, the 10,000 gpd discharge volume should either be reduced to 3,500 gpd, the same project flow required for new and replaced systems in Tier 1, or require an individual WDR. As another option, existing systems discharging more than 3,500 gpd should be covered under Tier 2 and given monitoring requirements.

Tier 1

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The Policy should clarify that all OWTS within 600 feet of an impaired (303(d)-listed water body for bacteria or nutrients) shall be included in Tier 3, not Tier 1. Attached are proposed language changes to Tier 1 to address this issue.

Tier 2

Heal the Bay and Heal the Ocean look forward to working with stakeholders to determine how Tier 2 LAMP requirements could identify existing problematic OWTS in a strong program that could ameliorate our concerns regarding a Tier 0 existing system escaping any evaluation. Many existing OWTS pose a moderate level of risk to state waters, and should be regulated accordingly. In addition to new or replacement OWTS, Tier 2 should include existing systems that do not comply with all siting and construction requirements, as well as dispersal system performance requirements and specifications outlined for Tier 1 (as stated earlier in this letter). For example, if an existing system is within 100 feet of a well, it should be treated like a Tier 2 system. We offer suggested language changes in the attachment to this letter. Through a LAMP, existing systems within certain setbacks (as

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shown in proposed language changes) should be monitored through a combination of visual inspections, receiving water monitoring, groundwater monitoring, and/or sanitary surveys performed by a certified environmental consultant. Existing systems identified in areas covered under a LAMP

- 39 → having certain risk factors should be inspected every 3 years and on point of sale. If existing Tier 2 ← 40
OWTS are within 200 feet of a sewer, they also must connect within 10 years. Tier 2 systems should
42 → have no less than a 5-foot depth to groundwater, as opposed to the 2-foot depth currently allowed in
section 9.4.9. A two foot separation is much too narrow to ensure water quality protection. In fact as
mentioned at the Workshop, many counties currently require a 5-foot separation.

Tier 3

- 43 → **Advanced Treatment Performance Criteria for Nitrogen should be 10mg/L for Commercial and
Multi-family Properties Discharging Over 3,500 gpd.**
The proposed policy sets weak performance standards for nutrients and fecal indicator bacteria in
advanced treatment systems. According to the Draft Policy, “Effluent from the supplemental treatment
44 → components designed to reduce nitrogen shall be certified by NSF, or other approved third party tester,
to meet a 50 percent reduction in total nitrogen when comparing the 30-day average influent to the 30-
day average effluent” (p. 35, Section 10.7.1). What is the basis for this requirement? This means a
system that currently takes influent averaging 50 mg/L in total nitrogen would only have to treat to an
average of 25 mg/L total nitrogen. This level is not protective of human health or aquatic life and will
45 → not reduce algal impairments, anoxia and hypoxia conditions, and other eutrophication impacts.

While we understand the complications of including a nitrogen limit for residential systems, there is no reason why larger commercial developments and multi-family homes should be exempt from receiving a protective nitrogen limit. Systems installed on larger developments can be more sophisticated — more similar to small-scale package plants than conventional septic systems — and can consistently achieve a protective nitrogen limit. Unlike small homeowners, larger commercial developments have the capability to have their systems handled by a wastewater management district or a private Operation & Maintenance contractor.

- 46 → Specifically, these large advanced treatment systems should be required to treat to a maximum of 10
mg/L nitrogen, as was the original intent of this policy. This would be consistent with many Basin
Plans throughout the State. For example, the Los Angeles Water Quality Control Plan sets a water
quality objective for nitrogen in waters that is not to exceed 10 mg/L nitrogen as nitrate-nitrogen plus
nitrite-nitrogen. The water quality objective of 10 mg/L is based on a Department of Health Services
drinking water standard. Thus, the advanced treatment requirement for nitrogen should instead revert
47 → back to a maximum 30-day average total nitrogen concentration of 10 mg/L as N.

Even the 10 mg/L limit will not be protective of aquatic life; this limit is only protective of human health. In order to protect aquatic life, levels of total nitrogen would need to be limited to nearly 1 mg/L. Hence, an advanced treatment requirement of 10 mg/L as N is generous and technologically
48 → feasible, and the proposed requirement in the Draft Policy is improper and inconsistent with the intent
of AB 885.

- 49 → It is critical to note that the best available control technology achieves even lower than 10 mg/L. The
Los Angeles Regional Board has issued WDRs for OWTS in Malibu requiring systems to meet 3 mg/L

49 → total nitrogen. Nitrex systems, which are single-pass proprietary trickling biofilters, are examples of a type of advanced onsite treatment that could easily meet the 10 mg/L nitrogen limit. Results of testing have shown nitrogen removal efficiencies up to 96%, leading to reductions to levels of 2 mg/L up to slightly higher results (average of 5.4 mg/L; median of 4.2 mg/L)² which is still capable of meeting a limit of 10 mg/L nitrogen on average. Recirculating sand/gravel filters with an anoxic filter and an external carbon source of methanol is another example of an advanced treatment system that could be used to meet these limits. At a minimum, commercial and multi-family OWTS designed to receive over 3,500 gpd should be required to either meet this limit, or they will have to apply for WDRs.

**Table 7. Nitrogen Removal Efficiencies
With External Carbon Sources**

External Carbon Source for RSF Anoxic Filter System	Mean Total-N % Removal	Mean Effluent Total-N, g/L
Methanol	74	13
Ethanol	80	10

Source: Nitrogen Reducing Technologies – Report to the Puget Sound Action Team: Full Version. June 2005. Page A-38.

TMDL Requirements

50 → Heal the Bay and Heal the Ocean maintain that it is unacceptable that the Policy no longer contains the requirement that a TMDL be adopted for the water bodies listed in Attachment 2 within 5 years of the effective date of this policy and within 5 years of future 303(d) listings. At a minimum, the Policy should establish a ceiling for TMDL implementation for those TMDL implementation plans that do not require building a new sewer system.

51 → For instance, Tier 3 OWTS near waterbodies on Attachment 2 should be required to comply with the TMDL 10 years from the development date mentioned on the attachment, and OWTS near water bodies that already have TMDLs should be required to comply with the TMDL and with the advanced treatment requirements of this policy no more than 10 years from the effective date of this policy if no implementation schedule has been drafted.

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53 → Systems in 303(d) listed high risk areas where a TMDL has not been developed (within 600 feet of nutrient and bacteria impaired waters) that have not committed to connecting to a centralized sewage treatment system should have 5 years from this Policy’s effective date for compliance with the advanced treatment requirements of the Policy. This provides an incentive to move more impaired water bodies into the TMDL program. We believe this requirement would be reasonable and justified because these systems are already considered as having reasonable potential to cause or contribute to impairments.

Upstream Requirements and Upgrades

² Nitrogen Reducing Technologies – Report to the Puget Sound Action Team: Full Version. June 2005.

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10 → OWTS within 600 feet of nitrogen or bacteria 303(d) listed impaired waters without a TMDL should be required to upgrade to advanced treatment if no TMDL is developed by the date specified in Attachment 2 – unless the owner commits to connecting to a sewer, or a detailed study shows that the system is not causing or contributing to the impairment. This should not be viewed as punitive because it is assumed these systems have been defined in the policy (within 600 feet of impaired water) as having the reasonable potential to contribute to the impairments.

55 → OWTS near impaired waters need to upgrade to the appropriate advanced treatment level for the applicable impairment. Perfect examples are the Malibu homes along Santa Monica Bay. It makes no sense for those OWTS to upgrade to denitrification because Santa Monica Bay is not listed for nutrients or eutrophication. However, disinfection is needed because there is a fecal bacteria TMDL for all Bay beaches. In Santa Barbara/Ventura County, the Rincon (which is soon connecting to public sewer) is listed on the CWA 303(d) impaired water body list for fecal and total coliform, not nitrates.

56 → If nearby waters are impaired for bacteria, then the required advanced treatment would consist of disinfection. If the water is listed for nitrates or total nitrogen, low dissolved oxygen, eutrophication, or algae, then a supplemental denitrification system should be required through AB 885 regulations. If

58 → the impaired waterbody is listed for nutrients and bacteria, then both disinfection and denitrification advanced systems should be required.

59 → If the local health department determines that areas within 600 feet are not high-risk areas based on soils, groundwater monitoring, and OWTS inspection, then land owners could be allowed to apply for a waiver from the advanced treatment requirement. The waiver approval decision should be made by the local Regional Water Board. Under any scenario, all new systems in these high risk areas must be advanced treatment systems.

61 → We ask the State Board to require that in addition to systems within an area 600 linear feet adjacent to the edge of an impaired water body, OWTS systems **upstream** of an impaired water body should also be considered Tier 3. For instance, OWTS located within 600 feet of tributaries that feed directly into water bodies impaired by nutrients and bacteria should be included in Tier 3. The 600 feet criterion can

62 → be modified by the local Regional Water Board (less or greater distance) if a local health agency or municipal entity can provide data (soil, slope and groundwater monitoring) demonstrating that the high risk area should be treated differently due to increased or lessened risk. If the local Department of Environmental Health and Safety determines high risk areas are outside of 600 feet from a water body, OWTS within these areas must also be considered Tier 3. The above approach would ensure that most OWTS that cause or contribute to water quality impairments are appropriately regulated under Tier 3.

Conditional Waiver

63 → The Conditional Waiver of Discharge Requirements should reiterate that a dispersal system with less than a five-foot depth to groundwater is a condition that must be met for compliance with this waiver. The attached redlines show language to address this issue.

Conclusion

AB 885 has great potential for protecting public health and improving surface and groundwater quality in California. We look forward to working with stakeholders in the coming few weeks to address the issues outlined above to ensure the current Draft Policy results in better protection of human health and aquatic life and achieves the intent of AB 885, putting an end to the contamination caused by improper siting and use of certain OWTS. Based on the discussion at the workshop, we believe that some of the Board members shared similar concerns. We now must find a feasible solution to these issues. We look forward to the working together to find solutions. Thank you for your consideration of these comments. If you have any questions, please contact us at 310-451-1500.

Sincerely,



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Preamble – Purpose and Scope – Structure of the Policy

3/19/2012

Preamble

Onsite wastewater treatment systems (OWTS) are useful and necessary structures that allow habitation at locations that are removed from centralized wastewater treatment systems. When properly sited, designed, operated, and maintained, OWTS treat domestic wastewater to reduce its polluting impact on the environment and most importantly protect public health. Estimates for the number of installations of OWTS in California at the time of this Policy are that more than 1.2 million systems are installed and operating. The vast majority of these are functioning in a satisfactory manner and meeting their intended purpose.

However there have been occasions in California where OWTS for a varied list of reasons have not satisfactorily protected either water quality or public health. Some instances of these failures are related to the OWTS not being able to adequately treat and dispose of waste as a result of poor design or improper site conditions. Others have occurred where the systems are operating as designed but their densities are such that the combined effluent resulting from multiple systems is more than can be assimilated into the environment. From these failures we must learn how to improve our usage of OWTS and prevent such failures from happening again.

As California's population continues to grow, and we see both increased rural housing densities and the building of residences and other structures in more varied terrain than we ever have before, we increase the risks of causing environmental damage and creating public health risks from the use of OWTS. What may have been effective in the past may not continue to be as conditions and circumstances surrounding particular locations change. So necessarily more scrutiny of our installation of OWTS is demanded of all those involved, while maintaining an appropriate balance of only the necessary requirements so that the use of OWTS remains viable.

Purpose and Scope of the Policy

The purpose of this Policy is to allow the continued use of OWTS, while protecting water quality and public health. This Policy recognizes that responsible local agencies can provide the most effective means to manage OWTS on a routine basis. Therefore as an important element, it is the intent of this policy to efficiently utilize and improve upon where necessary existing local programs through coordination between the State and local agencies. To accomplish this purpose, this Policy establishes a statewide, riskbased, tiered approach for the regulation and management of OWTS installations and replacements and sets the level of performance and protection expected from OWTS. In particular, the Policy requires actions for identified areas where OWTS contribute to water quality degradation that adversely affect beneficial uses.

This Policy only authorizes subsurface disposal of domestic strength, and in limited instances high strength, wastewater and establishes minimum requirements for the permitting, monitoring, and operation of OWTS for protecting beneficial uses of waters

of the State and preventing or correcting conditions of pollution and nuisance. And finally, this Policy also conditionally waives the requirement for owners of OWTS to apply for and receive Waste Discharge Requirements in order to operate their systems when they meet the conditions set forth in the Policy. Nothing in this Policy supersedes or requires modification of Total Maximum Daily Loads or Basin Plan prohibitions of discharges from OWTS.

This Policy applies to OWTS on federal, state, and Tribal lands to the extent authorized by law or agreement.

Structure of the Policy

This Policy is structured into ten major parts:

Definitions

Definitions for all the major terms used in this Policy are provided within this part and wherever used in the Policy the definition given here overrides any other possible definition.

[Section 1]

Responsibilities and Duties

Implementation of this Policy involves individual OWTS owners; local agencies, be they counties, cities, or any other subdivision of state government with permitting powers over OWTS; Regional Water Quality Control Boards; and the State Water Resources Control Board.

[Sections 2, 3, 4, and 5]

Tier 0 – Existing OWTS

64 → Existing OWTS that are within other setbacks listed in Tier 0 requirements shall be inspected upon implementation of this Policy to ensure the OWTS is not impacting water wells, etc. Existing OWTS that are properly functioning, and do not meet the conditions of failing systems or otherwise require corrective action (for example, to prevent groundwater impairment) as specifically described in Tier 4, and are not determined to be contributing to an impairment of surface water as specifically described in Tier 3, are automatically included in Tier 0.

[Section 6]

Tier 1 – Low-Risk New or Replacement OWTS

New or replacement OWTS that meet low risk siting and design requirements as specified in Tier 1, where there is not an approved Local Agency Management Program per Tier 2.

[Sections 7 and 8]

Tier 2 – Local Agency Management Program for New or Replacement OWTS California is well known for its extreme range of geological and climatic conditions. As such, the establishment of a single set of criteria for OWTS would either be too restrictive so as to protect for the most sensitive case, or would have broad allowances that would not be

protective enough under some circumstances. To accommodate this extreme variance, local agencies may submit management programs (“Local Agency Management Programs”) for approval, and upon approval then manage the installation of new and replacement OWTS under that program.

Local Agency Management Programs approved under Tier 2 provide an alternate method from Tier 1 programs to achieve the same policy purpose, which is to protect water quality and public health. In order to address local conditions, Local Agency Management Programs may include standards that differ from the Tier 1 requirements for new and replacement OWTS contained in Sections 7 and 8. As examples, a Local Agency Management Program may authorize different soil characteristics, usage of seepage pits, and different densities for new developments. Once the Local Agency Management Program is approved, new and replacement OWTS that are included within the Local Agency Management Program may be approved by the Local Agency. A Local Agency, at its discretion, may include Tier 1 standards within its Tier 2 Local Agency Management Program for some or all of its jurisdiction. However, once a Local Agency Management Program is approved, it shall supersede Tier 1 and all future OWTS decisions will be governed by the Tier 2 Local Agency Management Program until it is modified, withdrawn, or revoked.

[\[Section 9\]](#)

Tier 3 – Impaired Areas

OWTS that are near impaired water bodies may be addressed by a TMDL and its implementation program, or special provisions contained in a Local Agency Management Program. If there is no TMDL or special provisions, new or replacement OWTS within 600 feet of impaired water bodies listed in Attachment 2 must meet the specific requirements of Tier 3.

[\[Section 10\]](#)

Tier 4 – OWTS Requiring Corrective Action

OWTS that require corrective action or are either presently failing or fail at any time while this Policy is in effect are automatically included in Tier 4 and must follow the requirements as specified.

[\[Section 11\]](#)

Conditional Waiver of Waste Discharge Requirements

The requirement to submit a report of waste discharge for discharges from OWTS that are in conformance with this policy is waived.

[\[Section 12\]](#)

Effective Date

When this Policy becomes effective.

[\[Section 13\]](#)

Financial Assistance

Procedures for local agencies to apply for funds to establish low interest loan programs for the assistance of OWTS owners in meeting the requirements of this Policy.

[Section 14]

[Attachment 1](#)

AB 885 Regulatory Program Timelines.

[Attachment 2](#)

Tables 4 and 5 specifically identify those impaired water bodies that have Tier 3 requirements and must have a completed TMDL by the date specified, **and the TMDL must set an implementation schedule to meet waste load allocations within 10 years of the specified date.**

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[Attachment 3](#)

Table 6 shows where one Regional Water Board has been designated to review and, if appropriate, approve new Local Agency Management Plans for a local agency that is within multiple Regional Water Boards' jurisdiction.

What Tier Applies to my OWTS?

Existing OWTS that conform to the requirements for Tier 0 will remain in Tier 0 as long as they continue to meet those requirements. An existing OWTS will temporarily move from Tier 0 to Tier 4 if it is determined that corrective action is needed. The existing OWTS will return to Tier 0 once the corrective action is completed. Any major repairs conducted as corrective action must comply with Tier 1 requirements or Tier 2 requirements, whichever are in effect for that local area. An existing OWTS will move from Tier 0 to Tier 3 if it is adjacent to an impaired water body listed on Attachment 2, or is covered by a TMDL implementation plan.

In areas with no approved Local Agency Management Plan, new and replacement OWTS that conform to the requirements of Tier 1 will remain in Tier 1 as long as they continue to meet those requirements. A new or replacement OWTS will temporarily move from Tier 1 to Tier 4 if it is determined that corrective action is needed. The new or replacement OWTS will return to Tier 1 once the corrective action is completed. A new or replacement OWTS will move from Tier 1 to Tier 3 if it is adjacent to an impaired water body, or is covered by a TMDL implementation plan.

In areas with an approved Local Agency Management Plan, new and replacement OWTS that conform to the requirements of the Tier 2 Local Agency Management Plan will remain in Tier 2 as long as they continue to meet those requirements. A new or replacement OWTS will temporarily move from Tier 2 to Tier 4 if it is determined that corrective action is needed. The new or replacement OWTS will return to Tier 2 once the corrective action is completed. A new or replacement OWTS will move from Tier 2 to Tier 3 if it is adjacent to an impaired water body, or is covered by a TMDL implementation plan, or is covered by special provisions for impaired water bodies contained in a Local Agency Management Program.

Existing, new, and replacement OWTS in specified areas adjacent to water bodies that are identified by the State Water Board as impaired for pathogens or nitrogen and listed

in Attachment 2 are in Tier 3. Existing, new, and replacement OWTS covered by a TMDL implementation plan, or covered by special provisions for impaired water bodies contained in a Local Agency Management Program are also in Tier 3. These OWTS will temporarily move from Tier 3 to Tier 4 if it is determined that corrective action is needed. The new or replacement OWTS will return to Tier 3 once the corrective action is completed.

Existing, new, and replacement OWTS that do not conform with the requirements to receive coverage under any of the Tiers (e.g., existing OWTS with a projected flow of more than 10,000 gpd) do not qualify for this Policy's conditional waiver of waste discharge requirements, and will be regulated separately by the applicable Regional Water Board.

Final Draft

Responsibilities and Duties

3/20/2012

5.6 The State Water Board, at the time of approving any Impaired Water Bodies [303 (d)] List, and for the purpose of implementing Tier 3 of this Policy, shall identify in Attachment 2 those water bodies where: (1) it is likely that operating OWTS will subsequently be determined to be a contributing source of pathogens or nitrogen and therefore it is anticipated that OWTS would receive a loading reduction, and (2) it is likely that new OWTS installations discharging within 600 feet of the water body would contribute to the impairment. This identification shall be based on information available at the time of 303 (d) listing and may be updated based on new information. In addition, the State Board shall complete full review of Attachment 2 every 2 years upon adoption of the 303(d) List.

Final Draft

Tier 0 – Existing OWTS

3/19/2012

Tier 0 – Existing OWTS

Existing OWTS that are properly functioning and do not meet the conditions of failing systems or otherwise require corrective action (for example, to prevent groundwater impairment) as specifically described in Tier 4, and are not determined to be contributing to an impairment of surface water as specifically described in Tier 3, are automatically included in Tier 0.

6.0 Coverage for Properly Operating Existing OWTS

6.1 Existing OWTS are automatically covered by Tier 0 and the herein included waiver of waste discharge requirements if they meet the following requirements:

- 6.1.1 have a projected flow of 10,000 gallons-per-day or less;
- 6.1.2 receive only domestic wastewater from residential or commercial buildings, or high-strength wastewater from commercial food service buildings that does not exceed 900 mg/L BOD and has a properly sized and functioning oil/grease interceptor (a.k.a. grease trap);
- 6.1.3 do not require supplemental treatment under Tier 3;
- 6.1.4 do not require corrective action under Tier 4; and
- 6.1.5 do not consist of a cesspool as a means of wastewater disposal.

6.2 A Regional Water Board or local agency may deny coverage under this Policy to any OWTS that is:

6.2.1 Not in compliance with Section 6.1;

6.2.2 In the opinion of the Regional Water Board not able to adequately protect the water quality of the waters of the State and should therefore submit a report of waste discharge to receive Region specific waste discharge requirements or waiver of waste discharge requirements so as to be protective.

6.3 Existing OWTS currently under waste discharge requirements or individual waiver of waste discharge requirements will remain under those orders until notified in writing by the appropriate Regional Water Board that they are covered under this Policy.

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→ **6.4. Existing OWTS within the 600 ft. setback from 303(d)-listed impaired waterbodies for pathogens or nutrients shall be included in Tier 3 or be included in a TMDL program.**

→ 6.5 Existing OWTS within the following setbacks must be inspected (by an independent qualified professional, with report supplied to local agency/Environmental Health Service) to ensure the OWTS is not impacting water quality:

6.5.1 100 feet from wells;

6.5.2 100 feet from flowing surface water bodies where the edge of that water body is the natural or levied bank for creeks and rivers, or may be less where site conditions prevent migration of wastewater to the water body;

6.5.3 200 feet from vernal pools, wetlands, lakes, ponds, or other surface water bodies where the edge of that water body is the high water mark for lakes and reservoirs, and the mean high tide line for tidally influenced water bodies;

6.5.4 150 feet from a public water supply well where the depth of the effluent dispersal system does not exceed 20 feet;

6.5.5 Where the OWTS is sited in an area that fails to meet the minimum depths to groundwater and minimum soil depth from the bottom of the Dispersal System as described in Section 8.1.5 and Table 1 in Tier 1.

Final Draft

Tier 1 – Low Risk New or Replacement OWTS

3/19/2012

Tier 1 – Low Risk New or Replacement OWTS

New or replacement OWTS meet low risk siting and design requirements as specified in Tier 1, where there is not an approved Local Agency Management Program per Tier 2.

7.0 Minimum Site Evaluation and Siting Standards

7.1 A qualified professional shall perform all necessary soil and site evaluations for all new OWTS and for existing OWTS where the treatment or dispersal system will be replaced or expanded.

7.2 A site evaluation shall determine that adequate soil depth is present in the dispersal area. Soil depth is measured vertically to the point where bedrock, hardpan, impermeable soils, or saturated soils are encountered or an adequate depth has been determined. Soil depth shall be determined through the use of soil profile(s) in the dispersal area and the designated dispersal system replacement area, as viewed in excavations exposing the soil profiles in representative areas, unless the local agency has determined through historical or regional information that a specific site soil profile evaluation is unwarranted.

7.3 A site evaluation shall determine the anticipated highest level of groundwater within the dispersal field and its required minimum dispersal zone by estimation using one or a combination of the following methods:

7.3.1 Direct observation of the highest extent of soil mottling observed in the examination of soil profiles, recognizing that soil mottling is not always an indicator of the uppermost extent of high groundwater; or

7.3.2 Direct observation of groundwater levels during the anticipated period of high groundwater. Methods for groundwater monitoring and determinations shall be decided by the local agency; or

7.3.3 Other methods, such as historical records, acceptable to the local agency.

7.3.4 Where a conflict in the above methods of examination exists, the direct observation method indicating the highest level shall govern.

→ 7.3.5 In no case shall a OWTS use a dispersal system that is in soil saturated with groundwater nor shall separation of the bottom of a dispersal system to groundwater be less than five (5) feet.

7.4 Percolation test results in the effluent disposal area shall not be faster than one minute per inch (1 MPI) or slower than ninety minutes per inch (90 MPI). Other percolation rates may be used under a Tier 2 Local Agency Management Program. All percolation rates shall be based on actual or simulated wet weather conditions by performing the test during the wet weather period as determined by the local agency or by presoaking of percolation test holes and shall be a stabilized rate.

7.5 Minimum horizontal setbacks shall be as follows:

7.5.1 5 feet from parcel property lines;

7.5.2 100 feet from water wells and monitoring wells, unless regulatory or legitimate data requirements necessitate that monitoring wells be located closer;

7.5.3 100 feet from any unstable land mass or any areas subject to earth slides identified by a registered engineer or registered geologist; other setback distance are allowed, if recommended by a geotechnical report prepared by a qualified professional.

7.5.4 100 feet from springs and flowing surface water bodies where the edge of that water body is the natural or levied bank for creeks and rivers, or may be less where site conditions prevent migration of wastewater to the water body;

7.5.5 200 feet from vernal pools, wetlands, lakes, ponds, or other surface water bodies where the edge of that water body is the high water mark for lakes and reservoirs, and the mean high tide line for tidally influenced water bodies;

7.5.6 150 feet from a public water well where the depth of the effluent dispersal system does not exceed 10 feet;

7.5.7 200 feet from a public water well where the depth of the effluent dispersal system exceeds 10 feet in depth;

7.5.8 Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth and the separation from the bottom of the system and ground water is less than five feet, the horizontal setback required to achieve a two-year travel time for microbiological contaminants shall be evaluated. A qualified professional shall conduct

this evaluation. However in no case shall the setback be less than 200 feet.

7.5.9 Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake and within the catchment of the drainage, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.

7.5.10 Where the effluent dispersal system is located more than 1,200 but less than 2,500 feet from a public water systems' surface water intake and within the catchment of the drainage, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.

70 → 7.5.11 Where the OWTS is sited in an area that exceeds the minimum depths to groundwater and minimum soil depth from the bottom of the Dispersal System as described in Section 8.1.5 and Table 1 in Tier 1. In no case shall there be less than five (5) feet separation from the bottom of a OWTS to groundwater.

71 → 7.5.12 All OWTS within 600 feet of an impaired (303(d)-listed water body for pathogens or nutrients shall be included in Tier 3.

7.6 Prior to issuing a permit to install an OWTS the permitting agency shall determine if the OWTS is within 1,200 feet of an intake for a surface water treatment plant for drinking water and is in the drainage catchment in which the intake is located. If the OWTS is within 1,200 feet of an intake for a surface water treatment plant for drinking water and is in the drainage catchment in which the intake is located:

7.6.1 The permitting agency shall provide a copy of the permit application to the owner of the water system of their proposal to install an OWTS within 1,200 of an intake for a surface water treatment. If the owner of the water system cannot be identified, then the permitting agency will notify California Department of Public Health Drinking Water Program.

7.6.2 The permit application shall include a topographical plot plan for the parcel showing the OWTS components, the property boundaries, proposed structures, physical address, and name of property owner.

7.6.3 The permitting agency shall provide the estimated wastewater flows, intended use of proposed structure generating the wastewater, soil data, and estimated depth to seasonally saturated soils.

7.6.4 The public water system owner shall have 5 days from receipt of the permit application to provide recommendations and comments to the permitting agency.

7.7 Natural ground slope in all areas used for effluent disposal shall not be greater than 25 percent.

7.8 The average density for any subdivision of property occurring after the effective date of this Policy and implemented under Tier 1 shall not exceed one single-family dwelling unit, or its equivalent, per 2.5 acres for those units that rely on OWTS.

8.0 Minimum OWTS Design and Construction Standards

8.1 OWTS Design Requirements

8.1.1 A qualified professional shall design all new OWTS and modifications to existing OWTS where the treatment or dispersal system will be replaced or expanded. A qualified professional employed by a local agency, while acting in that capacity may design or review and approve a design for a proposed OWTS.

8.1.2 OWTS shall be located, designed, and constructed in a manner to ensure that effluent does not surface at any time, and that percolation of effluent will not adversely affect beneficial uses of waters of the State.

8.1.3 The design of new and replaced OWTS shall be based on the expected influent wastewater quality with a projected flow not to exceed 3,500 gallons per day, the peak wastewater quantity for purposes of hydraulic sizing, the characteristics of the site, and the required level of treatment for protection of water quality and public health.

8.1.4 All dispersal systems shall have at least twelve (12) inches of soil cover.

8.1.5 The minimum depth to the anticipated highest level of groundwater below the bottom of the leaching trench, and the native soil depth immediately below the leaching trench, shall not be less than prescribed in Table 1.

TABLE 1 NOT REPRODUCED HERE

8.1.6 Dispersal systems shall be a leachfield, designed using not more than 4 square-feet of infiltrative area per linear foot of trench as the infiltrative surface, and with trench width no wider than 3 feet. Seepage pits and other dispersal systems may only be authorized for repairs where siting limitations require a variance. Maximum application rates shall be determined from stabilized percolation rate as provided in Table 2, or from soil texture and structure determination as provided in Table 3.

TABLES 2 & 3 NOT REPRODUCED HERE

8.1.7 Dispersal systems shall not exceed a maximum depth of 10 feet as measured from the ground surface to the bottom of the trench.

8.1.8 All new dispersal systems shall have 100 percent replacement area that is equivalent and separate, and available for future use.

8.1.9 No dispersal systems or replacement areas shall be covered by an impermeable surface, such as paving, building foundation slabs, plastic sheeting, or any other material that prevents oxygen transfer to the soil.

8.1.10 Rock fragment content of native soil surrounding the dispersal system shall not exceed 50 percent by volume for rock fragments sized as cobbles or larger and shall be estimated using either the point-count or line-intercept methods.

8.1.11 Increased allowance for gravel-less chamber systems is only allowed under a Tier 2 Local Agency Management Program.

72 → 8.1.12 OWTS discharging more than 3,500 gallons per day shall be put into Tier 2 and given monitoring requirements, OR, require an individual WDR.

8.2 Septic Tank Construction and Installation

8.2.1 All new or replaced septic tanks and new or replaced grease interceptor tanks shall comply with the standards contained in Sections K5(b), K5(c), K5(d), K5(e), K5(k), K5(m)(1), and K5(m)(3)(ii) of Appendix K, of Part 5, Title 24 of the 2007 California Code of Regulations.

8.2.2 All new septic tanks shall comply with the following requirements:

8.2.2.1 Access openings shall have watertight risers, the tops of which shall be set within 6 inches of finished grade; and

8.2.2.2 Access openings shall be secured to prevent unauthorized access.

8.2.3 New and replaced OWTS septic tanks shall be limited to those approved by the International Association of Plumbing and Mechanical Officials (IAPMO) or stamped and certified by a California registered civil engineer as meeting the industry standards, and their installation shall be according to the manufacturer's instructions.

8.2.4 New and replaced OWTS septic tanks shall be designed to prevent solids in excess of three-sixteenths (3/16) of an inch in diameter from passing to the dispersal system. Septic tanks that use a National Sanitation

Foundation/American National Standard Institute (NSF/ANSI) Standard 46 certified septic tank filter at the final point of effluent discharge from the OWTS and prior to the dispersal system shall be deemed in compliance with this requirement.

8.2.5 A Licensed General Engineering Contractor (Class A), General Building Contractor (Class B), Sanitation System Contractor (Specialty Class C- 42), or Plumbing Contractor (Specialty Class C-36) shall install all new OWTS and replaced OWTS in accordance with California Business and Professions Code Sections 7056, 7057, and 7058 and Article 3, Division 8, Title 16 of the California Code of Regulations. A property owner may also install his/her own OWTS if the as-built diagram and the installation are inspected and approved by the Regional Water Board or local agency at a time when the OWTS is in an open condition (not covered by soil and exposed for inspection).

Final Draft

Tier 2 – Local Agency OWTS Management Program

3/19/2012

Tier 2 – Local Agency OWTS Management Program

Local agencies may submit management programs for approval, and upon approval then manage the installation of new and replacement OWTS under that program. Local Agency Management Programs approved under Tier 2 provide an alternate method from Tier 1 programs to achieve the same policy purpose, which is to protect water quality and public health. In order to address local conditions, Local Agency Management Programs may include standards that differ from the Tier 1 requirements for new and replacement OWTS contained in Sections 7 and 8. As examples, a Local Agency Management Program may authorize different soil characteristics, usage of seepage pits, and different densities for new developments. Once the Local Agency Management Program is approved, new and replacement OWTS that are included within the Local Agency Management Program may be approved by the Local Agency. A Local Agency, at its discretion, may include Tier 1 standards within its Tier 2 Local Agency Management Program for some or all of its jurisdiction. However, once a Local Agency Management Program is approved, it shall supersede Tier 1 and all future OWTS decisions will be governed by the Tier 2 Local Agency Management Program until it is modified, withdrawn, or revoked.

9.0 Local Agency Management Program for Minimum OWTS Standards

The Local Agency Management Program for minimum OWTS Standards is a management program where local agencies can establish minimum standards that are differing requirements from those specified in Tier 1 (Section 7 and Section 8), including the areas that cannot meet those minimum standards and still achieve this Policy's purpose, which is to protect water quality and public health. Local Agency Management Programs may include any one or combination of the following to achieve this purpose:

- Differing system design requirements;
- Differing siting controls such as system density and setback requirements;
- Requirements for owners to enter monitoring and maintenance agreements; and/or
- Creation of an onsite management district.

9.1 Where different and/or additional requirements are needed to protect water quality the local agency may consider any of the following, as well as any other conditions deemed appropriate, when developing Local Agency Management Program requirements:

9.1.1 Degree of vulnerability to pollution from OWTS due to hydrogeological conditions.

9.1.2 High Quality waters or other environmental conditions requiring enhanced protection from the effects of OWTS.

9.1.3 Shallow soils requiring a dispersal system installation that is closer to ground surface than is standard.

9.1.4 OWTS is located in area with high domestic well usage.

9.1.5 Dispersal system is located in an area with fractured bedrock.

9.1.6 Dispersal system is located in an area with poorly drained soils.

9.1.7 Surface water is vulnerable to pollution from OWTS.

9.1.8 Surface water within the watershed is listed as impaired for nitrogen or pathogens.

9.1.9 OWTS is located within an area of high OWTS density.

73 → 9.1.10 Existing OWTS within the following setbacks must be monitored in accordance with a Local Agency Management Plan:

9.1.10.1 Within the 600 ft. setback from 303(d)-listed impaired waterbodies for pathogens or nutrients;

9.1.10.2 100 feet from wells;

9.1.10.3 100 feet from flowing surface water bodies where the edge of that water body is the natural or levied bank for creeks and rivers, or may be less where site conditions prevent migration of wastewater to the water body;

9.1.10.3 200 feet from vernal pools, wetlands, lakes, ponds, or other surface water bodies where the edge of that water body is the high water mark for lakes and reservoirs, and the mean high tide line for tidally influenced water bodies;

9.1.10.4 150 feet from a public water supply well where the depth of the effluent dispersal system does not exceed 20 feet;

9.1.10.5 Where the OWTS is sited in an area that fails to meet the minimum depths to groundwater and minimum soil depth from the bottom of the Dispersal System as described in Section 8.1.5 and Table 1 in Tier 1.

9.2 The Local Agency Management Program shall detail the scope of its coverage, such as the maximum authorized projected flows for OWTS, as well as a clear delineation of those types of OWTS included within and to be permitted by the program, and provide the local site evaluation, siting, design, and construction requirements, and in addition each of the following:

9.2.1 Any local agency requirements for 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.

9.2.2 Any special provisions applicable to OWTS within specified geographic area near specific impaired water bodies listed for pathogens or nitrogen. The special provisions may be substantive and/or procedural, and may include, as examples: consultation with the Regional Water Board prior to issuing permits, supplemental treatment, development of a management district, special siting requirements.

9.2.3 Local Agency Management Program variances, for new installations and repairs in substantial conformance, to the greatest extent practicable. Variances are not allowed for the requirements stated in sections 9.4.1 through 9.4.9.

9.2.4 Any educational, training, certification, and/or licensing requirements that will be required of OWTS service providers, site evaluators, designers, installers, pumpers, maintenance contractors, and any other person relating to OWTS activities.

9.2.5 Education and/or outreach program including informational materials to inform OWTS owners about how to locate, operate, and maintain their OWTS as well as any Water Board order (e.g., Basin Plan prohibitions) regarding OWTS restrictions within its jurisdiction. The education and/or outreach program shall also include procedures to ensure that alternative onsite system owners are provided an informational maintenance or replacement document by the system designer or installer. This document shall cite homeowner procedures to ensure maintenance, repair, or replacement of critical items within 48 hours following failure.

9.2.6 An analysis of existing and proposed disposal locations for septage, the volume of septage anticipated, and whether adequate capacity is available.

9.2.7 Any consideration given to onsite maintenance districts.

9.2.8 Any consideration given to the development and implementation of, or coordination with, Regional Salt and Nutrient Management Plans.

9.2.9 Any consideration given to coordination with watershed management groups.

9.2.10 Procedures for evaluating the proximity of sewer systems to new or replacement OWTS installations. Existing Tier 2 OWTS within 200 feet of a sewer must connect to sewer within 10 years of implementation of this Policy.

9.2.11 Procedures for notifying the owner of a public water system prior to issuing an installation or repair permit for an OWTS, if the OWTS is within 1,200 feet of an intake for a surface water treatment plant for drinking water and is in the drainage area catchment in which the intake is located, or if the OWTS is within a horizontal sanitary setback from a public well.

9.2.12 Policies and procedures that will be followed when a proposed OWTS dispersal area is within the horizontal sanitary setback of a public well or a surface water intake. These policies and procedures shall either indicate that supplemental treatment as specified in 10.9 and 10.10 of this policy are required for OWTS that are within a horizontal sanitary setback of a public well or surface water intake, or will establish alternate siting and operational criteria for the proposed OWTS that would similarly mitigate the potential adverse impact to the public water source.

74 → 9.2.13 Cesspools with be registered with Local Agency Management Programs with site-specific information (depth, volume, discharge, soils), and put on a timeline of phase-out.

9.3 The minimum responsibilities of the local agency for management of the Local Agency Management Program include:

9.3.1 Maintain records of the number, location, and description of permits issued for OWTS where a variance is granted.

9.3.2 Maintain a water quality assessment program to evaluate the impact of OWTS discharges and assess the extent to which groundwater and local surface water quality may be adversely impacted. The focus of the assessment should be areas with characteristics listed under section 9.1.

The assessment program will include monitoring and analysis of water quality data, review of complaints, variances, failures, and any information resulting from inspections. The assessment may use existing water quality data from other monitoring programs and/or establish the terms, conditions, and timing for monitoring done by the local agency. At a minimum this assessment will include monitoring data for nitrates and pathogens, and may include data for other constituents which are needed to adequately characterize the impacts of OWTS on water quality.

Other monitoring programs for which data may be used include but are not limited to any of the following:

9.3.2.1. Random well samples from a domestic well sampling program.

9.3.2.2. Routine real estate transfer samples if those are performed and reported.

9.3.2.3. Review of public system sampling reports done by the local agency or another municipality responsible for the public system.

9.3.2.4. Water quality testing reports done at the time of new well development if those are reported.

9.3.2.5. Beach water quality testing data performed as part of Health and Safety Code Section 115885.

9.3.2.6. Receiving water sampling performed as a part of a NPDES permit.

9.3.2.7. Data contained in the California Water Quality Assessment Database.

9.3.2.8. Groundwater sampling performed as part of Waste Discharge Requirements.

9.3.2.9. Groundwater data collected as part of the Groundwater Ambient Monitoring and Assessment Program and available in the Geotracker Database.

9.3.3 Submit an annual report by February 1 to the applicable Regional Water Board summarizing the status of items 9.3.1 through 9.3.2 above. Every fifth year, submit an evaluation of the monitoring program and an assessment of whether water quality is being impacted by OWTS, identifying any changes in the Local Agency Management Program that will be undertaken to address impacts from OWTS. The first report will commence one year after approval of the local agency's Local Agency Management Program. In addition to summarizing monitoring data collected per 9.3.8 above, all groundwater monitoring data generated by the local agency shall be submitted in EDF format for inclusion into Geotracker, and surface water monitoring shall be submitted to CEDEN in a SWAMP comparable format.

9.4 The following are not allowed to be included in a Local Agency Management Program:

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→ ~~9.4.1 Cesspools of any kind or size.~~ (DELETE: replace with new section 9.2.13, above).

9.4.2 OWTS receiving a projected flow over 10,000 gallons per day.

9.4.3 OWTS that utilize any form of effluent disposal that discharges on or above the post installation ground surface such as sprinklers, exposed drip lines, free-surface wetlands, or a pond.

9.4.4 Slopes greater than 30 percent without a slope stability report approved by a registered professional.

9.4.5 Decreased leaching area for IAPMO-approved dispersal systems using a multiplier less than 0.70.

9.4.6 Supplemental OWTS without requirements for periodic monitoring or inspections.

9.4.7 OWTS dedicated to receiving wastes from RV dumps.

9.4.8 Separation of the bottom of dispersal system to groundwater less than two (2) feet.

9.4.9 Installation of OWTS where public sewer is available. The public sewer may be considered as not available when such public sewer or any building or exterior drainage facility connected thereto is located more than 200 feet from any proposed building or exterior drainage facility on any lot or premises that abuts and is served by such public sewer.

9.4.10 Except as provided for in sections 9.4.11 and 9.4.12, new or repaired onsite systems with minimum horizontal setbacks less than any of the following:

9.4.10.1 150 feet from a public water well where the depth of the effluent dispersal system does not exceed 10 feet in depth.

9.4.10.2 200 feet from a public water well where the depth of the effluent dispersal system exceeds 10 feet in depth.

9.4.10.3 Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth and the separation from the bottom of the system and ground water is less than five feet the horizontal setback required to achieve a two-year travel time for microbiological contaminants shall be evaluated. A qualified professional shall conduct this evaluation. However in no case shall the setback be less than 200 feet.

9.4.10.4 Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake and within the

catchment of the drainage, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.

9.4.10.5 Where the effluent dispersal system is located more than 1,200 but less than 2,500 feet from a public water systems' surface water intake and within the catchment area of the drainage, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.

9.4.11 For replacement OWTS that do not meet the above horizontal separation requirements, the replacement OWTS shall meet the horizontal separation to the greatest extent practicable. In such case, the replacement OWTS shall utilize supplemental treatment and other mitigation measures, unless the permitting authority finds that there is no indication that the existing system is adversely affecting the public water source, and there is limited potential that the system could impact the water source based on topography, soil depth, soil texture, and groundwater separation.

9.4.12 For new OWTS, installed on parcels of record existing at the time of the effective date of this Policy, that cannot meet the above horizontal separation requirements, the OWTS shall meet the horizontal separation to the greatest extent practicable and shall utilize supplemental treatment for pathogens as specified in section 10.8 and any other mitigation measures prescribed by the permitting authority.

9.5 A Local Agency Management Program for OWTS must include adequate technical detail to support how all the criteria in their program work together to protect water quality and public health.

9.6 A Regional Water Board reviewing a Local Agency Management Program shall consider, among other things, the past performance of the local program to adequately protect water quality, and where this has been achieved with criteria differing from Tier 1, shall not unnecessarily require modifications to the program for purposes of uniformity, as long as the Local Agency Management Program meets the requirements of Tier 2.

Final Draft

Tier 3 – Impaired Areas

3/19/2012

Tier 3 – Impaired Areas

OWTS that are near impaired water bodies may be addressed by a TMDL and its implementation program, or special provisions contained in a Local Agency Management Program. If there is no TMDL or special provisions, existing, new or replacement OWTS within 600 feet of impaired water bodies listed in Attachment 2 must meet the specific requirements of Tier 3.

10.0 Advanced Protection Management Program

The Advanced Protection Management Program is the minimum required management program for all local agencies where an OWTS is located near a water body that has been listed as an impaired water body due to nitrogen or pathogen indicators pursuant to Section 303(d) of the Clean Water Act. This Tier 3 contains the OWTS requirements within the Advanced Protection Management Program. Local agencies are authorized to implement Advanced Protection Management Programs in conjunction with an approved Local Agency Management Program or, if there is no approved Local Agency Management Program, Tier 1. Local agencies are encouraged to collaborate with the Regional Water Boards by sharing any information pertaining to the impairment, provide advice on potential remedies, and regulate OWTS to the extent that their authority allows for the improvement of the impairment.

10.1 The geographic area for each water body's Advanced Protection Management Program is defined by the applicable TMDL, if one has been approved. If there is not an approved TMDL, it is defined by an approved Local Agency Management Program, if it contains special provisions for that water body. If it is not defined in an approved TMDL or Local Agency Management Program, it shall be 600 linear feet [in the horizontal (map) direction] of a water body listed in Attachment 2 where the edge of that water body is the natural or levied bank for creeks and rivers, the high water mark for lakes and reservoirs, and the mean high tide line for tidally influenced water bodies, as appropriate. OWTS near impaired water bodies that are not listed on Attachment 2, and do not have a TMDL and are not covered by a Local Agency Management Program with special provisions, are not addressed by Tier 3.

10.2 The requirements of an Advanced Protection Management Program for all OWTS will be in accordance with an adopted TMDL, and its implementation program, if one has been adopted to address the impairment. An adopted TMDL supersedes all requirements in Tier 3, except that, for TMDL implementation plans adopted after the effective date of this Policy, all required OWTS implementation actions shall commence within 5 years after the TMDL's effective date. The TMDL may use some or all of the

Tier 3 requirements and shall establish the applicable area of implementation for OWTS requirements within the watershed. For those impaired water bodies that do have an adopted TMDL addressing the impairment, but the TMDL does not assign a load allocation to OWTS, no further action is required unless the TMDL is modified at some point in the future to include actions for OWTS.

76 → 10.3 If no TMDL has been adopted, the OWTS will upgrade to Advance Treatment within 5 years of adoption of this policy.

10.4 The Regional Water Boards shall adopt TMDLs for impaired water bodies identified in Attachment 2, in accordance with the specified dates.

10.4.1 If a Regional Water Board does not complete a TMDL within the time period specified in Attachment 2, coverage under this Policy's waiver of waste discharge requirements shall expire for any OWTS that has any part of its dispersal system discharging within the geographic area of an Advanced Protection Management Program. The Regional Water Board shall issue waste discharge requirements, general waste discharge requirements, waivers of waste discharge requirements, or require corrective action for such OWTS. The Regional Water Board will consider the following when establishing the waste discharge requirements, general waste discharge requirements, waivers of waste discharge requirements, or requirement for corrective action:

10.4.1.1 Whether supplemental treatment should be required.

10.4.1.2 Whether routine inspection of the OWTS should be required.

10.4.1.3 Whether monitoring of surface and groundwater should be performed.

10.4.1.4 The collection of a fee for those OWTS covered by the order.

10.4.1.5 Whether owners of previously-constructed OWTS should file a report by a qualified professional in accordance with section 10.5.

10.4.1.6 Whether owners of new or replaced OWTS should file a report of waste discharge with additional supporting technical information as required by the Regional Water Board.

10.5 If the Regional Water Board requires owners of OWTS to submit a qualified professional's report, the report may include a determination of whether the OWTS is functioning properly and as designed or requires corrective actions per Tier 4, and regardless of its state of function, whether it is contributing to impairment of the water body.

10.5.1 The qualified professional's report may also include, but is not limited to:

10.5.1.1 A general description of system components, their physical layout, and horizontal setback distances from property lines, buildings, wells, and surface waters.

10.5.1.2 A description of the type of wastewater discharged to the OWTS such as domestic, commercial, or industrial and classification of it as domestic wastewater or high-strength waste.

10.5.1.3 A determination of the systems design flow and the volume of wastewater discharged daily derived from water use, either estimated or actual if metered.

10.5.1.4 A description of the septic tank, including age, size, material Of construction, internal and external condition, water level, scum layer thickness, depth of solids, and the results of a one-hour hydrostatic test.

10.5.1.5 A description of the distribution box, dosing siphon, or distribution pump, and if flow is being equally distributed throughout the dispersal system, as well as any evidence of solids carryover, clear water infiltration, or evidence of system backup.

10.5.1.6 A description of the dispersal system including signs of hydraulic failure, condition of surface vegetation over the dispersal system, level of ponding above the infiltrative surface within the dispersal system, other possible sources of hydraulic loading to the dispersal area, and depth of the seasonally high groundwater level.

10.5.1.7 A determination of whether the OWTS is discharging to the ground's surface.

10.5.1.8 For a water body listed as an impaired water body for pathogens, a determination of the OWTS dispersal system's separation from its deepest most infiltrative surface to the highest seasonal groundwater level or fractured bedrock.

10.5.1.9 For a water body listed as an impaired water body for nitrogen, a determination of whether the groundwater under the dispersal field is reaching the water body, and a description of the method used to make the determination.

10.6 For new, replaced, and existing OWTS in an Advanced Protection Management Program, the following are not covered by this Policy's waiver but may be authorized by a separate Regional Water Board order:

10.6.1 Cesspools of any kind or size.

10.6.2 OWTS receiving a projected flow over 10,000 gallons per day.

10.6.3 OWTS that utilize any form of effluent disposal on or above the ground surface.

10.6.4 Slopes greater than 30 percent without a slope stability report approved by a registered professional.

10.6.5 Decreased leaching area for IAPMO-approved dispersal systems using a multiplier less than 0.70.

10.6.6 OWTS utilizing supplemental treatment without requirements for periodic monitoring.

10.6.7 OWTS dedicated to receiving wastes from RV dumps.

10.6.8 Separation of the bottom of dispersal system to groundwater less than two (2) feet.

10.6.9 Minimum horizontal setbacks less than any of the following:

10.6.9.1 150 feet from a public water well where the depth of the effluent dispersal system does not exceed 10 feet in depth;

10.6.9.2 200 feet from a public water well where the depth of the effluent dispersal system exceeds 10 feet in depth:

10.6.9.3 Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth and the separation from the bottom of the system and ground water is less than five feet the horizontal setback required to achieve a two-year travel time for microbiological contaminants shall be evaluated. A qualified professional shall conduct this evaluation. However in no case shall the setback be less than 200 feet.

10.6.9.4 Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake and within the catchment of the drainage, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.

10.6.9.5 Where the effluent dispersal system is located more than 1,200 but less than 2,500 feet from a public water systems' surface water intake and within the catchment of the drainage, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.

10.6.9.6 For replacement OWTS that do not meet the above horizontal separation requirements, the replacement OWTS shall meet the horizontal separation to the greatest extent practicable. In such case, the replacement OWTS shall utilize supplemental treatment and other mitigation measures.

10.6.9.7 For new OWTS, installed on parcels of record existing at the time of the effective date of this Policy, that cannot meet the above horizontal separation requirements, the OWTS shall meet the horizontal separation to the greatest extent practicable and shall utilize supplemental treatment for pathogens as specified in section 10.8 and any other mitigation measures as prescribed by the permitting authority.

10.7 The requirements contained in Section 10 shall not apply to owners of OWTS that are constructed and operating, or permitted, on or prior to the date that the nearby water body is added to Attachment 2 who commit by way of a legally binding document to connect to a centralized wastewater collection and treatment system regulated through WDRs as specified within the following timeframes:

10.7.1 The owner must sign the document within forty-eight months of the date that the nearby water body is initially listed on Attachment 2.

10.7.2 The specified date for the connection to the centralized community wastewater collection and treatment system shall not extend beyond nine years following the date that the nearby water body is added to Attachment 2.

10.8 In the absence of an adopted TMDL or Local Agency Management Program containing special provisions for the water body, all existing, new or replaced OWTS permitted after the date that the water body is initially listed in Attachment 2 that have any discharge within the geographic area of an Advanced Protection Management Program shall meet the following requirements:

10.8.1 Utilize supplemental treatment and meet performance requirements in 10.9 if impaired for nitrogen and 10.10 if impaired for pathogens,

77 → 10.8.2 Comply with the setback requirements of Section 7.5.1 to 7.5.5, and if within the setback requirements OTWS shall:

10.8.2.1 Be inspected within 1 year of adoption of this Policy, and thereafter, once every 3 years;

10.8.2.2 Maintenance activities will be reported annually to the appropriate agency.

10.9 Supplemental treatment requirements for nitrogen

10.9.1 Effluent from the supplemental treatment components designed to reduce nitrogen shall be certified by NSF, or other approved third party tester, to meet a 10mg/L limit in total nitrogen for commercial and multi-family properties discharging over 3,500 gpd~~when comparing the 30-day average influent to the 30-day average effluent.~~

10.9.1.1 For multi-family and commercial properties discharging over 3,500 gpd, when 10mg/L limit is not achievable, the OWTS owner shall apply for a WDR.

10.9.2 Where a drip-line dispersal system is used to enhance vegetative nitrogen uptake, the dispersal system shall have at least six (6) inches of soil cover.

10.10 Supplemental treatment requirements for pathogens

10.10.1 Supplemental treatment components designed to perform disinfection shall provide sufficient pretreatment of the wastewater so that effluent from the supplemental treatment components does not exceed a 30-day average TSS of 30 mg/L and shall further achieve an effluent fecal coliform bacteria concentration less than or equal to 100 Most Probable Number (MPN) per 100 milliliters.

10.10.2 The minimum soil depth and the minimum depth to the anticipated highest level of groundwater below the bottom of the dispersal system shall not be less than three (3) feet. All dispersal systems shall have at least twelve (12) inches of soil cover.

10.11 OWTS in an Advanced Protection Management Program with supplemental treatment shall be designed to meet the applicable performance requirements above and shall be stamped or approved by a Qualified Professional.

10.12 Prior to the installation of any proprietary treatment OWTS in an Advanced Protection Management Program, all such treatment components shall be tested by an independent third party testing laboratory.

78 → 10.13 The ongoing monitoring of OWTS in an Advanced Protection Management Program with supplemental treatment components designed to meet the performance requirements in Sections 10.9 and 10.10 shall be monitored both upstream and downstream, with annual reports submitted to the appropriate OWTS management or oversight agency.

79 → 10.13.1 Unless there is a regional groundwater monitoring plan, at least one monitoring well shall be installed between an OWTS and an impaired water body, with annual groundwater sampling required for systems within 600 feet of an impaired water body.

10.14 OWTS in an Advanced Protection Management Program with supplemental treatment components shall be equipped with a visual or audible alarm as well as a

telemetric alarm that alerts the owner and service provider in the event of system malfunction. OWTS using supplemental treatment shall, at a minimum, provide for 24-hour wastewater storage based on design flow as a means to minimize pollution from overflow discharge after a system malfunction or power outage. Where telemetry is not possible, the owner shall inspect the system at least monthly as directed and instructed by a service provider and notify the service provider not less than quarterly of the observed operating parameters of the OWTS.

10.15 OWTS in an Advanced Protection Management Program designed to meet the disinfection requirements in Section 10.10 shall be inspected for proper operation quarterly by a service provider unless a telemetric monitoring system is capable of continuously assessing the operation of the disinfection system. Testing of the wastewater flowing from supplemental treatment components that perform disinfection shall be sampled at a point in the system after the treatment components and prior to the dispersal system and shall be conducted quarterly based on analysis of total coliform with a minimum detection limit of 2.2 MPN. All effluent samples must include the geographic coordinates of the sample's location. Effluent samples shall be taken by a service provider and analyzed by a California Department of Public Health certified laboratory.

10.16 The minimum responsibilities of the local agency administering an Advanced Protection Management Program include those prescribed for the Local Agency Management Programs in Section 9.3 of this policy, as well as monitoring owner compliance with Sections 10.13, 10.14, and 10.15.

Final Draft

Waiver – Effective Date – Financial Assistance

3/20/2012

Conditional Waiver of Waste Discharge Requirements

12.0 In accordance with Water Code section 13269, the State Water Board hereby waives the requirements to submit a report of waste discharge, obtain waste discharge requirements, and pay fees for discharges from OWTS covered by this Policy. Owners of OWTS covered by this Policy shall comply with the following conditions:

12.0.1 The OWTS shall function as designed with no surfacing effluent.

80 → 12.0.2 The OWTS shall not utilize a dispersal system that is in soil saturated with Groundwater, nor shall the separation of the bottom of a dispersal system to groundwater be less than five (5) feet.

12.0.3 The OWTS shall not be operated while inundated by a storm or flood event.

12.0.4 The OWTS shall not cause or contribute to a nuisance or pollution.

12.0.5 The OWTS shall comply with all applicable local agency codes, ordinances, and requirements.

12.0.6 The OWTS shall comply with and meet any applicable TMDL implementation requirements, special provisions for impaired water bodies, or supplemental treatment requirements imposed by Tier 3.

12.0.7 The OWTS shall comply with any corrective action requirements of Tier 4.

12.1 This waiver may be revoked by the State Water Board or the applicable Regional Water Board for any discharge from an OWTS, or from a category of OWTS.