

# **Appendix A**

## Review of Existing Conditional Waivers

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## **A Review of Existing Conditional Waivers**

Since the existing conditional waivers were renewed in 2002, several types of discharge have been identified as potentially significant sources of pollutants in the development of Total Maximum Daily Loads (TMDLs) for several water bodies on the Clean Water Act section 303(d) List of Water Quality Limited Segments (303(d) List) for the San Diego Region.

The existing conditional waivers for the discharge types of concern identified by the TMDL projects do not include waiver conditions that provide the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) the information or data necessary to identify specific discharges occurring within the San Diego Region, the ability to verify compliance with waiver conditions, or the ability to assess the effectiveness of the waiver conditions. Therefore, the existing conditional waivers need to be reviewed for effectiveness, and the conditions should be revised, if necessary, to provide additional requirements to minimize or eliminate discharges of pollutants and better protect water quality in the Region. This review also fulfills the requirements of Water Code section 13269(f).

### **A.1 Types of Discharge Eligible for the Existing Conditional Waivers**

Table 4-4 in Chapter 4 of the Basin Plan lists the types of discharge that are eligible for the existing conditional waivers. The existing conditional waivers currently waive waste discharge requirements (WDRs) and/or the requirement to file reports of waste discharge (RoWDs) for the following 26 discharging operations (or specific types of discharge):

1. Conventional septic tank/subsurface disposal systems for residential units.
2. Conventional septic tank/subsurface disposal systems for commercial/industrial establishments.
3. Alternative individual sewerage systems.
4. Conventional septic tank/subsurface disposal systems for campgrounds.
5. Construction and test pumping of water wells.
6. Air conditioner condensate.
7. Animal feeding operations (300 to 999 animal units).
8. Animal feeding operations (less than 300 animal units).
9. Plant crop residues.
10. Storm water runoff.
11. Sand and gravel mining operations.
12. Intermittent swimming pool discharges.
13. Dredging project wastes.
14. Short-term construction dewatering operations.
15. Manure composting and soil amendment operations.
16. Solid waste disposal facilities accepting only inert wastes.
17. Stream channel alterations.
18. Agricultural irrigation return water.
19. Nursery irrigation return water.

20. Short-term use of reclaimed wastewater.
21. On-site drilling mud discharge.
22. Timber harvesting.
23. Temporary discharge of specified contaminated soils.
24. Green waste composting facilities.
25. Incidental discharges within a response area during a spill response.
26. Permanent reclaimed water projects.

## **A.2 Enrollment Requirements for Existing Conditional Waivers**

The existing waivers include 26 types of discharge that were considered in 2002 to be “low threat” to water quality, or regulated by another agency or program that would effectively protect water quality. Types of waste discharge were classified as Category 1 or Category 2 discharges for purposes of San Diego Water Board oversight to determine compliance with waiver conditions.

Category 1 types of discharge were not considered a significant threat to water quality, but determined to be a potential threat to water quality. A waiver for a Category 1 type of discharge was developed if site and/or discharge information was provided in some form and/or could be accessed by the San Diego Water Board. Thus, for Category 1 types of discharge some form of enrollment is required. Enrollment was fulfilled either by submitting an enrollment form directly to the San Diego Water Board, or through enrollment with another public agency or San Diego Water Board regulatory program.

Category 2 types of discharge were determined to be very low threat to water quality with little likelihood of impacting the quality of waters of the state. Under the existing conditional waivers, the San Diego Water Board does not require enrollment for Category 2 types of discharge. It was assumed that the San Diego Water Board could assess compliance with Category 2 waiver conditions by means of surveys or other indirect methods.

Several types of discharge continue to pose a low threat to water quality and can still be conditionally waived without enrollment by a discharger. However, there are several types of discharge (both Category 1 and) that may actually pose a potential threat to water quality and should require enrollment.

For the proposed conditional waivers, discussed in section 7 of the Technical Report, the San Diego Water Board has discontinued the Category 1 and 2 types of discharge designations. The potential threat to water quality that a type of discharge may pose can be determined by whether or not there is an enrollment requirement included in the waiver conditions. For the types of discharge that are not expected to pose a threat to water quality, minimum requirements for allowing a discharge to occur were developed so a discharger can implement measures that will allow the discharge to be conditionally waived without enrollment. For the types of discharge that may pose a potential threat to water quality, the waiver conditions include some form of enrollment requirement, in addition to the minimum requirements that must be implemented to

minimize or eliminate the discharge, or potential discharge, of pollutants to waters of the state in the San Diego Region.

### **A.3 Review of the Existing Conditional Waivers**

The types of discharge that have been waived of the requirement to file RoWDs and/or regulation under WDRs by the existing conditional waivers are reviewed and discussed below in the following subsections. The waiver conditions proposed for the renewal of the existing conditional waivers are also provided in the following subsections.

Discharges that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state.

#### **A.3.1 Existing Conditional Waiver Nos. 1 through 4 - Conventional Septic Tank/Subsurface Disposal Systems for Residential Units, Commercial/Industrial Establishments, and Campgrounds, and Alternative Individual Sewerage Systems**

Septic and sewerage systems can discharge several pollutants that can affect the quality of waters of the state. Septic and sewerage systems discharge effluent to the subsurface which is a source of pollutants that can potentially infiltrate to groundwater. However, the use of on-site septic and sewerage systems where no community sewerage system is available is in the public interest to protect human health. Effluent from septic and sewerage systems should not pose a significant threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges from septic and sewerage systems, and the conditions under which the discharge should not pose a significant threat to water quality. Discharges from septic and sewerage systems that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Septic and sewerage systems treat domestic wastewater and sewage, or “black water,” and discharge effluent to the subsurface on land. The effluent from septic and sewerage systems contains pathogens (e.g., bacteria, viruses, protozoa), nutrients (i.e., phosphorus and nitrogen compounds), and other pollutants introduced into the system. Natural processes in the soil of the disposal area are usually an integral component of septic and sewerage systems and provide further treatment of the effluent as it percolates through the ground. Different septic and sewerage systems include conventional septic tank/subsurface disposal systems and alternative individual sewerage systems, and provide varying levels of wastewater and sewage treatment. Septic and sewerage systems can adequately provide public health, water quality, and environmental protection when properly designed, sited, constructed, maintained and operated.

The section entitled *Guidelines for New Community and Individual Sewerage Facilities* in Chapter 4 (Implementation) of the Basin Plan contains the principles, goals, and policy of the San Diego Water Board for the protection of groundwater quality from

discharges of domestic wastewater from septic and sewerage systems. Existing Conditional Waiver Nos. 1 through 4 are applicable to discharges from septic and sewerage systems constructed in accordance with the conditions set forth in Chapter 4 of the Basin Plan. The Basin Plan specifies different conditions for discharges of domestic wastewater from septic and sewerage systems at industrial or commercial projects and residential housing projects involving more than 5 family units. Additionally, existing Conditional Waiver No. 4 is only applicable to campgrounds that do not allow recreational vehicles to connect to the on-site septic or sewerage system. Existing Conditional Waiver Nos. 1 through 4 are not applicable to septic and sewerage systems constructed within areas designated as Zone A, as defined by the California Department of Public Health's (CDPH) *Drinking Water Source Assessment and Protection Program*.

The San Diego Water Board utilizes existing Conditional Waiver Nos. 1 through 4 for effluent discharged from septic and sewerage systems. However, the San Diego Water Board determined that it is consistent with the Basin Plan and in the public interest to delegate regulation of specific types of discharge to another public agency. Existing Conditional Waiver Nos. 1 through 4 delegate the regulation of the discharge to the appropriate county health officer with the primary condition that the design of the septic or sewerage system has been approved by the county environmental health agency (authorized local agency) having jurisdiction where the system has been or will be constructed. County approval is usually in the form of a separate permit for the construction, installation, or repair of a septic or sewerage system, or as part of a building or plumbing permit.

The State Water Resources Control Board (State Water Board) is in the process of developing new regulations for on-site wastewater treatment systems (OWTSs),<sup>1</sup> which include conventional septic tank/subsurface disposal systems and alternative individual sewerage systems. After the new OWTS regulations are adopted, the following OWTSs must be brought into compliance with the regulations:

- OWTSs constructed or replaced on or after July 1, 2004 (or 6 months after the adoption date of the regulations, whichever is sooner)
- OWTSs subject to a major repair<sup>2</sup>
- OWTSs that pools or discharges to the surface of the ground
- OWTSs that, in the judgment of the Regional Water Board or the authorized local authorities, has the reasonable potential to cause a violation of water quality objectives, to impair present or future beneficial uses of water, to cause pollution, nuisance, or contamination of waters of the state.

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<sup>1</sup> As required, pursuant to Water Code section 13291

<sup>2</sup> "Major repair" means OWTS enlargement or corrective work necessary to eliminate a failure condition to an OWTS where such improvements involve the replacement, or modification of a septic tank, supplemental treatment unit, or dispersal system, excluding non-perforated distribution pipes, regardless of whether or not a failure condition exists.

As of the writing of this report, the State Water Board is still in the process of developing the new OWTS regulations. The OWTS regulations that will be adopted by the State Water Board may have requirements that are more protective of water quality than those currently enforced by authorized local agencies. The authorized local agencies will be responsible for bringing septic and sewerage systems in compliance with the new OWTS regulations.

Until the new State Water Board's OWTS regulations are adopted, the Basin Plan provisions related to OWTSs and septic and sewerage systems, including the conditional waivers, will continue to be the method by which water quality will be protected. Additionally, until the new OWTS regulations are adopted, the design, installation, construction, maintenance and operation of new and existing septic and sewerage systems should be in accordance with the authorized local agency's requirements and local ordinances.

Obtaining the appropriate permits from authorized local authorities for septic and sewerage systems should continue to be a waiver condition that can serve as the method of enrollment for a conditional waiver. Completed and approved permit applications and inspection reports for septic and sewerage systems that can be obtained from the authorized local authorities can provide sufficient information and data to the San Diego Water Board to determine compliance with the conditions of the conditional waivers for septic and sewerage systems.

*Proposed Conditions for Renewing Existing Conditional Waiver Nos. 1 through 4:*

Discharges from septic and sewerage systems are not expected to pose a significant threat to the quality of water of the state under the following conditions:

1. Prevent the direct or indirect discharge of effluent from septic and sewerage systems to any surface waters of the state (including ephemeral streams and vernal pools).
2. Effluent from septic and sewerage systems must be discharged to the subsurface and cannot surface or pond.
3. Effluent from septic and sewerage systems must not adversely affect the quality or beneficial uses of underlying groundwater.
4. Effluent from septic and sewerage systems must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
5. Effluent from septic and sewerage systems must be discharged at least 5 feet above highest known historical or anticipated groundwater level.
6. Effluent from septic and sewerage systems must be discharged at least 100 feet away from any surface water body.
7. Effluent from septic and sewerage systems must not impact the quality or beneficial uses of groundwater in any water wells.
8. Septic and sewerage systems must comply with the requirements and conditions for Individual Sewerage Systems and Alternative Systems of Chapter 4 of the Basin Plan.

9. The septic or sewerage system owner/operator must comply with local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies. Copies of any approvals, permits, certifications, and/or licenses must be available on site for inspection.
10. The septic or sewerage system owner/operator must maintain and operate the septic or sewerage system in accordance with the design approved by the authorized local agencies.
11. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
12. Septic and sewerage systems can only accept domestic wastes and/or wastewater.
13. For existing septic and sewerage systems, the following conditions apply:
  - a) Existing septic or sewerage systems serving campgrounds must not allow connections from recreational vehicles.
  - b) Owners/operators of existing septic and sewerage systems that cause a condition of contamination, pollution, or nuisance must cease the use of the septic or sewerage system and repair or replace it with a compliant septic or sewerage system, or permanently remove the septic or sewerage system from operation.
  - c) After adoption of State Water Board OWTS regulations, any existing septic or sewerage system that is replaced, requires major repair, pools or discharges to the surface of the ground, or has the reasonable potential to cause a violation of water quality objectives, to impair present or future beneficial uses of water, to cause pollution, nuisance, or contamination of waters of the state must be brought into compliance with new OWTS regulations. Owners/operators of septic and sewerage systems that cannot bring their septic or sewerage system into compliance must cease the use of the system and replace it with a compliant system, or permanently remove the system from operation.
14. For new septic and sewerage systems, the following conditions apply:
  - a) New septic and sewerage systems installed at campgrounds must not allow connections from recreational vehicles.
  - b) New septic and sewerage systems must comply with the conditions set forth in the section entitled “Guidelines for New Community and Individual Sewerage Facilities” in Chapter 4 (Implementation) of the Basin Plan.
  - c) New septic and sewerage systems proposed to be constructed in areas where groundwater water quality objectives have been exceeded must be evaluated for potential adverse effects on groundwater quality and beneficial uses to determine if regulating the system with individual WDRs is more appropriate.
  - d) New septic and sewerage systems proposed to be constructed within areas designated as Zone A, as defined by the CDPH’s Drinking Water Source Assessment and Protection Program, must be constructed with an adequate setback from the drinking water supply source that will be protective of drinking water quality.
  - e) Six (6) months after adoption of State Water Board OWTS regulations, applications received by the authorized local authority for the construction of a

new septic or sewerage system must be in compliance with new OWTS regulations for design and installation.

### A.3.2 Existing Conditional Waiver No. 5 – Construction and Test Pumping Water Wells

Groundwater extracted and discharged during the construction and test pumping of water wells can contain several pollutants that can affect the quality of waters of the state. These pollutants can potentially infiltrate to groundwater or runoff to surface waters. However, groundwater from the construction and test pumping of water wells would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with groundwater extracted and discharged during the construction and test pumping of water wells to land, and the conditions under which the discharge would not pose a threat to water quality. Discharges of extracted groundwater that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Potable or relatively contaminant-free water can be extracted and discharged during construction, development, and maintenance of water wells. The pollutants of concern are suspended solids, turbidity, chlorine, and other water treatment, conditioning, and well maintenance chemicals. Suspended solids and turbidity are filtered out by the soil as the water infiltrates through the vadose zone, and is usually the same or better quality than the shallowest part of the underlying groundwater. Chlorine and other typical water treatment, conditioning, and well maintenance chemicals are typically used in low concentrations and attenuate quickly.

Discharges from groundwater extraction projects to surface water are subject to federal National Pollutant Discharge Elimination System (NPDES) regulations and regulated in the San Diego Region under general WDRs.<sup>3</sup> These discharges could not be granted waivers because they must be regulated under WDRs. However, discharges from groundwater extraction projects to land would not be subject to NPDES regulations and may be issued a conditional waiver.

Low volumes and infrequent discharges of groundwater from water wells are not expected to adversely affect the quality of groundwater because the water would likely evapotranspire before infiltrating to the underlying groundwater. However, excessive

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<sup>3</sup> San Diego Water Board Order No. 2000-90, NPDES No. CAG919001, *General Waste Discharge Requirements for Temporary Groundwater Extraction and Similar Waste Discharges to San Diego Bay and Storm Drains or Other Conveyance Systems Tributary Thereto*; and, San Diego Water Board Order No. 2001-96, NPDES No. CAG919002, *General Waste Discharge Requirements for Groundwater Waste Discharges from Construction, Remediation, and Permanent Groundwater Extraction Projects to Surface Waters within the San Diego Region Except for San Diego Bay*

volumes or frequent discharges could potentially be a source of pollutants that can infiltrate to underlying groundwater and adversely affect the quality of groundwater over time. A Notice of Intent filed with the San Diego Water Board about these discharges could provide notification of the project, enrollment, and sufficient information and data to the San Diego Water Board to determine compliance with the conditions of the waiver, or determine if regulation by individual WDRs is appropriate. Therefore, enrollment should be required for frequent or regular discharges from water wells to land.

For sites where soil or groundwater contamination is known to be present or discovered, operators are obligated to report the finding to the authorized local regulatory agencies. In such cases, discharge of water from these sites would require proper treatment and/or disposal and a conditional waiver would not be appropriate.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 5:*

Discharges of groundwater extracted and discharged during the construction and test pumping of water wells to land are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Prevent the direct or indirect discharge of pumped well water to any surface waters of the state (including ephemeral streams and vernal pools).
2. Discharges of pumped well water to land must not cause the migration of contaminants such as chlorinated solvents, hydrocarbons, or other toxic or hazardous substances to any waters of the state.
3. Pumped well water discharged to land must not come in contact with any material that consists of or is contaminated with chlorinated solvents, hydrocarbons, or other toxic or hazardous substances prior to discharge; and where the well was not constructed for and is not to be used in groundwater and/or soil remediation operations.
4. Pumped well water discharged to land must not adversely affect the quality or beneficial uses of waters of the state.
5. Any products used to condition or treat groundwater or wells that may discharge to land must be applied in accordance with manufacturer instructions and guidelines, and must reliably attenuate before infiltrating to underlying groundwater.
6. Discharges of pumped well water to land must not adversely impact the quality or beneficial uses of groundwater in any water wells.
7. Discharges of groundwater pumped from any well that is used in a soil and/or groundwater contamination investigation or corrective action may not be discharged to land, unless the discharger has filed a Notice of Intent containing monitoring and analytical data demonstrating that the quality of the proposed discharge would not cause the groundwater at the disposal site to exceed water quality objectives.
8. For multiple applications of pumped groundwater to land over a continuous 365-day period, or a cumulative 24-hours (or longer) application of groundwater from wells pumped to land within a continuous 365-day period, the discharger must file a Notice of Intent containing information about the operator, location, planned period of and

frequency of discharge, and measures that will be taken to minimize the discharge of pollutants that might affect surface water and groundwater quality. Sufficient information demonstrating compliance with waiver conditions must be submitted before the discharge may begin.

9. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

### A.3.3 Existing Conditional Waiver No. 6 – Air Conditioner Condensate

Air conditioner condensate can contain several pollutants that can affect the quality of waters of the state. These pollutants can potentially infiltrate to groundwater or runoff to surface waters. However, discharges of air conditioner condensate would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges of air conditioner condensate to land, and the conditions under which the discharge would not pose a threat to water quality. Discharges of air conditioner condensate that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Waste generated from air conditioning, cooling, or refrigeration systems are collectively referred to herein as cooling water. Cooling water may be contact or non-contact. Contact cooling water is generated when a material or product is submerged in chilled water. Non-contact cooling water does not contact any raw material, product, or waste product.

Non-contact cooling water may contain dissolved metals from contact with metal piping, as well as chlorine or other chemicals added to the water to prevent scaling. Dissolved metals concentrations are usually in non-detectable to trace amounts. Chlorine and other chemicals used to condition or treat cooling water are typically used in low concentrations and dissipate quickly. The cooling water may also have elevated temperatures. However, temperature is not typically a concern for groundwater.

Discharges of cooling water to surface water would be subject to federal National Pollutant Discharge Elimination System (NPDES) regulations. These discharges could not be eligible for a conditional waiver because they must be regulated under WDRs. However, discharges of cooling water to land would not be subject to NPDES regulations and may be issued a conditional waiver.

These types of discharge are typically relatively low in volume, duration and frequency, and consist of water that does not come in contact with any product. These types of discharge to land are not expected to pose a threat to the quality of groundwater because the water would likely evaporate before infiltrating to the underlying groundwater. However, excessive volumes or frequent discharges could potentially be a source of pollutants that can infiltrate to underlying groundwater and have an adverse

effect on the quality of groundwater over time. A Notice of Intent filed with the San Diego Water Board about these discharges could provide notification of the project, enrollment, and sufficient information and data to the San Diego Water Board to determine compliance with the conditions of the waiver, or determine if regulation by individual WDRs is appropriate. Therefore, enrollment should be required for frequent or regular discharges of cooling water to land.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 6:*

Discharges of air conditioner condensate and non-contact cooling water to land are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Discharges must not contain contact cooling water.
2. Prevent the direct or indirect discharge of cooling water to any surface waters of the state (including ephemeral streams and vernal pools).
3. Discharges of cooling water to land must not cause the migration of contaminants such as chlorinated solvents, hydrocarbons, or other toxic or hazardous substances to any waters of the state.
4. Discharges of cooling water to land must not come in contact with any material that consists of or is contaminated with chlorinated solvents, hydrocarbons, or other toxic or hazardous substances prior to discharge.
5. Discharges of cooling water to land must not adversely affect the quality or beneficial uses of waters of the state.
6. Any products used to treat or condition cooling water must be used in accordance with manufacturer's instructions and guidelines and reliably attenuate before infiltrating to underlying groundwater.
7. Discharges of cooling water to land must not exceed an average of 1,200 gallons per day for any continuous 365-day period, unless the discharger has filed a Notice of Intent containing information about the operator, location, and planned period of and average daily volume of discharge.
8. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

A.3.4 Existing Conditional Waiver Nos. 7 and 8 – Animal Feeding Operations

Animal feeding operations (AFOs) can generate and discharge several sources of pollutants that can affect the quality of waters of the state. These pollutants can potentially infiltrate to groundwater or runoff to surface waters. However, discharges from AFOs would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges from AFOs, and the conditions under which the discharges would not pose a threat to water quality. Discharges from AFOs that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Animals generate wastes such as manure, urine, and soiled bedding, which are sources of sediment, nutrients, and pathogens (i.e., bacteria, viruses, protozoa). Additionally, animal activities can augment and/or accelerate erosion, which increases the amount of sediment that can be transported in runoff. Therefore, surface and storm water runoff and infiltration from AFOs can transport excessive sediment, nutrients, and pathogens to surface waters and groundwater, which can have an adverse effect on water quality.

According to federal NPDES regulations, an AFO is defined as a lot or facility that stables or confines and feeds or maintains animals for a total of 45 days or more in any 12-month period, and does not sustain crops, vegetation, forage growth, or post harvest residues during the normal growing season over any portion of the lot or facility.<sup>4</sup> AFOs that are designated as CAFOs are subject to NPDES regulations, which require regulation under WDRs.<sup>5</sup>

The factors that determine whether an AFO is a CAFO vary depending on the number of animals confined in the lot. Large AFOs (1,000 or more animal units, where 1 animal unit is equivalent to 1 cow or approximately 1,000 pounds) are defined as CAFOs based on animal units alone.<sup>6</sup> These facilities are subject to NPDES regulations and must be regulated under WDRs. Therefore, large AFOs are not eligible for a conditional waiver.

Medium AFOs are facilities that have 300 to 999 animal units, which are equivalent to, but not limited to, the following numbers of animals:

- 300-999 dairy cows
- 300-999 veal calves
- 300-999 cattle (not dairy or veal)
- 750-2,499 swine (55 lbs or heavier)
- 3,000-9,999 swine (less than 55 lbs)
- 150-499 horses
- 3,000-9,999 sheep or lambs
- 16,500-54,999 turkeys
- 9,000-29,999 laying hens (if with liquid manure handling)
- 25,000-81,999 laying hens (if without liquid manure handling)
- 37,500-124,999 chickens (not laying hens, without liquid manure handling)
- 1,500-4,999 ducks (if with liquid manure handling)
- 10,000-29,999 ducks (if without liquid manure handling)

According to the NPDES regulations, a medium AFO is a CAFO if: (a) pollutants are discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device, or (b) pollutants are directly discharged into waters of

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<sup>4</sup> Code of Federal Regulations Title 40 section 122.23(b)(1)(i)&(ii)

<sup>5</sup> In California, WDRs are issued in lieu of federal NPDES permits.

<sup>6</sup> Code of Federal Regulations Title 40 section 122.23(b)(4)

the United States which originate outside of and passes over, across, or through the facility or otherwise comes into direct contact with the confined animals.<sup>7</sup>

So, a medium AFO that discharges to waters of the United States during dry weather conditions and/or storm events is considered a CAFO, and must be regulated under WDRs that conform to NPDES regulations. However, an AFO is not a CAFO if the AFO discharges only during a 25-year, 24-hour storm event or greater. If a medium AFO does not discharge to waters of the United States, it is eligible for a conditional waiver.

Existing Conditional Waiver No. 7 is for medium AFOs. According to existing Conditional Waiver No. 7, medium AFOs must comply with the following conditions: 1) no discharge of pollutants to waters of the United States through any man-made conveyance, or directly to waters of the United States which originate outside of and pass over, across or through the facility or otherwise come into direct contact with the animals confined in the operation; and, 2) operating and maintaining the facility in accordance with the regulations cited in California Code of Regulations Title 27 sections 22562 through 22565, which pertain to wastewater and manure management practices for concentrated animal feeding operations (CAFOs). Additionally, medium AFOs must submit an enrollment form to the San Diego Water Board for a conditional waiver. To date, no medium AFOs have submitted any enrollment forms to the San Diego Water Board. This may be due to lack of knowledge or awareness of the conditional waivers and waiver conditions on the part of medium AFO facility owners, or such facilities simply may not exist in the San Diego Region.

If these types of facilities do exist, they must contact the San Diego Water Board to determine if they are eligible for a conditional waiver. A letter or report submitted to the San Diego Water Board about the medium AFO facility could provide sufficient information and data to determine compliance with the conditions of the waiver, or determine if regulation by individual WDRs that implement NPDES regulations is appropriate.

An AFO with less than 300 animal units is a small AFO. Existing Conditional Waiver No. 8 is for small AFOs. A small AFO is not a CAFO unless the San Diego Water Board designates it as a CAFO on a case-by-case basis. A small AFO can be designated as a CAFO if the San Diego Water Board determines that it is a potentially significant contributor of pollution to waters of the United States. Based on the definition of an AFO,<sup>8</sup> properties where horses, pigs, cows, sheep, turkeys, hens, chickens, ducks, or other any other types of animals are kept as pets may be considered AFOs. Therefore, many properties with non-commercial animals or pets may technically be considered small AFOs. If the San Diego Water Board does not designate these lots or facilities as CAFOs, they are eligible for a conditional waiver. According to existing Conditional Waiver No. 8, no enrollment is required for AFOs with less than 300 animal units.

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<sup>7</sup> Code of Federal Regulations Title 40 section 122.23(b)(4)

<sup>8</sup> Code of Federal Regulations Title 40 section 122.23(b)(1)(i)&(ii)

However, according to existing Conditional Waiver No. 8, small AFOs must comply with the following conditions: 1) no discharge of pollutants to waters of the United States through any man-made conveyance, or directly to waters of the United States which originate outside of and pass over, across or through the facility or otherwise come into direct contact with the animals confined in the operation; and, 2) operating and maintaining the facility in accordance with the regulations cited in California Code of Regulations Title 27 sections 22562 through 22565, which pertain to wastewater and manure management practices for CAFOs.

In 2002, small AFOs were not expected to pose a significant threat to water quality. However, since then, observations and reports from the municipalities involved in the development of bacteria Total Maximum Daily Loads (TMDLs) suggests that small AFOs (primarily related to recreational equestrian ownership and activities) could be causing the direct and/or indirect discharge of a significant amount of pollutants into streams and creeks in the Region. Municipalities are specifically concerned about small AFOs in the watersheds with river and beach segments listed as impaired for bacteria (total coliform, fecal coliform, *E. coli* and/or *Enterococci*), sediment, and/or nutrients on the Clean Water Act section 303(d) List of Water Quality Limited Segments (303(d) List).

Runoff from several small AFOs in the same area that are not properly maintained and managed can collectively transport excessive amounts of sediment, nutrients, and bacteria into nearby surface waters during storm events. Activities such as spraying down pavement to “wash away” manure and urine or washing animals without containment of wash water can cause dry weather nuisance flows to transport pollutants to nearby surface waters. Animals that are allowed to enter surface waters can discharge manure and urine directly into the water, as well as accelerate the erosion of stream and creek banks and channels. These types of activities can adversely affect the quality of surface waters, as well as groundwater.

The number of land parcels that could be classified as small AFOs in the Region is not known. According to the United States Department of Agriculture, there are over 700 horse farms in San Diego County. If animal operations with other types of animals are included, the number is likely to be in the thousands. Current San Diego Water Board resources would not be sufficient to issue WDRs to all the potential small AFOs in the Region. However, the collective discharges from small AFOs can be a significant source of pollutants to waters in the Region.

In addition to the portions of a facility that may be considered a medium or small AFO, a facility may also have pastures on or adjacent to the property that are used by the animals. Storm water runoff from pastures and range lands are exempt from NPDES regulations. However, storm water runoff from pasture and range lands on or adjacent to medium and small AFOs may require regulation under WDRs, unless a waiver is issued.

Medium and small AFOs that properly manage their facilities, pastures, and animal activities and wastes are not expected to pose a threat to the quality of waters of the state. A guidance document prepared by several public and private entities in Orange and San Diego counties entitled *Equestrian-Related Water Quality Best Management Practices* outlines the management measures (MMs) and best management practices (BMPs) that can be implemented by horse owners to reduce the impact of horses on water quality. The same MMs/BMPs could be used by any medium or small AFO to protect water quality. Types of MMs/BMPs recommended in the document include:

- Runoff Management
- Erosion Control
- Bacteria/Nutrient Transportation Prevention
- General Housekeeping
- Protection of Waterbodies

Additional MMs/BMPs for animal operations are also available from the United States Department of Agriculture Natural Resource Conservation Service (NRCS) in their *Field Office Technical Guide*.

Medium and small AFOs that implement MMs/BMPs at their facilities can prevent the discharge of pollutants that may adversely impact the quality of surface waters and groundwater. Medium AFOs should still be required to enroll for a conditional waiver, but should also provide information demonstrating compliance with waiver conditions. However, small AFOs that implement MMs/BMPs and comply with waiver conditions should remain eligible for a conditional waiver without enrollment.

Medium and small AFOs that violate waiver conditions by not implementing MMs/BMPs and allow the degradation of water quality should be required to comply with waiver conditions. Enforcement actions could also be taken against facilities that fail to comply with waiver conditions. Additionally, medium and small AFOs that fail to comply with waiver conditions may also be designated as a CAFO and be subject to NPDES regulations, requiring regulation under WDRs.

*Proposed Conditions for Renewing Existing Conditional Waiver Nos. 7 and 8:*

Discharges from small and medium AFOs are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Small and medium AFOs must not discharge any pollutants to waters of the United States through any man-made conveyance, or directly to waters of the United States which originate outside of and pass over, across or through the facility or otherwise come into direct contact with the animals confined in the operation.
2. Small and medium AFOs must be operated and maintained in accordance with the regulations cited in California Code of Regulations Title 27 sections 22562 through 22565.

3. Small and medium AFOs must comply with local, state, and federal ordinances and regulations, and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.
4. Small and medium AFOs must implement MMs/BMPs to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are provided in *Equestrian-Related Waste Quality Best Management Practices* available from the County of San Diego Department of Agriculture, Weights and Measures, or the *Field Office Technical Guide* available from the NRCS. Additional references may be available from other sources.
5. Small and medium AFOs must prevent direct contact of animals with surface water bodies. Animals should not be allowed adjacent to or within stream banks. Small and medium AFOs should maintain a buffer zone or riparian filter strip between the animal and any surface waters of the state. The buffer zone must adequately minimize the discharge of pollutants from the AFO. There should be no direct exposure of a surface water body to an animal.
6. Small and medium AFOs must prevent the direct or indirect discharge of animal wastes (manure, urine, soiled bedding) to surface waters of the state (including ephemeral streams and vernal pools).
7. Small and medium AFOs must properly manage the wastes (i.e., manure, urine, soiled bedding) generated by the animals at the facility in accordance with the following guidelines:
  - a) Animal wastes should be collected and disposed of regularly (at least once every two weeks).
  - b) Animal wastes can be stored temporarily (no longer than two weeks) on site until disposal, unless animal wastes are composted on site. The amount of animal wastes stored in temporary storage area must not exceed the capacity of the storage area. If animal wastes exceed, or threaten to exceed the capacity of the temporary storage area, the animal wastes should be disposed of immediately.
  - c) Areas adjacent to temporary storage area for animal wastes should be graded to prevent storm water and surface runoff from reaching the storage area.
  - d) Temporary storage area should be on an impervious surface (e.g., concrete pad or plastic tarp) to prevent leaching of pollutants to groundwater.
  - e) Temporary storage area should be protected with a roof or cover, or at a minimum be covered with plastic sheeting if precipitation is forecast within the next 24 hours, to prevent direct contact between precipitation and animal wastes.
  - f) A buffer zone of at least 100 feet should be maintained between the temporary storage area for animal wastes and any surface water body, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
  - g) If animal wastes are composted on site, composting activities must comply with the waiver conditions applicable to composting operations.
8. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.

9. Small and medium AFOs must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.
10. For medium AFOs, owners or operators must file a Notice of Intent containing information about the facility owner/operator, number and types of animals, map of the facility showing the locations of nearby surface water bodies and/or water wells, and MMs/BMPs that have been, or are planned to be implemented to prevent erosion and discharges of animal wastes that could affect surface water and groundwater quality. Sufficient information demonstrating compliance with waiver conditions must be submitted in order for the medium AFO facility to be eligible for this conditional waiver.

#### A.3.5 Existing Conditional Waiver No. 9 – Plant Crop Residues

Plant crop residues discharged to land may be a source of pollutants that can affect the quality of waters of the state. These pollutants can potentially be transported in runoff to surface waters or have residual pollutants that can be dissolved and leached to underlying groundwater. However, discharges of plant crop residues to land would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges of plant crop residues to land, and the conditions under which the discharge would not pose a threat to water quality. Discharges of plant crop residues that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Plant crop residues include the leaves, stems and roots that remain after agricultural row and field crops (e.g., vegetable, grain, feed, melon, berry) have been harvested. Plant crop residues can also include culled fruit and prunings from tree crops. Disposal of plant crop residues is often through land disposal. Land disposal may include plowing crop residues back into the ground, or chipping and grinding the residues and using it as a mulch.

Discharges of plant crop residues to surface water would not be eligible for a conditional waiver because they may be subject to NPDES regulations or Clean Water Act section 404 permitting requirements, which would require regulation under WDRs or a Clean Water Act section 401 Water Quality Certification. However, discharges of plant crop residues to land may be eligible for a waiver under certain conditions.

Land disposal of crop residues is a relatively low cost disposal option and allows the return of organic matter and nutrients into the soil as the residues decompose. Crop residues may contain pesticides or other products that were applied to the crops, which could be a source of pollutants that can infiltrate to underlying groundwater. Storm water and surface runoff that comes in to contact with crop residues may also transport pollutants to surface waters.

However, research findings indicate that certain plant diseases may be controlled through the action of soil microbes that are active in compost and mulches that have been applied to the soil, such as plant crop residues. Crop residues plowed into the ground as a soil amendment or applied to the surface as a mulch also help to reduce wind and water erosion of the soil, to retain moisture in the soil, and to decrease the impact of precipitation by slowing the runoff and infiltration of water. Therefore, proper management of plant crop residues can reduce the amount of waste that an agricultural operator must dispose of, as well as reduce runoff, infiltration, and erosion.

The discharge of plant crop residues to land is not expected to impact groundwater quality because it can help retain water and reduce the amount that will infiltrate to groundwater, which will promote evapotranspiration. Additionally, proper management of plant crop residues can help reduce surface and storm water runoff to surface waters. Discharges of plant crop residues that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 9:*

Discharge of plant crop residues to land are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Prevent the direct or indirect discharge of plant crop residues to any surface waters of the state (including ephemeral streams and vernal pools).
2. Plant crop residues must be managed to prevent transport of pollutants to waters of the state.
3. Plant crop residues may be used as feedstock for composting.
4. Plant crop residues cannot be burned and applied to land.
5. Application of any products (e.g., fertilizers, pesticides) to plants or soil must be used in accordance with manufacturer's guidelines and must not have an adverse effect on the quality of any waters of the state.
6. Operators must implement MMs/BMPs around areas where plant crop residues have been discharged to land to minimize or eliminate runoff and leachate to surface waters and groundwater.
7. Operators must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.

A.3.6 Existing Conditional Waiver No. 10 – Storm Water Runoff

When rainfall, or storm water, reaches the surface, it will percolate into the ground, move across the land surface and percolate into the ground, and/or move across the land surface and enter a surface water body. As storm water moves through or over the land surface as runoff, it picks up and carries away natural and man-made pollutants that can affect the quality of waters of the state. The pollutants in storm water runoff can potentially infiltrate to groundwater or runoff to surface waters. Storm water runoff in urbanized areas is subject to federal NPDES regulations.<sup>9</sup> Storm water runoff

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<sup>9</sup> Code of Federal Regulations Title 40 section 402(p)

resulting from agricultural or silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands, is exempt from federal NPDES regulations.<sup>10</sup> However, storm water runoff resulting from agricultural and silvicultural activities is subject to the regulations in the state Water Code. Discharges of storm water runoff from agricultural and silvicultural activities are not expected to pose a threat to the quality of waters of the state if discharged in compliance with certain conditions

The following discussion identifies the potential pollutants of concern associated with discharges of storm water runoff from agricultural and silvicultural (including growing, grazing, and land management) activities, and the conditions under which the discharges would not pose a threat to water quality. Discharges of storm water runoff from agricultural and silvicultural activities that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Existing Conditional Waiver No. 10 is for storm water runoff, “*where no NPDES permit and where appropriate best management practices...are implemented to minimize the discharge of contaminants in runoff to groundwater aquifers.*” Existing Conditional Waiver No. 10 is only applicable to the discharge of storm water runoff that infiltrates to groundwater. Under the existing conditional waivers, there is no waiver specific to discharges of storm water runoff to surface waters.

However, according to Code of Federal Regulations Title 40 section 122.3(e), “*An introduction of pollutants from nonpoint source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands*” are not subject to NPDES regulations. This does not include runoff discharges from CAFOs,<sup>11</sup> from concentrated aquatic animal facilities,<sup>12</sup> to aquaculture projects,<sup>13</sup> or from silvicultural point sources.<sup>14</sup> Storm water runoff from agricultural and silvicultural activities is, however, subject to the regulations in the state Water Code.

Nonpoint source (NPS) pollution, or polluted runoff, is the leading cause of water quality impairments in California according to the State Water Board’s *Plan for California’s Nonpoint Source Pollution Control Program*<sup>15</sup> (NPS Program Plan). Storm water runoff from lands utilized for agricultural and/or silvicultural activities can be a significant source of pollutants to surface waters and/or groundwater if proper MMs/BMPs are not implemented. This conclusion is supported by the fact that several surface water bodies in the northern part of the San Diego Region, where agricultural land uses are most prevalent, are not meeting water quality objectives for several agriculture related pollutants and are on the 303(d) List.

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<sup>10</sup> Code of Federal Regulations Title 40 section 122.3(e)

<sup>11</sup> Defined in Code of Federal Regulations Title 40 section 122.23

<sup>12</sup> Defined in Code of Federal Regulations Title 40 section 122.24

<sup>13</sup> Defined in Code of Federal Regulations Title 40 section 122.25

<sup>14</sup> Defined in Code of Federal Regulations Title 40 section 122.27

<sup>15</sup> <http://www.waterboards.ca.gov/nps/protecting.html>

Storm water runoff from NPSs can transport sediment, dissolved solids, pesticides, nutrients, hydrocarbons, pathogens (i.e., bacteria, viruses, protozoa), and other pollutants to groundwater as well as surface waters, which can have an adverse effect on water quality. Discharges of storm water runoff not subject to NPDES regulations, which can include infiltration to groundwater and runoff to surface waters from agricultural and silvicultural activities (including pasture and range lands used for grazing), may be eligible for a conditional waiver.

Existing Conditional Waiver No. 10 requires implementation of MMs/BMPs, but no enrollment, monitoring, or reporting requirements. Additionally, the conditions of existing Conditional Waiver No. 10 only apply to infiltration of storm water runoff to groundwater and do not include conditions for storm water runoff discharging to surface waters. The existing waiver conditions do not include any requirements that would compel compliance with waiver conditions.

While existing Conditional Waiver No. 10 does not include conditions for NPS storm water runoff discharges to surface water, there are regulatory mechanisms in place for silvicultural activities. For the control of storm water runoff from silvicultural lands, the State Water Board entered into Management Agency Agreements (MAAs) with the U.S. Department of Agriculture Forest Service (USFS) and the California Board of Forestry/California Department of Forestry (BOF/CDF), and designated these agencies as the Water Quality Management Agencies (WQMAs) for the National Forest System and nonfederal forest lands, respectively. For each WQMA, the State Water Board certified and approved Water Quality Management Plans, which include approved MMs/BMPs to be implemented during timber operations. Under the MAAs, the Regional Water Boards have agreed to waive WDRs and the requirement to file RoWDs for timber operations where approved MMs/BMPs are implemented in accordance with the Water Quality Management Plans.

Implementation of MMs/BMPs for timber operations approved by the WQMAs normally include: (1) implementing MMs/BMPs according to specific site conditions; (2) monitoring to assure that MMs/BMPs are properly applied and are effective; (3) immediate mitigation of a problem where MMs/BMPs are not effective (including regulatory action, if necessary); and (4) improvement of an approved MM/BMP or implementation of additional MMs/BMPs when needed to resolve a deficiency. However, if evidence indicates the WQMAs are not complying with their obligations under the MAAs and/or water quality is degrading due to storm water runoff from silvicultural lands, the Regional Water Boards may require the operators to file RoWDs, implement additional MMs/BMPs, regulate by WDRs, and/or issue enforcement actions (e.g., Investigation Orders, Notices of Violation, Administrative Assessments of Civil Liability, Cease and Desist Orders, Cleanup and Abatement Orders).

For the control of storm water runoff from agricultural lands and pasture and range lands used for grazing, there is no agency that the San Diego Water Board can enter into an agreement with to act as a WQMA. At this time, the San Diego Water Board

must rely upon compliance with the conditional waivers for discharges of storm water runoff from agricultural lands and pasture and range lands used for grazing.

However, the existing waiver conditions only apply to protection of groundwater, so there are no waiver conditions in place for the protection of surface waters. Additionally, the conditions of existing Conditional Waiver No. 10 provide little or no information or data to identify agricultural NPS pollutant sources, verify implementation of MMs/BMPs, or ability to assess effectiveness of any MMs/BMPs that may be in place. Based on available water quality data collected since 2002, the conditions for existing Conditional Waiver No. 10 may not be effective in protecting water quality from pollutants in storm water runoff from agricultural NPSs (including pasture and range lands used for grazing).

For agricultural activities (e.g., row crops, orchards, nurseries), the Central Coast, Central Valley, and Los Angeles Regional Water Boards have implemented waiver programs to control NPS runoff from “irrigated” lands with conditions that require enrollment, implementation of MMs/BMPs, monitoring, reporting, and preparation of water quality management plans. The San Diego Water Board is also proposing to implement a waiver program that includes enrollment, monitoring, and reporting. In other regions most of the agricultural operations are on large 100-acre and greater size parcels that can be easily located, have easily identified owners and/or operators, and operate on a full-time and/or year-round schedule. Thus, the Regional Water Boards from these regions can easily identify and contact owners and/or operators that are not enrolled in their irrigated lands waiver programs. Identifying larger operations such as these in the San Diego Region and enrolling them in a similar waiver program should not be very difficult.

However, the San Diego Region has several factors that make regulating runoff from agricultural activities very challenging. The San Diego Region has agriculture operations on a wide range of parcel sizes. According to the San Diego County Farm Bureau (Farm Bureau), more than half (60 percent or more) of the farms in the San Diego Region are small agriculture operations on parcels with 10-acres or less, with owners and/or operators that do not occupy the parcels or are present only part of the year, and/or operate on a seasonal, part-time, or sporadic schedule. There are thousands of these small growing operations in the San Diego Region. The rest of the farms (40 percent or less) are probably implementing MMs/BMPs and/or affiliated with or getting information or assistance from organizations such as the Farm Bureaus, University of California Cooperative Extension (UCCE), U.S. Department of Agriculture Natural Resource Conservation Service (NRCS), regional resource conservation districts (RCDs), or other organizations.

Many of these small agriculture operations are very likely unaware of their responsibilities to implement MMs/BMPs, or the consequences of their actions. Educating these small agriculture operations of their responsibilities is necessary to ensure that their practices do not adversely affect water quality. Reaching out to small agricultural operators will take a significant amount of time due to the anticipated

numbers of such operations. However, available evidence suggests that the collective discharges from small agricultural operations can be a significant source of pollutants to waters of the state in the Region.

For lands that are used for grazing, storm water runoff has not been considered a significant threat to water quality and there has been little or no regulation. A special use permit is required from the USFS for livestock grazing on NFS lands, which may include implementation of MMs/BMPs to minimize erosion and runoff and prevent overgrazing. However, for state and private lands used for grazing, it is unknown if land owners in the Region impose any water quality management requirements.

The waiver conditions for discharges of storm water runoff should be revised to include conditions that require implementation of MMs/BMPs to minimize or eliminate pollutants in storm water runoff from NPS sources to surface waters in addition to groundwater. Other conditions for storm water runoff from agricultural and grazing lands should include monitoring and reporting. Education and outreach should also be included in the waiver conditions.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 10:*

Discharges of storm water runoff from agricultural and silvicultural (including growing, grazing, and land management) activities are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Owners/operators of agricultural, silvicultural, or grazing operations must implement MMs/BMPs to minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.
2. Owners/operators of silvicultural operations must comply with USFS or BOF/CDF MM/BMP implementation requirements, in accordance with the applicable State Water Board-certified Water Quality Management Plan.
3. Owners/operators of agricultural and grazing operations must implement MMs/BMPs to minimize or eliminate storm water runoff and infiltration. Recommended MMs/BMPs are available in the State Water Board's NPS Program Plan and/or available from UCCE, NRCS, or RCDs. Additional references may be available from other sources.
4. Owners/operators of agricultural and grazing operations must receive annual water quality management related training (e.g., implementation of MMs/BMPs, nutrient management, irrigation water management, range management, etc.). Proof of training must be available on site for inspection.
5. Owners/operators of agricultural operations must be in regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCD so they can be informed of the latest storm water runoff MMs/BMPs and developments with water quality issues. Proof of contact (e.g., newsletter addressed to facility, NRCS conservation plan, UCCE self assessment) must be available on site for inspection.
6. For agricultural, silvicultural, or grazing operations where no MMs/BMPs have been, or are planned to be, implemented, the owner/operator must file a Notice of Intent

demonstrating that MMs/BMPs are not required to comply with the waiver conditions.

#### A.3.7 Existing Conditional Waiver No. 11 – Sand and Gravel Mining Operations

Sediment and other pollutants discharged by sand and gravel mining operations can affect the quality of waters of the state. These pollutants can potentially be transported in runoff to surface waters or have residual pollutants that can be dissolved and leached to underlying groundwater. However, discharges from sand and gravel mining operations would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges from sand and gravel mining operations, and the conditions under which the discharge would not pose a threat to water quality. Discharges from sand and gravel mining operations that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Operations that mine sand and gravel can discharge significant amounts of sediment and other waste materials, which can affect the quality of surface waters and groundwater. Existing Conditional Waiver No. 11 is for discharges from sand and gravel mining operations, “*where operations are not conducted in flowing streams; and where water quality certification pursuant to Federal Clean Water Act Section 401 has been issued*” and “*does not apply to wash water or other discharges from sand and gravel processing operations.*”

Most sand and gravel mining operations are effectively regulated to prevent impacts to water quality under the Surface Mining and Reclamation Act (SMARA) through conditions included in a Surface Mining Permit. Sand and gravel mining operations that are performed nearby or with waters of the United States would also require a permit under the River and Harbors Act section 10 and/or Clean Water Act section 404 (collectively referred to herein as “Federal Permits”). In order for an operation to obtain a Federal Permit, the operation must first obtain a Clean Water Act section 401 water quality certification (401 Certification) from the appropriate Regional Water Board. Projects regulated under Clean Water Act section 404 are not subject to federal NPDES regulations.<sup>16</sup> However, discharges of dredged or fill materials that can affect the quality of waters of the state (which include waters of the United States) are subject to regulations in the state Water Code and may be regulated with WDRs, unless a waiver is issued.

Mining of sand and gravel is subject to SMARA.<sup>17</sup> Sand and gravel mining operations are required to obtain a Surface Mining Permit from the city or county “lead agency”

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<sup>16</sup> Code of Federal Regulations Title 40 section 122.3(b)

<sup>17</sup> Public Resources Code section 2710 et seq. and California Code of Regulations Title 14 section 3500 et seq.

(typically the local planning or building department). In order to obtain a Surface Mining Permit the applicant must submit an application and reclamation plan.

The Surface Mining Permit application and reclamation plan includes the following standards and requirements pertaining to the protection of water quality: 1) performance standards for drainage, diversion structures, waterways, and erosion control;<sup>18</sup> 2) performance standards for stream protection, including surface water and groundwater;<sup>19</sup> 3) performance standards for tailing and mine waste management;<sup>20</sup> 4) performance standards for closure of surface openings;<sup>21</sup> 5) a description of how contaminants will be controlled and mining wastes will be disposed;<sup>22</sup> and 6) a description of how affected streams will be rehabilitated to minimize erosion and sedimentation.<sup>23</sup>

In addition to the requirements of SMARA, sand and gravel mining operations that involve the removal or placement of soil, sediment, and other materials in or near waters of the United States must also obtain a Federal Permit from the Army Corps of Engineers (ACOE).<sup>24</sup> In order for the applicant to obtain a Federal Permit from the ACOE, the project must first obtain a water quality certification pursuant to Clean Water Act section 401 (401 Certification) from a Regional Water Board to demonstrate that the mining operations will not adversely affect water quality.<sup>25</sup>

The San Diego Water Board determined that it is consistent with the Basin Plan and in the public interest to delegate regulation of specific types of discharge to another public agency. A Surface Mining Permit and/or a Federal Permit and 401 Certification would effectively regulate discharges from sand and gravel mining operations. Therefore, sand and gravel mining operations that obtain a Surface Mining Permit and/or a Federal Permit and 401 Certification may be eligible for a waiver. Under existing Conditional Waiver No. 11, enrollment for a conditional waiver for sand and gravel mining operations was fulfilled with a 401 Certification. However, there is the potential that a sand and gravel mining operation may not need a 401 Certification. In such cases, a Surface Mining Permit should still be required. A Surface Mining Permit can still fulfill the enrollment requirements because the permit application requires the applicant to include performance standards for the protection of water quality.

Obtaining the required Surface Mining Permits and/or Federal Permits and 401 Certifications should be included as waiver conditions that can serve as the method of enrollment for a conditional waiver. Completed and approved documentation for sand and gravel mining projects from the city or county “lead agency” and/or ACOE, as well as 401 Certification applications submitted to the San Diego Water Board, can

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<sup>18</sup> California Code of Regulations Title 14 section 3706

<sup>19</sup> California Code of Regulations Title 14 section 3710

<sup>20</sup> California Code of Regulations Title 14 section 3712

<sup>21</sup> California Code of Regulations Title 14 section 3713

<sup>22</sup> Public Resources Code 2772(c)(8)(A)

<sup>23</sup> Public Resources Code 2772(c)(8)(B)

<sup>24</sup> Pursuant to Clean Water Act section 404

<sup>25</sup> Pursuant to Clean Water Act section 401

provide sufficient information and data to the San Diego Water Board to determine compliance with the conditions of the conditional waivers.

For sand and gravel mining operations that may discharge pollutants to waters of the state but do not require a Surface Mining Permit or Federal Permit and 401 Certification, the discharger must submit a RoWD to the San Diego Water Board to determine if an individual conditional waiver, or if regulation by individual WDRs is appropriate.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 11:*

Discharges from sand and gravel mining operations are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Sand and gravel mining operations cannot be conducted in flowing streams or other water bodies.
2. For sand and gravel mining operations with a Surface Mining Permit and/or Federal Permit and 401 Certification, the following conditions apply:
  - a) Operators must comply with measures included in the Surface Mining Permit and/or Federal Permit and 401 Certification to protect surface water and groundwater quality.
  - b) The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
  - c) At least one copy of any permits, licenses, and certifications must be available on site for inspection.
  - d) Operators must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.

A.3.8 Existing Conditional Waiver No. 12 – Intermittent Swimming Pool Discharges

Swimming pool water can contain several pollutants that can affect the quality of waters of the state. The pollutants in swimming pool water discharged to land can potentially infiltrate to groundwater or runoff to surface waters. However, swimming pool discharges would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with swimming pool discharges to land, and the conditions under which the discharge would not pose a threat to water quality. Swimming pool discharges that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Discharges of water from swimming pools are typically infrequent and relatively free of waste constituents. Existing Conditional Waiver No. 12 only regulates the discharge of water from swimming pools to land. Under the existing conditional waivers, there is no waiver specific to discharges water from swimming pools to surface waters.

Discharges of water from swimming pools to engineered storm water systems in urbanized areas are subject to the ordinances that the municipalities have adopted to comply with their municipal separate storm sewer system (MS4) WDRs (conforming to NPDES requirements), and may require a pool drainage permit before discharge is allowed. Areas that do not have engineered storm water systems may discharge to land or surface waters for disposal of pool water. Discharges of water from swimming pools to surface waters would be considered a point source, thus subject to NPDES regulations and would require regulation under WDRs. However, discharges of water from swimming pools to land would not be subject to NPDES regulations and may be eligible for a conditional waiver.

Swimming pool water typically originates from the local municipal water supply, but can have elevated total dissolved solids concentrations due to evaporation and/or addition of chemicals. Swimming pool waters can also contain bacteria if insufficiently chlorinated, or elevated chlorine concentrations if over-chlorinated. Little or no organic waste is expected in swimming pool waters. Dissolved solids, bacteria, and/or chlorine in swimming pool water discharged to land would be adsorbed and/or attenuated as it infiltrates through the soil and would not be expected to adversely affect the quality of underlying groundwater. Therefore, dissolved solids, bacteria, and/or chlorine in swimming pool water discharged to land or surface water are expected to pose a low threat to surface waters or groundwater.

These types of discharge are typically relatively low in volume and frequency and are not expected to adversely affect the quality of groundwater because the water would likely evapotranspire before infiltrating to the underlying groundwater. However, excessive volumes or frequent discharges could potentially be a source of pollutants that can infiltrate to underlying groundwater and have an adverse effect on the quality of groundwater over time. A Notice of Intent filed with the San Diego Water Board about these discharges could provide notification of the project, enrollment, and sufficient information and data to the San Diego Water Board to determine compliance with the conditions of the waiver, or determine if regulation by individual WDRs is appropriate. Therefore, enrollment should be required for frequent or regular discharges of swimming pool water to land.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 12:*

Discharges of swimming pool water to land are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Prevent the direct or indirect discharge of water from swimming pools to any surface waters of the state (including ephemeral streams and vernal pools).
2. Discharges of water from swimming pools to land must not cause the migration of contaminants such as chlorinated solvents, hydrocarbons, or other toxic or hazardous substances to any waters of the state.

3. Discharges of water from swimming pools to land must not come in contact with any material that consists of or is contaminated with chlorinated solvents, hydrocarbons, or other toxic or hazardous substances prior to discharge.
4. Discharges of water from swimming pools to land must not adversely affect the quality or beneficial uses of waters of the state.
5. Any products added to swimming pool water must be applied in accordance with manufacturer instructions and guidelines and reliably attenuate before infiltrating to underlying groundwater.
6. Discharges of water from each swimming pool to land must not exceed 50,000 gallons during any continuous 365-day period, unless the discharger has filed a Notice of Intent containing information about the swimming pool location and volume, planned period of and frequency of discharge.

#### A.3.9 Existing Conditional Waiver No. 13 – Dredging Project Wastes

Dredging and the discharge of dredged materials are source of pollutants that can affect the quality of waters of the state. Dredging projects can discharge sediment and other pollutants directly to surface waters during dredging activities. Sediment and other pollutants from dredged materials that are deposited on land may be transported to surface waters in surface or storm water runoff, or may be leached to groundwater. However, discharges from dredging projects would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges from dredging projects, and the conditions under which the discharge would not pose a threat to water quality. Discharges from dredging projects that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Dredging is the scraping or excavation of sediment off the floor of a water body. Reasons for dredging may include, but are not limited to, construction projects where piling or abutments must be placed in a stream channel or other water body, management and maintenance of waterways for navigation and flood control purposes, or harvesting storm-dispersed sands. Dredging projects can result in the discharge of sediment, which can affect the quality of surface water and groundwater. Dredged sediment that is removed may be discharged to land or water. Dredged material that is removed for discharge to land may also include “incidental fallback” discharge of sediment to water.

Projects that include dredging sediment from waters of the United States, including wetlands, must apply for a permit from the ACOE. Obstruction or alteration of navigable waters of the United States is regulated under River and Harbors Act section 10. The discharge of dredged or fill material into waters of the United States is regulated under Clean Water Act section 404. In order for an applicant to receive a permit under the River and Harbors Act section 10 and/or Clean Water Act section 404 (collectively referred to herein as “Federal Permits”), a Clean Water Act section 401 water quality

certification (401 Certification) for the project is required from the appropriate Regional Water Board. . Projects regulated under Clean Water Act section 404 are not subject to federal NPDES regulations.<sup>26</sup> However, discharges of dredged or fill materials that can affect the quality of waters of the state (which include waters of the United States) are subject to regulations in the state Water Code and may be regulated with WDRs, unless a waiver is issued.

The San Diego Water Board determined that it is consistent with the Basin Plan and in the public interest to delegate regulation of specific types of discharge to another public agency. A Federal Permit and 401 Certification would effectively regulate dredging project waste discharges. Therefore, dredging projects that obtain a Federal Permit and 401 Certification may be eligible for a waiver.

Under existing Conditional Waiver No. 13, enrollment for a conditional waiver for discharges of wastes from dredging projects is fulfilled with a 401 Certification. However, there are potential dredging projects that may not require a 401 Certification.

Obtaining the required Federal Permits and 401 Certifications should be included as waiver conditions that can serve as the method of enrollment for a conditional waiver. Completed and approved documentation for dredging projects from the ACOE, as well as 401 Certification applications submitted to the San Diego Water Board, can provide sufficient information and data to the San Diego Water Board to determine compliance with the conditions of the conditional waivers.

For dredging projects that may discharge pollutants to waters of the state but do not require a Federal Permit and 401 Certification, the discharger must submit a RoWD to the San Diego Water Board to determine if an individual conditional waiver, or if regulation by individual WDRs is appropriate.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 13:*

Discharges from dredging projects are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. For dredging projects with a Federal Permit and 401 Certification, the following conditions apply:
  - a) Operators must comply with measures included in the Federal Permit and 401 Certification to protect surface water and groundwater quality.
  - b) The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
  - c) At least one copy of any permits, licenses, and certifications must be available on site for inspection.
  - d) Operators must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.

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<sup>26</sup> Code of Federal Regulations Title 40 section 122.3(b)

### A.3.10 Existing Conditional Waiver No. 14 – Short-term Construction Dewatering Operations

Discharges from dewatering operations can contain several pollutants that can affect the quality of waters of the state. These pollutants can potentially infiltrate to groundwater or runoff to surface waters. However, discharges from dewatering operations would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges from dewatering operations to land, and the conditions under which the discharge would not pose a threat to water quality. Discharges from dewatering operations that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Dewatering operations are typically short in duration with relatively low volume, non-storm water discharges. Dewatering operations may include discharging extracted groundwater and water collected from cofferdams or diversions. The pollutants of concern are suspended solids and turbidity. Suspended solids and turbidity are filtered out by the soil as the water infiltrates through the vadose zone, and the water quality is usually the same or better quality than the shallowest part of the underlying groundwater.

Discharges from dewatering operations to surface water are subject to federal National Pollutant Discharge Elimination System (NPDES) regulations and regulated in the San Diego Region under general WDRs.<sup>27</sup> These discharges could not be granted waivers because they must be regulated under WDRs. However, discharges from dewatering operations to land would not be subject to NPDES regulations and may be issued a conditional waiver.

Low volume and infrequent discharges from dewatering operations are not expected to adversely affect the quality of groundwater because the water would likely evapotranspire before infiltrating to the underlying groundwater. However, excessive volumes or frequent or continuous discharges could potentially be a source of pollutants that can infiltrate to underlying groundwater and have an adverse effect on the quality of groundwater over time. A Notice of Intent filed with the San Diego Water Board about these discharges could provide notification of the project, enrollment, and sufficient information and data to the San Diego Water Board to determine compliance with the conditions of the waiver, or determine if regulation by individual WDRs is appropriate.

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<sup>27</sup> San Diego Water Board Order No. 2000-90, NPDES No. CAG919001, *General Waste Discharge Requirements for Temporary Groundwater Extraction and Similar Waste Discharges to San Diego Bay and Storm Drains or Other Conveyance Systems Tributary Thereto*; and, San Diego Water Board Order No. 2001-96, NPDES No. CAG919002, *General Waste Discharge Requirements for Groundwater Waste Discharges from Construction, Remediation, and Permanent Groundwater Extraction Projects to Surface Waters within the San Diego Region Except for San Diego Bay*

Therefore, enrollment should be required for frequent or regular discharges from dewatering operations.

For sites where soil or groundwater contamination is known to be present or discovered, operators are obligated to report the finding to the authorized local regulatory agencies. In such cases, discharge of water from these sites would require proper treatment and/or disposal and a conditional waiver would not be appropriate.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 14:*

Discharges from dewatering operations to lands are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Prevent the direct or indirect discharge from dewatering operations to any surface waters of the state (including ephemeral streams and vernal pools).
2. Discharges from dewatering operations to land must not cause the migration of contaminants such as chlorinated solvents, hydrocarbons, or other toxic or hazardous substances to any waters of the state.
3. Discharges from dewatering operations to land must not come in contact with any material that consists of or is contaminated with chlorinated solvents, hydrocarbons, or other toxic or hazardous substances prior to discharge to land; and where the dewatering operation is not for groundwater and/or soil remediation operations.
4. Discharges from dewatering operations to land must not adversely affect the quality or beneficial uses of waters of the state.
5. Any products used to condition or treat groundwater that may discharge to land must be applied in accordance with manufacturer instructions and guidelines, and must not adversely affect the quality of underlying groundwater.
6. Discharges from dewatering operations to land must not adversely impact the quality or beneficial uses of groundwater in any water wells.
7. Discharges of groundwater pumped from any well or excavation that is used in a soil and/or groundwater contamination investigation or corrective action may not be discharged to land, unless the discharger has filed a Notice of Intent containing monitoring data demonstrating that the quality of the proposed discharge would not cause the groundwater at the disposal site to exceed water quality objectives.
8. For dewatering operations that discharge an average of 5,000 gallons per day for any continuous 180-day period, the discharger must file a Notice of Intent containing information about the operator, location, planned period and rate of discharge, and measures that will be taken to minimize the discharge of pollutants that might affect groundwater quality. Sufficient information demonstrating compliance with waiver conditions must be submitted before the discharge may begin.
9. Groundwater cannot originate from an area that contains any contaminated soil or groundwater.
10. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

### A.3.11 Existing Conditional Waiver Nos. 15 and 24 – Manure Composting and Soil Amendment Operations and Green Waste Composting Facilities

Discharges of compost feedstocks such as manure and green wastes and composted materials as amendments or mulches to soil can be significant sources of pollutants that can affect the quality of waters of the state. These discharges contain pollutants that can potentially leach to groundwater or can be transported in surface and storm water runoff to surface waters. However, discharges of manure and green wastes to compost piles or as amendments or mulches to soil would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges of manure and green wastes, and the conditions under which the discharges would not pose a threat to water quality. Discharges of manure and green wastes that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Compost is the stable product resulting from the biological decomposition of organic matter under controlled conditions. Composting is differentiated from the natural decomposition of organic matter because it is a process controlled by humans. Compost may be used as a soil amendment or mulch.

A soil amendment is a material, such as organic material or sand, mixed into soil to improve its physical properties. When compost is used as a soil amendment, it improves soil structure by lowering bulk densities, increasing permeability and porosity, and introducing microorganisms which produce "cementing agents" (such as gels, gums, slimes, and other polysaccharides) helpful in binding soil particles together into aggregates. When amended with compost, clayey soils are protected against compaction and sandy soils are more able to retain water and nutrients. A soil amendment must be thoroughly mixed into the soil. If it is merely buried, its effectiveness is reduced, and it will interfere with water and air movement and root growth.

Mulch, in contrast, is left on the soil surface. Mulch does not always consist of composted materials, but typically consists of organic materials (e.g., shredded or chipped bark or branches), which eventually decompose and add humic matter to the soil, enhancing its fertility. Its purpose is to reduce evaporation and runoff, inhibit weed growth, and/or create an attractive appearance. Mulches also moderate soil temperature, helping to warm soils in the spring and cool them in the summer. Mulches may be incorporated into the soil as amendments after they have decomposed to the point that they no longer serve their purpose.

The starting materials for composting are commonly referred to as feedstocks. Feedstocks such as yard trimmings, wood chips, vegetable scraps, paper products, animal carcasses, and manures have all been composted successfully. Mixtures of organic materials may be more or less heterogeneous, but are rendered more

physically homogenous through the composting process. Particles are made smaller and the total volume of the original materials is reduced (usually by 30 to 50 percent). Volume reduction is one of the benefits of composting.

Composting activities and operations are subject to California Integrated Waste Management Board (CIWMB) regulations.<sup>28</sup> There are CIWMB regulations specific to agricultural material composting operations,<sup>29</sup> green material composting operations and facilities,<sup>30</sup> biosolid composting operations at publicly owned treatment works (POTWs),<sup>31</sup> research composting operations,<sup>32</sup> and chipping and grinding operations and facilities.<sup>33</sup>

According to the CIWMB composting operating standards, composting operations must “ensure that leachate is controlled to prevent contact with the public.”<sup>34</sup> However, there are no operating standards specific to the protection of water quality. Additionally, there are several composting activities that are excluded from CIWMB composting requirements.<sup>35</sup> The discharge of wastes to composting operations can potentially have a direct or indirect impact on the quality of waters of the state if not properly managed.

The CIWMB regulations define “*agricultural material*” as “*material of plant or animal origin, which result from the production and processing of farm, ranch, agricultural, horticultural, aquacultural, silvicultural, floricultural, vermicultural, or viticultural products, including manures, orchard and vineyard prunings, and crop residues.*” According to the CIWMB regulations, an “*agricultural material composting operation*” is “*an operation that produces compost from green or agricultural additives, and/or amendments.*”

The CIWMB regulations define “*green material*” as “*any plant material that is separated at the point of generation, contains no greater than 1.0 percent of physical contaminants by weight, and... includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood waste. Green material does not include food material, biosolids, mixed solid waste, material processes from commingled collection, wood containing lead-based paint or wood preservative, mixed construction or mixed demolition debris.*” According to the CIWMB regulations, a “*green waste composting operation*” or “*facility*” is “*an operation or facility that composts green material, additives, and/or amendments. A green material composting operation or facility may also handle manure and paper products.*”

Existing Conditional Waiver Nos. 15 and 24 are for discharges of manure and green wastes as feedstock for composting. However, existing Conditional Waiver Nos. 15 and 24 have differing waiver conditions and treat manure and green waste composting as

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<sup>28</sup> California Code of Regulations Title 14 sections 17850 through 17870

<sup>29</sup> California Code of Regulations Title 14 section 17856

<sup>30</sup> California Code of Regulations Title 14 section 17857.1

<sup>31</sup> California Code of Regulations Title 14 section 17859.1

<sup>32</sup> California Code of Regulations Title 14 section 17862

<sup>33</sup> California Code of Regulations Title 14 section 17862.1

<sup>34</sup> California Code of Regulations Title 14 section 17867(a)(14)

<sup>35</sup> California Code of Regulations Title 14 section 17855(a)(1) through (9)

mutually exclusive composting processes. In reality, manure and green wastes are often composted together. Based on the definitions of agricultural and green material composting operations, manure and green wastes can be, and are typically composted together.

Additionally, neither existing Conditional Waiver No. 15 nor 24 include waiver conditions specific to the use of compost as a soil amendment or mulch. Existing Conditional Waiver No. 15 is supposed to be for the discharge of composted manure as a soil amendment, but only refers to manure use as it relates to CAFOs. Compost does not always originate from CAFOs, and may not always be used as a soil amendment, but may also be used as a mulch. Soil amendments and mulches are not limited to composted materials.

According to California Code of Regulations Title 14 section 17855(a)(1) through (9) of the CIWMB regulations, the following types of operations or facilities are excluded from needing to obtain a Compostable Materials Handling Facility Permit, or notifying the local enforcement agency (LEA) and/or CIWMB of the composting activities prior to commencing operations:

- (1) An activity is excluded if it handles agricultural material derived from an agricultural site, and returns a similar amount of the material produced to that same agricultural site, or an agricultural site owned or leased by the owner, parent, or subsidiary of the composting activity. No more than an incidental amount of up to 1,000 cubic yards of compost product may be given away or sold annually.
- (2) Vermicomposting is an excluded activity. The handling of compostable material prior to and after use as a growth medium is not an excluded activity and is subject to the requirements of this chapter. Handling of agricultural material on the site of a vermicomposting activity, for use as a growth medium on that same site, is an excluded activity if it complies with section 17855(a)(1).
- (3) Mushroom farming is an excluded activity. The handling of compostable material prior to and after use as a growth medium is not an excluded activity and is subject to the requirements of this chapter. Handling of agricultural material on the site of a mushroom farm, for use as mushroom bedding on that same site, is an excluded activity if it complies with section 17855(a)(1).
- (4) Handling of green material, feedstock, additives, amendments, compost, or chipped and ground material is an excluded activity if 500 cubic yards or less is on-site at any one time, the compostable materials are generated on-site and if no more than 1,000 cubic yards of materials are either sold or given away annually. The compostable material may also include up to 10% food material by volume.
- (5) The handling of compostable materials is an excluded activity if:
  - (A) the activity is located at a facility (i.e., landfill or transfer/processing facility) that has a tiered or full permit;<sup>36</sup> or

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<sup>36</sup> Defined in California Code of Regulations Title 14 section 18101

- (B) the activity is solely for the temporary storage of biosolids sludge at a publicly owned treatment works (POTW); or
  - (C) the activity is located at the site of biomass conversion and is for use in biomass conversion;<sup>37</sup> or
  - (D) the activity is part of a silvicultural operation or a wood, paper, or wood product manufacturing operation; or
  - (E) the activity is part of an agricultural operation and is used to temporarily store or process agricultural material not used in the production of compost or mulch; or
  - (F) the activity is part of an operation used to chip and grind materials derived from and applied to lands owned or leased by the owner, parent, or subsidiary of the operation; or
  - (G) the activity is part of an agricultural operation used to chip and grind agricultural material produced on lands owned or leased by the owner, parent, or subsidiary of the agricultural operation, for use in biomass conversion; or
  - (H) the activity is part of an animal food manufacturing or rendering operation.
  - (I) the activity is the storage of yard trimmings at a publicly designated site for the collection of lot clearing necessary for fire protection provided that the public agency designating the site has notified the fire protection agency; or
  - (J) the materials are handled in such a way to preclude their reaching temperatures at or above 122 degrees Fahrenheit as determined by the LEA.
- (6) Non-commercial composting with less than one cubic yard of food material is excluded provided that all compostable material is generated and used on-site.
  - (7) Storage of bagged products from compostable material is an excluded activity provided that such bags are no greater than 5 cubic yards.
  - (8) Within-vessel composting process activities with less than 50 cubic yard capacity are excluded.
  - (9) Beneficial use of compostable materials is an excluded activity. Beneficial use includes, but is not limited to slope stabilization, weed suppression, alternative daily cover, and similar uses, as determined by the LEA.

Many of the excluded activities listed above include agricultural and green materials, which include manure and green wastes. Manure and green wastes can be significant sources of pollutants (e.g., pathogens, nutrients, and sediment) that can adversely affect the quality of waters of the state if not properly managed. Areas where composting activities are performed must be properly protected from precipitation and runoff, which could transport pollutants to surface waters and/or groundwater.

Compost and/or other soil amendments and mulches must be properly applied to soil, as well as in the proper amounts, to prevent transporting the amendments or mulches to surface waters in surface runoff. An analysis of the nutrient and organic matter content of the soil will determine the amount of soil amendments or mulches that should be applied. Properly applied soil amendments or mulches will help to reduce wind and

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<sup>37</sup> Defined in Public Resources Code section 40106

water erosion of the soil, to retain moisture in the soil, and to decrease the impact of precipitation by slowing the runoff of water.

The number of land parcels that could be composting manure and/or green wastes and/or applying amendments and/or mulches to soil is not known. There are many small AFOs (e.g., residential land owners or ranches with one or more horses) or grazing facilities in the Region that may be composting manure at their facilities, or disposing of fresh manure directly on land as a fertilizer, amendment, and/or mulch. Some CAFOs in the Region, which are regulated by WDRs, give away composted manure for free. Many agricultural land owners may compost manure and/or green wastes on site and use the compost as a soil amendment or mulch for their crops and/or pastures. Residential land owners may also use manure compost as a soil amendment or mulch for their landscaping and gardens.

So, the number of land parcels that could be composting manure and/or green wastes and/or applying amendments and/or mulch to soil is likely to be in the thousands. Current San Diego Water Board resources would not be sufficient to issue WDRs to all these potential facilities in the Region. However, runoff and leachate from composting manure and/or green wastes and/or applying amendments and/or mulches to soils from several parcels can collectively be a significant source of pollutants to waters in the Region.

When operations or facilities properly manage their composting activities and/or properly apply amendments and/or mulches to soil, the potential impacts on water quality can be significantly reduced. Facilities that do not generate or use significant amounts of compost with manure and/or green wastes and implement MMs/BMPs should be eligible for a conditional waiver without enrollment. However, facilities that violate waiver conditions by not implementing MMs/BMPs and allow the degradation of water quality should be required comply with waiver conditions. Facilities that violate waiver conditions could be required to file a RoWD and be regulated with individual WDRs. Enforcement actions could also be taken against facilities that fail to comply with waiver conditions.

#### *Proposed Conditions for Renewing Existing Conditional Waiver Nos. 15 and 24*

Discharges associated with composting manure and/or green wastes and/or applying amendments and/or mulches to soil are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Prevent the direct or indirect discharge of compost, compost feedstocks, soil amendments, and/or mulches to any surface waters of the state (including ephemeral streams and vernal pools).
2. Compost, compost feedstocks, soil amendments, and/or mulches must not cause or threaten to cause a condition of contamination, pollution, or nuisance.

3. Operations or facilities that conduct composting and/or apply amendments and/or mulches to soil must implement MMs/BMPs to minimize or eliminate the discharge of any pollutants that could adversely affect the quality of waters of the state.
4. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
5. Operations or facilities that conduct composting and/or apply amendments and/or mulches to soil must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.
6. For composting operations or facilities that store 500 cubic yards or less on site at any one time, and the compostable materials are generated on-site and if no more than 1,000 cubic yards of materials are either sold or given away annually, or other CIWMB-excluded composting activities,<sup>38</sup> the following conditions apply to minimize or eliminate the discharge of pollutants to waters of the state:
  - a) Composting operations or facilities must comply with local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.
  - b) Compost pile(s) should be should be protected with a roof or cover, or at a minimum be covered with plastic sheeting if precipitation is forecast within the next 24 hours, to prevent direct contact between precipitation and compost.
  - c) Precipitation and surface drainage should be diverted away from the compost pile(s).
  - d) A buffer zone of at least 100 feet should be maintained between the compost pile(s) and any surface waters of the state, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
  - e) Leachate from compost pile(s) should not impact the quality of groundwater in any water wells.
  - f) The following wastes cannot be added to compost pile(s) unless sufficient information is provided to demonstrate that the waste does not pose a potential threat to water quality: (a) municipal solid wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.
7. For composting operations or facilities that store more than 500 cubic yards on site at any one time, or other CIWMB-regulated composting activities, the following conditions apply to minimize or eliminate the discharge of pollutants to waters of the state:
  - a) Composting operation or facility must be sited, designed and operated in accordance with the California Integrated Waste Management Board's (CIWMB) requirements in California Code of Regulations Title 14 sections 17865 through 17870. Records must be available on site for inspection.
  - b) Composting operations or facilities must comply with local ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.

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<sup>38</sup> California Code of Regulations Title 14 section 17855(a)(1) through (9)

- c) Compost pile(s) should be should be protected with a roof or cover, or at a minimum be covered with plastic sheeting if precipitation is forecast within the next 24 hours, to prevent direct contact between precipitation and compost.
  - d) Precipitation and surface drainage should be diverted away from the compost pile(s).
  - e) A buffer zone of at least 100 feet should be maintained between the compost pile(s) and any surface water body, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
  - f) Leachate from compost pile(s) must not adversely impact the quality or beneficial uses of groundwater in any water wells.
  - g) The following wastes cannot be added to compost pile(s) unless sufficient information is provided to demonstrate that the waste does not pose a potential threat to water quality: (a) municipal solid wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.
  - h) Containment structures such as embankments, liners or surface impoundments must be maintained in order to ensure proper performance whenever compost feedstocks (e.g., manure and/or green wastes) are discharged.
  - i) File a Notice of Intent containing information about the facility owner/operator, map of the facility showing the locations of compost pile(s) and nearby surface water bodies and/or water wells, and MMs/BMPs that have been, or are planned to be implemented to prevent discharges of compost that could affect surface water and groundwater quality. Sufficient information demonstrating compliance with waiver conditions must be submitted in order for the composting operation or facility to be eligible for this conditional waiver.
8. For operations or facilities that apply amendments and/or mulches to soil, the following conditions apply to minimize or eliminate the discharge of pollutants to waters of the state:
- a) Amendments or mulches applied to soil cannot include any of the following additives, unless sufficient information is provided to demonstrate that the additive does not pose a potential threat to water quality: (a) municipal solid wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.
  - b) The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the NRCS, UCCE, and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.

- c) Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
- d) Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

#### A.3.12 Existing Conditional Waiver No. 16 – Solid Waste Disposal Facilities Accepting Only Inert Wastes

Discharges of inert wastes to solid waste disposal facilities can be sources of pollutants that can affect the quality of waters of the state. These pollutants that can potentially be transported in surface and storm water runoff to surface waters. However, discharges of inert wastes to solid waste disposal facilities would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges of inert wastes to solid waste disposal facilities, and the conditions under which the discharges would not pose a threat to water quality. Discharges of inert wastes to solid waste disposal facilities that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

*“Inert waste”* is defined as *“that subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste.”*<sup>39</sup> Inert solid wastes do not need containment measures to ensure adequate protection of groundwater quality. However, inert waste must still be disposed of in a manner that is consistent with the Basin Plan. This waiver should apply only to inert solid wastes that are disposed of on land in an appropriate solid waste disposal facility.

As defined in the regulations, inert wastes contain no soluble or decomposable waste constituents.<sup>40</sup> Examples of inert solid waste include, but are not limited to, the following:

- Inert mining wastes, including native geological materials generated during aggregate mining activities at or in the vicinity of the site
- Inert soil, rock and gravel
- Broken cured concrete
- Bricks
- Glass and ceramics not containing lead
- Inert plastics

Such wastes are not expected to pose a nuisance or threat to groundwater if disposal facilities are properly designed and appropriate disposal methods are utilized.

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<sup>39</sup> California Code of Regulations Title 27 section 20230(a)

<sup>40</sup> California Code of Regulations Title 27 section 20230(a)

Therefore, enrollment should not be required for inert solid waste discharged to land in properly designed and restricted solid waste disposal facilities.

### *Proposed Conditions for Renewing Existing Conditional Waiver No. 16*

Discharges associated with solid waste disposal facilities accepting only inert wastes are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Prevent the direct or indirect discharge of inert wastes to any surface waters of the state (including ephemeral streams and vernal pools).
2. Inert wastes must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
3. Inert waste must not contain hazardous waste, or soluble or decomposable constituents to be considered inert waste.
4. Inert waste cannot contain any “free liquids.”<sup>41</sup>
5. Owner/operator of disposal facility must comply with local, state, and federal ordinances and regulations and obtain any required permits, certifications, and/or licenses.
6. Owner/operator of disposal facility must secure the disposal site and prevent unauthorized disposal by the public.
7. Inert wastes exclude any wastes determined by the San Diego Water Board to potentially have an adverse effect on the quality or beneficial uses of waters of the state, even if classified as inert waste.

### A.3.13 Existing Conditional Waiver No. 17 – Stream Channel Alterations

Stream channel alterations can result in the discharge of pollutants that can affect the quality of waters of the state. Stream channel alternations can discharge sediment and other pollutants directly to surface waters, and could potentially have an adverse effect on groundwater. However, discharges from stream channel alteration projects would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges from stream channel alteration projects, and the conditions under which the discharge would not pose a threat to water quality. Discharges from stream channel alteration projects that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Altering a stream channel is to obstruct, diminish, enhance, destroy, modify, relocate, realign, change, or potentially affect the existing condition or shape of a channel, or to change the path or characteristics of water flow within a natural channel. Stream

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<sup>41</sup> “Free liquids” defined by California Code of Regulations Title 27 section 20164 as “liquid which readily separates from the solid portions of waste under ambient temperature and pressure”

channel alterations include removal or placement of material or structures within any stream channel within the boundaries of the state. This may include stream channel maintenance activities where vegetation is removed or trimmed. Alternation of a stream channel can result in the discharge of sediment and other pollutants, which can affect the quality of surface water and groundwater.

Projects that may alter a stream channel that is a water of the United States must apply for a permit from the ACOE. Obstruction or alteration of navigable waters of the United States is regulated under River and Harbors Act section 10. The discharge of dredged or fill material into waters of the United States is regulated under Clean Water Act section 404. In order for an applicant to receive a permit under the River and Harbors Act section 10 and/or Clean Water Act section 404 (collectively referred to herein as “Federal Permits”), a Clean Water Act section 401 water quality certification (401 Certification) for the project is required from the appropriate Regional Water Board. Projects regulated under Clean Water Act section 404 are not subject to federal NPDES regulations.<sup>42</sup> However, discharges of dredged or fill materials that can affect the quality of waters of the state (which include waters of the United States) are subject to regulations in the state Water Code and may be regulated with WDRs, unless a waiver is issued.

The San Diego Water Board determined that it is consistent with the Basin Plan and in the public interest to delegate regulation of specific types of discharge to another public agency. A Federal Permit and 401 Certification would effectively regulate potential discharges resulting from stream channel alteration projects. Therefore, stream channel alteration projects that obtain a Federal Permit and 401 Certification may be eligible for a waiver.

Under existing Conditional Waiver No. 17, enrollment for a conditional waiver for discharges from stream channel alteration projects is fulfilled with a 401 Certification. However, there are potential stream channel alteration projects that do not require a 401 Certification.

Obtaining the required Federal Permits and 401 Certifications should be included as waiver conditions that can serve as the method of enrollment for a conditional waiver. Completed and approved documentation for stream channel alteration projects from the ACOE, as well as 401 Certification applications submitted to the San Diego Water Board, can provide sufficient information and data to the San Diego Water Board to determine compliance with the conditions of the conditional waivers.

For stream channel alteration projects that may discharge pollutants to waters of the state but do not require a Federal Permit and 401 Certification, the discharger must submit a RoWD to the San Diego Water Board to determine if an individual conditional waiver, or if regulation by individual WDRs is appropriate.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 17:*

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<sup>42</sup> Code of Federal Regulations Title 40 section 122.3(b)

Discharges from stream channel alteration projects are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. For stream channel alteration projects with a Federal Permit and 401 Certification, the following conditions apply:
  - a) Operators must comply with measures included in the Federal Permit and 401 Certification to protect surface water and groundwater quality.
  - b) The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
  - c) At least one copy of any permits, licenses, and certifications must be available on site for inspection.
  - d) Operators must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.

#### A.3.14 Existing Conditional Waiver No. 18 – Agricultural Irrigation Return Water

As agricultural irrigation water moves through or over the land surface, it picks up and carries away natural and man-made pollutants and can affect the quality of waters of the state. These pollutants in agricultural irrigation water can potentially infiltrate to groundwater or runoff to surface waters. However, discharges of agricultural irrigation water would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions

The following discussion identifies the potential pollutants of concern associated with discharges of agricultural irrigation water, and the conditions under which the discharges would not pose a threat to water quality. Discharges of agricultural irrigation water that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

According to Code of Federal Regulations Title 40 section 122.3(f), “*Return flows from irrigated agriculture*” are not subject to NPDES regulations. However, return flows from irrigated agriculture are subject to the regulations in the state Water Code. Discharges of agriculture irrigation return waters can result in surface runoff to surface waters and infiltration to groundwater. Surface runoff of agricultural irrigation return waters can transport excessive sediment, dissolved solids, nutrients, pesticides, hydrocarbons, and pathogens (i.e., bacteria, viruses, protozoa) to surface waters. Infiltration of agricultural irrigation return waters can also leach dissolved solids (salts), nutrients, pesticides, hydrocarbons, and pathogens to groundwater.

Nonpoint source (NPS) pollution, or polluted runoff, is the leading cause of water quality impairments in California according to the State Water Board’s NPS Program Plan. Runoff of irrigation return water from lands utilized for agricultural activities can be a significant source of pollutants to surface waters and/or groundwater if proper MMs/BMPs are not implemented. This conclusion is supported by the fact that several

surface water bodies in the northern part of the San Diego Region, where agricultural land uses are most prevalent, are not meeting water quality objectives for several agriculture related pollutants and are on the 303(d) List.

Existing Conditional Waiver No. 18 requires implementation of MMs/BMPs, but no enrollment, monitoring, or reporting requirements. The existing waiver conditions do not include any requirements that would compel compliance with waiver conditions. The conditions of existing Conditional Waiver No. 18 provide little or no information or data to identify agricultural NPS pollutant sources, verify implementation of MMs/BMPs, or ability to assess effectiveness of any MMs/BMPs that may be in place. Based on available evidence, the conditions for existing Conditional Waiver No. 18 may not be effective in protecting water quality from pollutants in irrigation return waters from agricultural NPSs.

The Central Coast, Central Valley, and Los Angeles Regional Water Boards have implemented waiver programs to control NPS runoff from irrigated lands with conditions that require enrollment, implementation of MMs/BMPs, monitoring, reporting, and preparation of water quality management plans. The San Diego Water Board is also proposing to implement a waiver program that includes enrollment, monitoring, and reporting. In the other regions most of the agricultural operations are on large 100-acre and greater size parcels that can be easily located, have easily identified owners and/or operators, and operate on a full-time and/or year-round schedule. Thus, the Regional Water Boards from these regions can easily identify and contact owners and/or operators that are not enrolled in their irrigated lands conditional waiver programs. Identifying larger operations such as these in the San Diego Region and enrolling them in a similar waiver program should not be very difficult.

However, the San Diego Region has several factors that make regulating irrigation return water from agricultural activities very challenging. The San Diego Region has agriculture operations on a wide range of parcel sizes. According to the San Diego County Farm Bureau (Farm Bureau), more than half (60 percent or more) of the farms in the San Diego Region are small agriculture operations on parcels with 10-acres or less, with owners and/or operators that do not occupy the parcels or are present only part of the year, and/or operate on a seasonal, part-time, or sporadic schedule. There are thousands of these small growing operations in the San Diego Region. The rest of the farms (40 percent or less) are probably implementing MMs/BMPs and/or affiliated with or getting information or assistance from organizations such as the Farm Bureau, UCCE, NRCS, regional RCDs, or other organizations.

Many of the smaller agriculture operations are very likely unaware of their responsibilities to implement MMs/BMPs, or the consequences of their actions. Educating these small agriculture operations of their responsibilities is necessary to ensure that their practices do not adversely affect water quality. Reaching out to small agriculture operators will take a significant amount of time due to the anticipated numbers of such operations. However, available evidence suggests that the collective

discharges from small agricultural operations can be a potentially significant source of pollutants to waters in the Region, and therefore need to be identified.

The waiver conditions for agricultural irrigation return water should be revised to include conditions that require implementation of MMs/BMPs to control irrigation return water. Other waiver conditions should include monitoring and reporting. Education and outreach should also be included in the waiver conditions.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 18:*

Discharges of agricultural irrigation return water are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Agricultural activities must implement MMs/BMPs to minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.
2. Agricultural operators must implement MMs/BMPs to minimize or eliminate the discharge of agricultural irrigation return water runoff to surface waters and infiltration to groundwater. Recommended MMs/BMPs are available in the State Water Board's NPS Program Plan and/or available from UCCE, NRCS, and/or regional RCDs. Additional references may be available from other sources.
3. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
4. Agriculture operators must receive annual water quality management related training (e.g., implementation of MMs/BMPs, nutrient management, irrigation water management, etc.). Proof of training must be available on site for inspection.
5. Agriculture operators must be in regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCD so they can be informed of the latest irrigation water runoff MMs/BMPs and developments with water quality issues. Proof of contact (e.g., newsletter addressed to facility, NRCS conservation plan, UCCE self assessment) must be available on site for inspection.
6. Agriculture operators must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.
7. For agriculture operations where no MMs/BMPs have been, or are planned to be, implemented, the operator must file a Notice of Intent with the San Diego Water Board demonstrating that MMs/BMPs are not required to comply with the waiver conditions.

A.3.15 Existing Conditional Waiver No. 19 – Nursery Irrigation Return Water

As nursery irrigation water moves through or over the land surface, it picks up and carries away natural and human-made pollutants and can affect the quality of waters of the state. These discharges can potentially infiltrate to groundwater or runoff to surface waters. However, discharges of nursery irrigation water would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions

The following discussion identifies the potential pollutants of concern associated with discharges of nursery irrigation water, and the conditions under which the discharges would not pose a threat to water quality. Discharges of nursery irrigation water that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

For the purposes of this discussion, nurseries are defined as facilities that are engaged in the propagation and/or growing of plants (shrubs, trees, vines, etc.) for sale. This does not include retail facilities such as supermarkets or home improvement stores. Discharges of nursery irrigation water can result in surface runoff to surface waters and infiltration to groundwater.

Surface runoff of nursery irrigation return waters can transport excessive sediment, dissolved solids, nutrients, pesticides, hydrocarbons, and pathogens (i.e., bacteria, viruses, protozoa) to surface waters. Nursery irrigation return waters can also leach dissolved solids (salts), nutrients, pesticides, hydrocarbons, and pathogens to groundwater. Infiltration of nursery irrigation return waters can have a significant effect on underlying groundwater.

There are two main types of nurseries: field (in-ground) and container. Container nurseries can be indoor or outdoor. Indoor container nurseries (e.g., greenhouses) may be completely contained with no direct or indirect discharges to waters of the state because of an impermeable floor where all irrigation return water is collected and reused or properly disposed in a sanitary sewer. Indoor and/or completely contained nurseries do not discharge nursery irrigation return water that requires regulation by a conditional waiver or WDRs. However, outdoor container and field nurseries can discharge nursery irrigation return water directly and/or indirectly to land and/or surface waters without proper management.

Existing Conditional Waiver No. 19 requires that there is no discharge to waters of the United States and implementation of MMs/BMPs, but no monitoring or reporting requirements. The waiver conditions for nursery irrigation return waters include an enrollment requirement, which is fulfilled by submitting an *Application for License to Sell Nursery Stock* to the California Department of Food and Agriculture (CDFA). Nursery operations can be identified through a directory available from the CDFA. However, the application form does not require any information pertaining to facility design, MM/BMP implementation, or water quality management.

The conditions of existing Conditional Waiver No. 19 provide no information or data to verify if MMs/BMPs have been implemented by a nursery operation, or ability to assess effectiveness of any MMs/BMPs that may be in place. Since 2002, the San Diego Water Board has received reports that surface runoff discharge has been observed from nurseries. Based on available evidence, the conditions for existing Conditional Waiver No. 19 may not be effective in protecting water quality from pollutants in irrigation return waters from nurseries.

The waiver conditions for nursery irrigation return water should be revised to include conditions that require implementation of MMs/BMPs to prevent the discharge of irrigation return water to any waters of the state and properly managing irrigation water use to minimize or eliminate potential adverse impacts to groundwater. Other waiver conditions should include monitoring and reporting. . Education and outreach should also be included in the waiver conditions.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 19:*

Discharges of nursery irrigation return water are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Prevent the direct or indirect discharge of nursery irrigation return water to any surface waters of the state (including ephemeral streams and vernal pools).
2. Nursery operations must implement MMs/BMPs to minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.
3. Nursery operators must implement MMs/BMPs to minimize or eliminate the infiltration of nursery irrigation return water to groundwater. Recommended MMs/BMPs are available in the State Water Board's NPS Program Plan and/or available from UCCE, NRCS, and/or regional RCDs. Additional references may be available from other sources.
4. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
5. Nursery operators must receive annual water quality management related training (e.g., implementation of MMs/BMPs, nutrient management, irrigation water management, etc.). Proof of training must be available on site for inspection.
6. Nursery operators must be in regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCD so they can be informed of the latest MMs/BMPs and developments with water quality issues. Proof of contact (e.g., newsletter addressed to facility, NRCS conservation plan, UCCE self assessment) must be available on site for inspection.
7. Nursery operators must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.
8. For nursery operations where no MMs/BMPs have been, or are planned to be, implemented, the operator must file a Notice of Intent demonstrating that MMs/BMPs are not required to comply with the waiver conditions.

A.3.16 Existing Conditional Waiver Nos. 20 and 26 – Short-Term Use of Reclaimed/Recycled Water and Permanent Reclaimed/Recycled Water Projects

Recycled water can contain several pollutants that can affect the quality of waters of the state. These pollutants can potentially infiltrate to groundwater or runoff to surface

waters. However, discharges of recycled water would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges of recycled water to land, and the conditions under which the discharge of recycled water to land would not pose a threat to water quality. Discharges of recycled water that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

The water supply in the San Diego Region is largely dependent upon water imported from northern California and the Colorado River. As the population in the Region increases, the need to conserve the existing water supply and/or develop water supply alternatives will become extremely important. California has a strong interest in domestic wastewater reclamation, or water recycling. The San Diego Water Board supports domestic wastewater reclamation and reuse to the maximum extent feasible to help meet the growing water needs of the Region.

Recycled water may only include sources that contain domestic waste, whole or in part.<sup>43</sup> Domestic wastewater reclamation is subject to the requirements of Water Code Articles 1 through 7 (commencing with section 13500) of Chapter 7, and the use of recycled water must not degrade water quality.<sup>44</sup> Recycled water cannot be discharged without authorization under WDRs, water reclamation requirements (WRRs), or a master reclamation permit (MRP),<sup>45</sup> unless issued a waiver. A conditional waiver is not applicable to recycled water discharges authorized and regulated under WDRs, WRRs, and/or a MRP.

The California Department of Public Health (CDPH) established statewide water recycling criteria for each type of recycled water use to protect public health.<sup>46</sup> The CDPH has established water recycling criteria for the following general uses:

- Use of Recycled Water for Irrigation<sup>47</sup>
- Use of Recycled Water for Impoundments<sup>48</sup>
- Use of Recycled Water for Cooling<sup>49</sup>
- Use of Recycled Water for Other Purposes<sup>50</sup>

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<sup>43</sup> California Code of Regulations Title 22 section 60302

<sup>44</sup> Water Code section 13550(a)(4)

<sup>45</sup> Water Code section 13529.2(b)

<sup>46</sup> California Code of Regulations Title 22, Division 4, Chapter 3, Articles 1 through 10

<sup>47</sup> Specific uses and wastewater treatment standards are provided in California Code of Regulations Title 22 section 60304

<sup>48</sup> Specific uses and wastewater treatment standards are provided in California Code of Regulations Title 22 section 60305

<sup>49</sup> Specific uses and wastewater treatment standards are provided in California Code of Regulations Title 22 section 60306

<sup>50</sup> Specific uses and wastewater treatment standards are provided in California Code of Regulations Title 22 section 60307

- Groundwater Recharge<sup>51</sup>

Depending on the planned use of the recycled water, the recycled water must be treated to one of the following minimum standards:

- Undisinfected Secondary Recycled Water<sup>52</sup>
- Disinfected Secondary-23 Recycled Water<sup>53</sup>
- Disinfected Secondary-2.2 Recycled Water<sup>54</sup>
- Disinfected Tertiary Recycled Water<sup>55</sup>

Recycled water that is treated to CDPH secondary treatment standards contains more pollutants than water that is treated to CDPH tertiary treatment standards. Recycled water treated to CDPH secondary treatment standards does not require filtering and will have higher concentrations of nutrients, suspended and dissolved solids, and/or metals compared to recycled water treated to CDPH tertiary treatment standards. CDPH wastewater reclamation treatment criteria also require disinfection for most recycled water uses. However, for those uses that do not require disinfection, bacteria may be present in relatively high concentrations.

The different CDPH recycled water criteria only include standards for bacteria to be protective of human health, not water quality. Pollutants that are typically present in

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<sup>51</sup> California Code of Regulations Title 22 section 60320

<sup>52</sup> Defined in California Code of Regulations Title 22 section 60301.900 as “oxidized wastewater” or “wastewater in which the organic matter has been stabilized, is nonputrescible, and contains dissolved oxygen.”

<sup>53</sup> Defined in California Code of Regulations Title 22 section 60301.225 as wastewater “that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30 day period.”

<sup>54</sup> Defined in California Code of Regulations Title 22 section 60301.220 as wastewater “that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period.”

<sup>55</sup> Defined in California Code of Regulations Title 22 section 60301.230 as “a filtered and subsequently disinfected wastewater that meets the following criteria: (a) The filtered wastewater has been disinfected by either: (1) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or (2) A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration; (b) The median concentration of total coliform bacteria measured in the disinfected effluent does not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.”

domestic wastewater that can potentially have an adverse effect on receiving water quality include suspended and dissolved solids and nutrients, among others. Therefore, the discharge of recycled water to land can potentially contain bacteria, nutrients, dissolved and suspended solids, and other pollutants.

Recycled water is suitable for a direct beneficial use or a controlled use that would otherwise not occur. However, the pollutants remaining in the recycled water, and recycled water that comes into contact with pollutants and transports those pollutants in surface runoff or leaches those pollutants into the soil and groundwater, can potentially have an adverse effect on the quality of waters of the state.

Recycled water that is discharged directly to surface water would be subject to federal National Pollutant Discharge Elimination System (NPDES) regulations. Recycled water indirectly discharged to surface waters, through surface runoff or overspray, would be subject to the water quality standards in the Basin Plan and the regulations of the Water Code. In either case, discharges of recycled water to surface waters could exceed and cause the receiving waters to exceed the water quality objectives in the Basin Plan and would require regulation under WDRs.

Excessive use of recycled water discharged to land can result in a significant amount of infiltration and leaching of pollutants to underlying groundwaters. Over time, recycled water that percolates to groundwater can potentially have an adverse effect on water quality. A Regional Water Board may not deny issuance of WRRs to a project that only violates a salinity standard in the Basin Plan.<sup>56</sup> WDRs, WRRs, and/or a MRP may include conditions allowing for a salinity standard to be exceeded. However, discharges that are eligible for a conditional waiver are not expected to adversely affect or pose a threat to water quality. With proper planning and application, the potential threat to groundwater quality from discharges of recycled water to land can be eliminated.

Existing Conditional Waiver No. 20 is for short-term or temporary discharges of recycled water to land. Most short-term projects that might discharge recycled water to land only require secondary treatment, with or without disinfection. Existing Conditional Waiver No. 20 can be applied to projects with short-term discharges (1 year or less) of recycled water to land that do not require the installation of permanent facilities or structures. Projects that have short-term discharges need to transport recycled water to a site using water trucks and/or in some mobile or temporary tank or container. Examples of short-term projects that may use recycled water include, but are not limited to, dust control, soil compactions, or green belt irrigation. Short-term recycled water projects that comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state.

Permanent recycled water projects require the installation of permanent facilities or structures to discharge recycled water to land, typically distributed through “purple pipe” systems. A recycled water agency must submit a RoWD and apply for and receive WDRs, WRRs, and/or MRP before distributing and allowing end users to discharge

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<sup>56</sup> Water Code section 13523.5

recycled water. Existing Conditional Waiver No. 26 was for permanent recycled water projects until final WDRs, WRRs, and/or MRP can be adopted by the San Diego Water Board. However, according to a Memorandum of Agreement with the California Department of Health Services, now the California Department of Public Health (CDPH), the State Water Board will not waive reclamation requirements nor propose a waiver of reclamation requirements for any proposed use of reclaimed water without consultation with the CDPH.<sup>57</sup> After contacting the CDPH, they expressed concern about the waiver for permanent recycled water projects, and they are opposed to renewing the existing Conditional Waiver No. 26. Therefore, the San Diego Water Board will not renew existing Conditional Waiver No. 26 for discharges from permanent recycled water projects.

Because the San Diego Water Board supports domestic wastewater reclamation and reuse to the maximum extent feasible to help meet the growing water needs of the Region, renewing the conditional waiver for discharges of recycled water on short-term projects is in the public interest. Discharges of recycled water to land that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 20:*

The discharge of recycled water to land is not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Prevent all windblown spray and surface runoff of recycled water on to property not owned or controlled by the discharger by implementation of MMs/BMPs.
2. Recycled water discharged to land must not adversely affect the quality or beneficial uses of underlying groundwater.
3. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
4. No irrigation with disinfected tertiary recycled water shall take place within 50 feet of any domestic water supply well, unless the conditions of California Code of Regulations Title 22 section 60310(a) have been met.
5. No impoundment of disinfected tertiary recycled water shall occur within 100 feet of any domestic water supply well, in accordance with California Code of Regulations Title 22 section 60310(b).
6. No irrigation with, or impoundment of, disinfected secondary-2.2 or disinfected secondary-23 recycled water shall take place within 100 feet of any domestic water supply well, in accordance with California Code of Regulations Title 22 section 60310(c).
7. No irrigation with, or impoundment of, undisinfectated secondary recycled water shall take place within 150 feet of any domestic water supply well, in accordance with California Code of Regulations Title 22 section 60310(d).

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<sup>57</sup> Memorandum of Agreement between the Department of Health Services and the State Water Resources Control Board on Use of Reclaimed Water, dated January 1996.

8. Any recycled water irrigation runoff shall be confined to the recycled water use area, in accordance with California Code of Regulations Title 22 section 60310(e)(1).
9. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities, in accordance with California Code of Regulations Title 22 section 60310(e)(2).
10. Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff, in accordance with California Code of Regulations Title 22 section 60310(e)(3).
11. No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground, or school yard, in accordance with California Code of Regulations Title 22 section 60310(f).
12. All use areas where recycled water is used that are accessible to the public shall be posted with warning signs that are visible to the public, in accordance with California Code of Regulations Title 22 section 60310(g)
13. No physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water, in accordance with California Code of Regulations Title 22 section 60310(h).
14. The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibs; and only quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access, in accordance with California Code of Regulations Title 22 section 60310(i).
15. Uses of recycled water, other than groundwater recharge, are limited to those listed in California Code of Regulations Title 22 Division 4 Chapter 3 Article 3, sections 60303 through 60309, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality and human health.
16. Recycled water cannot be used for groundwater recharge unless sufficient information is provided to demonstrate that it will be protective of water quality and human health.
17. For short-term recycled water projects, the following conditions apply:
  - a) Operator must file a Notice of Intent containing information about the operator, location, planned period of and frequency of discharge, and measures that will be taken to eliminate or minimize the discharge of pollutants that might affect surface water and groundwater quality. The Notice of Intent must include written notification from the permitted recycled water agency that the project will comply with recycled water regulations in California Code of Regulations Title 22, Division 4, Chapter 3, Articles 1 through 10. Sufficient information demonstrating compliance with waiver conditions must be submitted before the discharge may begin. The Notice of Intent is valid for 365 days, or 1 year.
  - b) A new Notice of Intent must be submitted to the San Diego Water Board if the short-term project exceeds 1 year. A new Notice of Intent must be received by the San Diego Water Board at least 60 days prior to the expiration of the previous Notice of Intent. If no new Notice of Intent is received 60 days prior to the expiration of the previous Notice of Intent, the short-term recycled water

project must cease operation 365 days, or 1 year, after the beginning of the operation.

#### A.3.17 Existing Conditional Waiver No. 21 – On-site Drilling Mud Discharge

Discharges of drilling mud can contain several pollutants that can affect the quality of waters of the state. These pollutants can potentially leach to groundwater or runoff to surface waters. However, discharges of drilling mud to land would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges of drilling mud to land, and the conditions under which the discharges would not pose a threat to water quality. Discharges of drilling mud that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Numerous wells are drilled within the Region on an annual basis. In many cases, drilling mud is used to help control the well drilling process. Drilling mud typically consists of bentonite clay mixed with water or a non-toxic mineral oil. The liquefied soil and rock cuttings from the well borehole, along with the bentonite drilling mud, are commonly contained in a portable tank, but can also be contained in a sump that is excavated on site, during drilling.

The fact that the waste drilling mud is non-toxic and non-hazardous does not mean that it is not a potential threat to surface water or groundwater quality. Drilling mud must be properly contained to prevent it from running off to surface waters. Drilling mud consists of high liquid content, which can potentially infiltrate to groundwater. However, the high content of clay and very fine-grained materials in the drilling mud will generally seal the floor and walls of the sump, which will severely reduce or eliminate any leaching potential as the water content evaporates. Containment of drilling muds within the sump during drilling also eliminates the threat to surface waters.

As long as drilling muds are properly managed and contained, these types of discharge are not expected impact surface water or groundwater quality. Discharges of drilling mud to land that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state.

#### *Proposed Conditions for Renewing Existing Conditional Waiver No. 21:*

Discharges of drilling mud to land are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Prevent the direct or indirect discharge of drilling mud to any surface waters of the state (including ephemeral streams and vernal pools).
2. Drilling mud must be contained to eliminate the potential for runoff from the site.

3. Drilling mud cannot be from borings advanced for a soil or groundwater contamination investigation.
4. Drilling mud sump design must ensure no overflow of drilling muds during drilling and at least 2 feet of freeboard.
5. The floor of the sump must be at least 5 feet above the highest known historical or anticipated groundwater level.
6. The walls of the sump must be at least 100 feet away from any surface water body or municipal water well.
7. Drilling mud cannot contain any toxic or hazardous constituents.
8. Drilling mud must be removed and disposed of at an appropriate disposal facility prior to restoring the containment area or sump to pre-sump conditions.
9. Drilling mud discharged in a sump must not adversely affect the quality or beneficial uses of underlying groundwater.
10. Drilling mud sump must be filled in and restored to pre-discharge conditions.
11. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

#### A.3.18 Existing Conditional Waiver No. 22 – Timber Harvesting

Timber harvesting activities can result in the discharge of pollutants that can affect the quality of waters of the state. Timber harvesting activities can discharge sediment and other pollutants directly to surface waters, and pollutants that can potentially leach to underlying groundwater. However, discharges from timber harvesting activities would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges from timber harvesting activities, and the conditions under which the discharge would not pose a threat to water quality. Discharges from timber harvesting activities that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Timber harvesting projects can result in erosion and the discharge of sediment, dissolved solids, nutrients, pesticides, and other pollutants. These pollutants can be transported to surface waters and groundwater by surface runoff, which can adversely affect the quality of the waters of the state.

According to Code of Federal Regulations Title 40 section 122.3(e), “*An introduction of pollutants from nonpoint source... silvicultural activities, including storm water runoff from... forest lands*” are not subject to NPDES regulations. This does not include runoff discharges from silvicultural point sources.<sup>58</sup> However, storm water runoff from silvicultural activities is subject to the regulations in the state Water Code.

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<sup>58</sup> Defined in Code of Federal Regulations Title 40 section 122.27

The harvesting of timber of national lands in California is regulated by the National Forest Management Act of 1976, administered by the USFS. In 1981, the USFS and State Board entered into a Management Agency Agreement (MAA). The MAA designates the USFS as the Water Quality Management Agency (WQMA) for timber operations (including timber harvesting, timber management, vegetative manipulation, fuels management, road construction, and watershed management) on National Forest System (NFS) lands.

In accordance with the MAA between the USFS and State Water Board, the Regional Water Boards have agreed to waive the issuance of WDRs and the requirement to file RoWDs for USFS timber operations that may result in nonpoint source (NPS) discharges, provided that the USFS designs and implements its projects in accordance with the MMs/BMPs certified by the State Water Board and U.S. Environmental Protection Agency (USEPA). Both the State Water Board and the USEPA certified the USFS's document entitled *Water Quality Management Plan for National Forest System Lands in California* as MMs/BMPs to be used during timber operations on NFS lands. Timber operations on NFS lands must prepare environmental and decision documents pursuant to the National Environmental Policy Act (NEPA). Thus, existing Conditional Waiver No. 22 defers the regulation of discharges for timber harvesting projects on NFS lands to the USFS, subject to the requirements of the USFS's *Water Quality Management Plan for National Forest System Lands in California*.

The harvesting of timber on private and state lands in California is regulated by the Z'Berg-Nejedly Forest Practices Act of 1973<sup>59</sup> and California Forest Practice Rules (FPRs)<sup>60</sup> administered by the California Board of Forestry (BOF) and California Department of Forestry (CDF). In 1988, the BOF and the State Water Board entered into a MAA in which the BOF and the CDF were jointly designated as the WQMAs for timber operations on state and private lands.

The State Water Board conditionally certified the *Water Quality Management Plan for Timber Operations on Nonfederal Lands*, which include those FPRs selected as and the process by which those rules are administered. Timber operations on nonfederal lands must submit a Notice of Exemption, Notice of Emergency, Timber Harvest Plan (THP), or Non-industrial Timber Management Plan (NTMP) to the CDF for approval in accordance with the certified plan. The CDF is supposed to circulate THPs and NTMPs to the Regional Water Boards for comment on potential water quality impacts.

The MMA between the BOF/CDF and State Water Board required a formal review of the FPRs and administering processes no later than 6 years from the date of certification. To date, the review has not occurred and the USEPA has not certified the FPRs and administering processes as MMs/BMPs for timber operations on non-federal lands. Since the certification by the State Water Board in 1988, several deficiencies in the FPRs have been raised by the State and Regional Water Boards, USEPA, California Department of Fish and Game (CDFG) and environmental advocate groups. The

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<sup>59</sup> Public Resources Code section 4511 et seq.

<sup>60</sup> California Code of Regulations Title 14 section 895 et seq.

deficiencies are primarily associated with monitoring, inspection, and enforcement of management practices for the protection of water quality and endangered species.

Under existing Conditional Waiver No. 22, enrollment for a conditional waiver of WDRs and/or the requirement to file RoWDs for timber harvesting is not required. However, existing Conditional Waiver No. 22 only includes conditions for timber harvesting on lands managed by the USFS and does not provide conditions for timber harvesting on nonfederal lands. While there are no timber harvesting activities currently being reported to the San Diego Water Board in the Region, there are federal, state and privately-owned forest lands in the Region that are available for timber harvesting or may require timber harvesting activities for wildfire protection purposes. Therefore, the waiver conditions for timber harvesting activities should be revised to include conditions for activities on nonfederal lands, and a process for verification of enrollment with the CDF and compliance with applicable USFS or BOF/CDF water quality management plans.

The San Diego Water Board determined that it is consistent with the Basin Plan and in the public interest to delegate regulation of specific types of discharge to another public agency. Obtaining the appropriate approvals from the USFS or BOF/CDF should be included as a waiver condition that can serve as the method of enrollment for a conditional waiver. Completed and approved documentation (environmental and decision documents, Notices of Exemption, Notices of Emergency, THPs, and/or NTMPs) for timber harvesting projects obtained from the USFS or BOF/CDF can provide sufficient information and data to the San Diego Water Board to determine compliance with the conditions of the conditional waivers.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 22:*

Discharges from timber harvesting projects are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. Timber harvesting projects must implement MMs/BMPs to minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.
2. Timber harvesting projects must comply with any federal, state, or local permitting, licensing, or certifications requirements and applicable regulations and ordinances.
3. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
4. For timber harvesting activities on NFS lands, the following conditions apply:
  - a) The State Water Board and USEPA must continue to certify the *Water Quality Management Plan for National Forest System Lands in California*.
  - b) The USFS must maintain: (a) a water quality program consistent with the Basin Plan, and (b) a program to monitor the implementation and effectiveness of MMs/BMPs.

- c) The USFS must provide the San Diego Water Board copies of the environmental and decision documents containing information documenting that a multi-disciplinary review of the timber harvest proposal has been conducted, and the proposed MMs/BMPs and additional control measures that will be implemented to protect water quality.
  - d) The USFS must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.
5. For timber harvesting activities on nonfederal lands, the following conditions apply:
- a) The State Water Board must continue to certify the *Water Quality Management Plan for Timber Operations on Nonfederal Lands*.
  - b) Timber harvest activities within 150 feet of existing structures (i.e., “FireSafe” treatments) that are conducted pursuant to a Notice of Exemption approved by the CDF are not required to provide notice to the San Diego Water Board, but must keep a copy of the approved Notice of Exemption for at least one year (from the approval date) on site for inspection.
  - c) For timber harvesting activities approved by the CDF pursuant to a Notice of Exemption or Notice of Emergency, a copy of the notice must be provided to the San Diego Water Board.
  - d) For timber harvesting activities with a THP or NTMP approved by the CDF, a copy of the Plan must be provided to the San Diego Water Board.
  - e) Owners/operators of non-federal forest lands must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

A.3.19 Existing Conditional Waiver No. 23 – Temporary Discharge of Specified Contaminated Soils

Contaminated soils, or soils containing wastes, that are discharged to land can affect the quality of waters of the state. These discharges contain pollutants that can potentially be transported in runoff to surface waters or have pollutants that can be dissolved and leached to underlying groundwater. However, discharges of soils containing wastes to land would not pose a threat to the quality of waters of the state if discharged in compliance with certain conditions.

The following discussion identifies the potential pollutants of concern associated with discharges of soils containing wastes to land, and the conditions under which the discharge would not pose a threat to water quality. Discharges of soils containing wastes to land that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state and may be waived of the requirement to file RoWDs and/or regulation by WDRs.

Each year there are numerous soil and groundwater investigations performed in the San Diego Region. In most cases, a soil and/or groundwater investigation generates solid wastes (primarily soil) impacted by petroleum hydrocarbons, heavy metals and/or other contaminants, which may be temporarily stockpiled and stored on a site prior to disposal at an appropriate waste disposal facility. The waste piles can be a source of

pollutants, such as sediment, hydrocarbons, heavy metals, and/or other toxic substances, which can adversely affect the quality of surface water and/or groundwater.

Discharges of soil to surface water would not be eligible for a conditional waiver because they may be subject to NPDES regulations or Clean Water Act section 404 permitting requirements, which would require regulation under WDRs or a Clean Water Act section 401 water quality certification. However, discharges of soil to land may be eligible for a waiver under certain conditions.

Under existing Conditional Waiver No. 23, discharges of soils containing wastes to temporary waste piles are eligible for a waiver when the discharger submits a completed initial certification report, properly contains, inspects, and maintains the waste pile, properly retains and disposes any return and ponded waters that come in contact with the waste pile, and clean closes and returns the site to its original state. Enrollment for a conditional waiver is fulfilled with the submission of the initial certification report, and termination of enrollment is fulfilled when the discharger submits a final disposal certification form. The initial certification report can provide sufficient information and data to the San Diego Water Board to determine compliance with the conditions of the waiver for the temporary discharge of specified contaminated soils.

Existing Conditional Waiver No. 23 includes General Conditions for all temporary waste piles, and Special Conditions for soils containing petroleum hydrocarbons or dredged spoils containing heavy metals. However, there are no Special Conditions for other types of soils or dredge spoils containing wastes. The General or Special Conditions should be revised to include other types of soils and dredged spoils containing wastes. Discharges of soils containing wastes to temporary waste piles that can comply with the proposed waiver conditions are not expected to pose a threat to the quality of waters of the state.

*Proposed Conditions for Renewing Existing Conditional Waiver No. 23:*

Discharges of soils containing wastes to temporary waste piles are not expected to pose a threat to the quality of waters of the state under the following conditions:

1. For any soils containing wastes temporarily stored in waste piles, the following General Conditions apply:
  - a) Prevent the direct or indirect discharge of waste soil discharged to temporary waste piles to any surface waters of the state (including ephemeral streams and vernal pools).
  - b) The discharger must comply with local, state, and federal ordinances and regulations and obtain any required permits, certifications, and/or licenses.
  - c) The discharger must submit a signed/completed certification report within 30 days of the initial discharge of any waste piles to be eligible for this waiver. The property owner must approve and acknowledge the placement of the waste at the site.

- c) The discharger must submit a signed/completed final disposal certification report within 10 working days of completing removal of all waste and restoring the site to its original condition.
- d) Unless otherwise specified in the applicable Special Conditions, no temporary waste piles may remain on a site for longer than 6 months or 180 days.
- e) The discharge of waste must not (a) cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin; (b) cause the occurrence of objectionable tastes and odors in water pumped from basin; (c) cause waters pumped from the basin to foam; (d) cause the presence of toxic materials in waters pumped from the basin; (e) cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0; (f) cause pollution, contamination or nuisance or adversely affect the quality or beneficial uses of groundwater or surface waters of the hydrologic subareas established in the Basin Plan; and/or, (g) cause a violation of any discharge prohibitions in the Basin Plan for the San Diego Region.
- f) The discharger must conduct regular inspections of temporary waste piles and associated MMs/BMPs at least once per week. Corrective actions must be taken as necessary to ensure compliance with the conditions of this waiver.
- g) Surface drainage must be diverted away from the temporary waste piles. For all temporary waste piles, the discharger must implement effective MMs/BMPs to prevent surface water runoff and runoff from contacting wastes and to prevent erosion and transport of wastes by surface runoff.
- h) Temporary waste piles must be placed at least 5 feet above the highest historically known or anticipated level of groundwater, and more than 100 feet from any surface water of the state, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
- i) Temporary waste piles must be protected against 100-year peak stream flows as defined by the County flood control agency.
- j) Temporary waste piles must be covered by plastic sheeting (not less than 10 mils thick, unless otherwise specified under the applicable Special Conditions) to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances.
- k) Temporary waste piles must be underlain by either plastic sheeting (not less than 10 mils thick, unless otherwise specified under the applicable Special Conditions) or a liner of low permeability that will prevent leachate from infiltrating to groundwater.
- l) Wastes discharged to waste piles, together with any containment materials used at the temporary waste pile, and any underlying geologic materials contaminated by the discharge, shall be removed within 180 days, unless otherwise specified under the applicable Special Conditions. Subsequently, the discharger must remove all wastes, treatment facilities, related equipment, and dispose of those items in accordance with applicable regulations. The site must be restored to its original state within 30 days after the temporary waste pile is removed, unless otherwise specified under the applicable Special Conditions.
- m) The discharger must post at least one clearly visible sign listing the following minimum information: a) project name, b) name and address of discharger, c)

- brief project description, and d) 24-hour contact information – name, address, facsimile, and telephone number for the project for as long as the temporary waste pile remains on the site.
2. For soils containing petroleum hydrocarbons temporarily stored in waste piles, the following Special Conditions apply:
    - a) Soils and associated solid waste containing petroleum hydrocarbons discharged into temporary waste piles shall be limited to a maximum time period of 3 months or 90 days on a site.
    - b) Soils and associated solid waste containing petroleum hydrocarbons discharged into temporary waste piles under an initial certification report must be derived from only one source (e.g., one unauthorized release site).
    - c) Temporary waste piles must be covered by plastic sheeting (not less than 10 mils thick) to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances.
    - d) Temporary waste piles must be underlain by either plastic sheeting (not less than 10 mils thick) or a liner of low permeability that will prevent leachate from infiltrating to groundwater.
    - e) In addition to the General and Special Conditions stated herein, temporary waste piles must conform to applicable provisions in the state's Local Oversight Program (LOP) for Orange, Riverside, or San Diego Counties.
    - f) The site must be restored to its original state within 30 days after removal of the temporary waste pile from the site.
  3. For dredged spoils containing heavy metals temporarily stored in waste piles, the following Special Conditions apply:
    - a) Dredged spoils and associated solid waste containing heavy metals discharged into temporary waste piles shall be limited to a maximum time period of 9 months or 270 days on a site.
    - b) Temporary waste piles must be covered by either a plastic sheeting to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances. Alternative control methods may be utilized if sufficient information is provided to demonstrate that the proposed alternative is protective of water quality and human health.
    - c) Temporary waste piles must be underlain by plastic sheeting (not less than 20 mils thick) or a liner of lower permeability that can prevent leachate from infiltrating to groundwater. Sufficient information must be provided to the San Diego Water Board demonstrating that the liner and containment facility has been designed to contain all solid wastes and fluids.
    - d) Materials used in containment structures must have the appropriate chemical and physical properties to ensure that such structures do not fail to contain waste because of: the stress of installation, pressure gradients, physical contact with the waste or leachate, or chemical reactions with soil and rock.
    - e) The site must be restored to its original state within 60 days after removal of the temporary waste pile from the site.

### A.3.20 Existing Conditional Waiver No. 25 – Incidental Discharges within a Response Area During a Spill Response

Oil and/or oily water may be discharged during an emergency oil spill response, which is a source of pollutants that can adversely affect the water quality of marine waters. However, the incidental discharge of oil and/or oily water is unavoidable during an emergency response, and the issuance of WDRs would significantly impede an oil spill cleanup. Therefore, in the interest of expediting the cleanup of an oil spill in marine waters, a conditional waiver for this type of discharge would be in the public interest. Existing Conditional Waiver No. 25 is for incidental discharges within a response area during an oil spill response.

In 1993 the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act was amended to require that the Administrator of the Office of Spill Prevention and Response (OSPR) and the Executive Director of the State Water Board enter into a memorandum of understanding (MOU), which addresses all permits and other requirements pertaining to the incidental discharge of wastewater during oil spill response activities. An MOU was subsequently signed in 1995.

The MOU addresses discharges of oily water which occur during oil spill response activities within or proximate to an oil spill in marine waters. The MOU finds that these discharges are exempt from NPDES regulations. The MOU also provides that the State Water Board will recommend that the coastal Regional Water Boards waive the issuance of WDRs for these types of discharge. A waiver for this type of discharge would be in the public interest, as provided in Water Code section 13269, because the issuances of WDRs under the circumstances could significantly impede oil spill cleanup.

The MOU defines “*incidental discharge*” as “*the release of oil and/or oily water within the response area in or proximate to the area in which the oil recovery activities are taking place during and attendant to oil spill response activities. Incidental discharges include, but are not limited to, the decanting of oily water; in order to conserve oil storage capacity, and the wash down of vessels, facilities, and equipment used in the response.*”

A conditional waiver for incidental discharges within a response area for an oil spill in marine waters is in the public interest, because it expedites the oil spill cleanup process. Therefore, enrollment should not be required in order to facilitate the oil spill response and cleanup process.

#### *Proposed Conditions for Renewing Existing Conditional Waiver No. 25:*

Incidental discharges within a response area during an oil spill response should minimize the potential impact and should not pose a significant threat to the quality of waters of the state under the following conditions:

1. An oil spill incident occurs in the marine waters of the San Diego Region requiring a response authorized by the Administrator of the Office of Spill Prevention and Response.
2. Incidental discharges are confined to the response area which is defined by the daily work plan approved under the Incident Command System or Unified Command Structure by the Administrator, Federal On-Scene Coordinator, or State On-Scene Coordinator.
3. Oil spill response must be in marine waters.<sup>61</sup>

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<sup>61</sup> “Marine waters” defined in Government Code section 8670.3(i) as “those waters subject to tidal influence”