

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENVIRONMENTAL ANALYSIS, MS 27
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 653-7507
FAX (916) 653-7757
TTY (916) 653-4086



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September 19, 2011

Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor, Sacramento, CA 95814
commentletters@waterboards.ca.gov

Subject: Comment Letter, Caltrans MS4 Permit

Dear Ms. Townsend,

The California Department of Transportation (Caltrans) appreciates the opportunity to provide comments on the [revised draft Tentative Order](#) and related attachments that will constitute the reissued Caltrans Statewide NPDES Permit (CAS000003). The August 18, 2011, Public [Notice](#), requested that new comments address only the revisions to the draft tentative order issued in January and we have focused on those changes. We have also included comments on critical provisions that were not modified from the original draft due to the magnitude of impacts of this permit to the State of California.

Caltrans requests adequate time (minimum of 120 days) for additional review time necessary for the Board to provide answers to our questions and for Caltrans to complete an assessment for compliance requirements, the feasibility of compliance, the appropriateness and effectiveness of provisions and associated costs for the Water Quality Action Levels and related provisions added to the Tentative Order. It is likely that additional funding will require state budget action, and as you are aware, the state budget process and approvals can take several months. The funding assessment needs to be as accurate as possible to minimize the impacts to work on the State Highway System.

On March 14, 2011, Caltrans submitted extensive [comments](#) on the January draft Permit. These comments identified 12 major programmatic issues and included a detailed page-by-page review of the Permit. We request that the Board continue to consider these comments in its ongoing review and provide responses. As in our previous comments, we have assessed this revised draft based on the feasibility of compliance and the need to protect the environment while ensuring the responsible expenditure of public funds.

Provisions in this latest draft will apparently result in many or most existing highway runoff discharges being classified as in non-compliance with the permit and therefore subject to enforcement and penalties. In addition, as currently structured, the permit will likely require a

massive statewide construction program. The size and timing of these retrofit programs are difficult to estimate without further clarification of permit provisions. We are concerned that retrofits will be needed where there is no evidence of harm to the beneficial uses of the waterway. We do not believe this constitutes a reasonable expenditure of public funds. Our key issues are the following:

1. **Unavoidable non-compliance** – Past monitoring by Caltrans and other urban MS4s has shown that multiple pollutants in runoff will typically exceed water quality objectives when measured in the effluent, that is, before discharge. Based on the new permit, exceedances in the effluent trigger monitoring in the receiving water. Exceedances in the receiving water are likely to occur, especially in effluent dependent waters and in other waterways where dilution is limited. Receiving water exceedances may apparently be considered permit violations and subject to enforcement based depending on the receiving water limitation language contained in the MS4 permit due to the recent 9th Circuit Court of Appeals opinion regarding the permit language in the Los Angeles County’s MS4 stormwater permit (Natural Res. Def. Council, Inc. v. County of Los Angeles, 636 F.3d 1235 (9th Cir. July 13, 2011)). However, we do not know the extent of potential non-compliance because of limited available receiving water monitoring data and unanswered questions, such as the point of compliance in the receiving water.
2. **Comprehensive statewide system retrofits** – To attempt to achieve permit compliance, Caltrans will likely need to construct treatment controls for most cases of exceedances in the receiving water. The permit requires the exceedances to be addressed on a watershed basis, which means that many outfalls will need treatment facilities when one outfall has been identified as causing an exceedance. The number of discharge locations needing retrofit is unknown but could eventually encompass many of the urban areas in the state.
3. **Requirements to prohibit agricultural and other non-stormwater discharges** – In many locations, agricultural and other non-Caltrans non-storm water flows pass through the right-of-way. These flows are often commingled with Caltrans stormwater runoff. The permit requires Caltrans to prohibit these non-Caltrans flows if they are not NPDES-permitted. Certain “conditionally exempted” non-stormwater flows are also prohibited if they contain “pollutants,” which is a term that is defined very broadly. The extent of this compliance problem is also unknown. To achieve compliance, Caltrans must somehow prohibit these non-stormwater flows from passing through the right-of-way or implement a retrofit program to build separate conveyances for the Caltrans highway runoff. Further, run-off from agriculture is specifically exempt from NPDES permit requirements, thus it would never fall within the exception to this prohibition.
4. **Prohibition of discharge of pesticides or breakdown byproducts** – These cannot be discharged—in apparently any concentration—to a waterway listed as impaired for these pesticides. This is a potentially major compliance and retrofit issue because of the ubiquitous nature of pesticides or their byproducts, which are measurable, even in rainfall. This prohibition could compromise our maintenance and operational practices (public safety, fire suppression, etc.).

5. **A better method for stormwater compliance** – We suggest a compliance approach based on recommendations of the State Water Board’s Blue Ribbon Panel with a focus on implementing TMDL allocations, a prioritized approach, and addressing identified problems in the waters of the state.

6. **Need for time to assess impacts to the Department** – The estimated increased annual cost to implement the new permit is at least \$ 500 million (support and capital costs) due to the application of stringent water quality standards and new development and redevelopment standards. This would add to the currently fiscally-challenged State Highway Account. The permit requires Caltrans to secure the appropriate fiscal resources to implement this permit. Caltrans has begun the Budget Change Proposal (BCP) process. Even if this BCP is approved, funding will not be available until after July 2012. **Caltrans requests adequate time (minimum of 120 days)** to assess the potential costs, timing of these expenditures and funding/budget change proposals needed to comply with the permit requirements.

Clarifications, collaboration with the State Water Board, and permit revisions are needed to ensure that the permit is environmentally and fiscally responsible. If you have any questions, please contact me directly at (916) 653-4446.

Sincerely,



SCOTT McGOWEN, P.E.
Chief Environmental Engineer

cc: Richard Land, Malcolm Dougherty, Caltrans; Tom Howard, Jonathan Bishop, Bruce Fujimoto, Vicky Whitney, Walt Shannon SWRCB

ATTACHMENT

Caltrans comments on the [Revised Draft Tentative Order](#) (NPDES Permit No. CAS000003), dated August 18, 2011, for the State of California, Department of Transportation

These comments are grouped into the following sections:

- Compliance Issues
 - Clarifications and other comments
 - Major Recommendations
 - Changes to January 2011 Draft Permit Supported by Caltrans
 - Fact Sheet and Attachments
-

Compliance Issues

ZD-1 → **1. Overall issue** – The 9th Circuit Court opinion regarding Los Angeles County MS4 permit ([revised opinion](#)) appears to indicate that implementing the standard “iterative process” permit language contained in the Los Angeles County MS4 permit, and for which similar language is contained in the Revised Draft Tentative Order, for exceedances of water quality standards (WQS) does not protect an MS4 from an enforcement action, i.e., an exceedance of WQS caused by the discharge constitutes a permit violation.

In this tentative order, the iterative process is specifically identified as providing a pathway to compliance for three permit provisions related to WQS (Prohibition A.4 and Receiving Water Limitations D.2 and D.3). However, this language is similar to that contained in the Los Angeles County MS4 permit. Based on the 9th Circuit opinion, this permit language would mean that any exceedance of standards in the receiving water attributable to the discharge would place Caltrans in non-compliance with the permit, regardless of whether the iterative process is being implemented. Based on monitoring by Caltrans and other MS4s, exceedances are expected to be common. Permit violations could be widespread and would continue until control facilities can be funded, designed and built (although it is unclear if structural BMPs can meet receiving water standards for all constituents). A permit resulting in unavoidable non-compliance and open-ended liability is not acceptable.

Recommendation: The discharge prohibition language and the receiving water limitations language in this permit needs to be redesigned in light of the 9th Circuit opinion to not place many or most discharges in immediate non-compliance. *Natural Res. Def. Council, Inc. v. County of Los Angeles*, 636 F.3d 1235 (9th Cir. July 13, 2011).

2. Pages 14 and 15 – **Finding 37** – Various new sentences:

“Where complete implementation requirements have not been specified or approved by the Regional Water Boards as of the date of the adoption of this Order, it is necessary that specific requirements and clear deliverables and actions be specified to ensure consistency of this permit with assigned WLAs and to provide clear and enforceable conditions for the Department.”

Comment (part 1): As stated at the beginning of the Finding, *“Implementation requirements for many TMDLs are partially or fully specified in Regional Water Board Basin Plans and are an enforceable part of this Order.”* However, the added wording indicates that new specific requirements developed by the Regional Water Boards, but not part of the TMDL adopted as a basin plan amendment, will be applied to Caltrans. This is not appropriate since these supplemental requirements have not been subject to the TMDL approval process (public review, State Water Board, USEPA) and formally made part of the Basin Plan.

ZD-2

Recommendation: This new wording does not appear to follow the public review process and should be deleted. The finding should state that Caltrans is only subject to WLAs that have been adopted in Basin Plan amendments and approved by USEPA.

“This Order additionally requires the Department to develop a ‘Supplemental TMDL Implementation Plan’ for approval by the State Water Board for any TMDLs for which deliverables and action items are not discernable from the Basin Plan language and for which specific TMDL permit requirements have not been subsequently specified by the Regional Water Boards.”

Comment (part 2): In many cases, the TMDLs do not have specific deliverables and action items for implementation by Caltrans because none are needed. It is inappropriate and excessive to require Caltrans to develop an Implementation Plan for TMDLs that do not formally assign a waste load allocation to Caltrans or have other specific requirements for Caltrans. This permit provision is using the Findings to create an extra-legal process to replace standard TMDL procedures and should be removed. For EPA-issued TMDLs, which do not include a compliance plan, Caltrans will develop any needed plan.

ZD-3

Recommendation: Caltrans should only be required to develop implementation plans for EPA-issued TMDLs. In addition, for state-issued TMDLs, the required actions should be limited to those specified in the TMDL as adopted into the Basin Plan and should not include any additional requests from the Regional Water Board without the Regional Water Board formally adopting these requirements. We do not see a basis in the Clean Water Act for these supplemental requirements that are outside the normal TMDL process.

3. Page 18 – General Discharge **Prohibition A.2** [this provision has not changed from preliminary draft],

“Discharge to Areas of Special Biological Significance (ASBS) is prohibited unless an exception has been granted by the State Water Board.”

Comment: We understand that the Board intends to adopt the exception at the same meeting at which it adopts the Caltrans permit. However, if this concurrent adoption does not occur and the Caltrans permit is adopted first, then all existing Caltrans discharges to ASBS are in violation of the permit and subject to enforcement and substantial penalties.

ZD-4

→ **Recommendation:** The exceptions should be adopted prior to the Caltrans permit or this prohibition should be made contingent on adoption of the exceptions. Caltrans needs adequate time to evaluate the compliance approach, feasibility to comply, and impacts to the Department. (See expanded discussion in Major Comment #7 from Caltrans March 14, 2011, letter.)

4. Page 18 – General Discharge **Prohibition A.3** regarding exceedances of water quality standards [*this provision has not changed from the preliminary draft*]

“Discharge of material other than storm water, or discharge that is not composed entirely of storm water, to waters of the United States or another permitted MS4 is prohibited, except as conditionally exempted under Section B of this Order or authorized by a separate National Pollutant Discharge Elimination System (NPDES) permit.”

Comment: Section B as referred to in the permit provision, describes three categories of non-stormwater: (1) authorized by a separate permit, (2) exempt, and (3) conditionally exempt. This prohibition allows the discharge of NPDES-permitted discharges and those that are conditionally exempt. However, it does not allow the discharge of “exempt” non-storm water discharges, which are described in Section B.2 on page 19. Exempt discharges could potentially include agricultural tailwater, discharges from small urban areas, forest runoff, and other non-point discharges not listed in B.3.

ZD-5

→ **Recommendation:** Prohibition A.3 should specifically include “exempt” discharges.

5. Page 18 – General Discharge **Prohibition A.4** regarding exceedances of water quality standards [*this provision has not significantly changed from the preliminary draft*]

Comment: This prohibition is absolute—no reference is made as part of this prohibition to an iterative process or other method for bringing discharges into compliance. Thus, the prohibition is a standalone prohibition, and all exceedances of WQS caused or contributed to by Caltrans are permit violations subject to enforcement and penalties, and requiring corrective measures.

We note that the iterative process established by *Receiving Water Limitation D.4*, references this prohibition. However, the July 13, 2011 9th Circuit Court of Appeals opinion in *NRDC vs. Los Angeles County Flood Control District* indicated that an iterative process based on permit language like that found in the Los Angeles County MS4 permit, which is similar to that established in *Limitation D.4* simply specifies the means of coming into compliance and does not negate the clearly stated requirement that discharges not cause an exceedance of standards.

Stormwater runoff from urban land uses frequently exceeds water quality objectives at the point of discharge (end-of-pipe). These discharges will also exceed water quality standards in the receiving water when the discharge is to effluent dependent waters (EDW), or where receiving water dilution is limited, or mixing zones are not allowed by

the Basin Plan. These exceedances in the receiving water create a permit violation and this permit violation continues until corrective measures effectively bring the discharge into compliance. Further, permit violations open Caltrans up to liability under the Clean Water Act's citizen suit provisions.

ZD-6

→ **Recommendation:** This prohibition should be deleted. In the Recommendations section of these comments we include a separate approach for MS4 compliance based on the Blue Ribbon Panel recommendations, TMDL implementation, and a prioritized approach to addressing identified water quality problems. We also provide possible alternative wording, which may be adequate if this prohibition is retained.

6. Page 18 – General Discharge **Prohibition A.5** - Condition of pollution or nuisance. *[This provision has been modified in this revised permit draft to delete redundant text]*

“5. The discharge of storm water to surface waters of the State or waters of the United States in a manner causing or threatening to cause a condition of pollution or nuisance as defined in Water Code § 13050.”

Comment: This prohibition is vague and it could be potentially interpreted to apply to any widespread discharge of stormwater containing pollutants.

ZD-7

→ **Recommendation:** This prohibition should be deleted. In the Recommendations section, we include possible alternative wording if this prohibition is retained.

7. Page 18 – **General Discharge Prohibition A.6** – This prohibition is new with this revised draft and states:

“The discharge of biological and residual pesticides and their breakdown byproducts to waters of the U.S. that are impaired by the pesticides used, or drainages tributary to those waters, is prohibited. Impaired waters are those waters not meeting water quality standards pursuant to § 303(d) of the CWA (Impaired Water bodies).”

Comment, Part 1: Structural non-compliance - Because many waterways in the state are listed as impaired by pesticides, this prohibition will potentially place many discharges in non-compliance and would make cost-effective maintenance of the highway infeasible. Stormwater treatment controls are not readily available that can reliably reduce pesticides or their breakdown to non-detectable levels if they are present in runoff. Complete control may require construction of high-level treatment including full capture of runoff, transport to a treatment facility, and treatment by sedimentation and filtration, followed by activated carbon or similar advanced treatment.

Over one hundred waterways or segments are listed in California for pesticides (see following table). Because this prohibition also prohibits discharges to tributary drainages, a high proportion of state waters would be subject to the discharge ban. For example, the LA River Estuary is listed for Chlordane and DDT—does this mean that discharges containing any detectable amount of these pesticides to waterways in the 827 sq mi of LA River basin are all prohibited?

Impaired Waterways on the 2008 303(d) List
(From 2010 Integrated Report - [Category 5](#))

Pesticide listings (2008)	Number of waterways (est.)
Bifenthrin (unique listing)	1
ChemA (sum of various pesticides)*	10
Chlordane	54
Chlorpyrifos	106
DDE	11
DDT	113
Diazinon	90
Dieldrin	56
Dimethoate	8
Diuron	8
Endosulfan	9
Pentachlorophenol	3
Pesticides or Group A Pesticides, etc	42
Pyrethroids	13
Toxaphene	24

*ChemA refers to the sum of the chemicals aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor

This proposed prohibition means that a discharge from a roadway right-of-way is a violation of the permit if it contains any detectable amount of a pesticide for which the receiving waters are listed or residues of those pesticides. (Some waterways are listed generically for “pesticides” and possibly any pesticide discharge would be prohibited)

Violations of this prohibition could potentially be caused by:

- *Residues from past use by Caltrans or others in the ROW*, The Caltrans Vegetation Control Program uses pesticides, including herbicides, to attain the following important goals:
 - Provide fire risk management in support of the California Department of Forestry and Fire Protection and the US Forest Service.
 - Control vegetation that interferes with highway use (visibility, integrity of highway surfaces, etc.).
 - Prevent excessive growth of invasive and noxious weeds in conformance with the *California Noxious & Invasive Weed [Action Plan](#)* and similar local requirements.
- *Agricultural runoff passing through the ROW*. These agricultural flows may routinely violate this proposed prohibition when discharges are to pesticide-listed waters or tributaries until Caltrans is able to physically separate highway runoff from these other flows or otherwise prohibit these flows (see Prohibition B.2). Identifying, securing funding, planning, and completing construction of these new facilities will

take an undetermined number of years. During this interim period, the discharge will be in violation of the permit and subject to enforcement action and penalties.

- *Pesticide residues carried by rainfall that creates roadway runoff.* Rainwater quality monitoring completed by Caltrans showed detectable levels in all samples. See CTSW-RT-99-055, previously submitted to the State Water Board. Also, see [Concentrations of Pesticides in Sacramento Metropolitan Area Rainwater and Creeks during the 2001, 2002 and 2003 Orchard Dormant Spray Seasons](#), Regional Water Board, Central Valley Region, 2004. As discussed above, high-level treatment may be needed to reduce pesticide concentrations carried by rainfall to non-detectable levels when the discharge is to pesticide-listed waters.

Further, pesticide drift is a significant problem. Pesticides have been detected in high-sierra lakes (see: http://articles.sfgate.com/2002-12-05/bay-area/17575407_1_yellow-legged-frog-pesticide-regulation-amphibian-populations). It is impractical to control a pollutant that enters the Caltrans right-of-way in the form of drift from other regulated and non-regulated users.

If pesticides used in these control programs are subsequently identified as causing impairment (i.e., 303(d) listing), then Caltrans can proceed to utilize replacement pesticides or alternative controls. However, it is not feasible to immediately cease the discharge of any detectable residue or any detectable breakdown byproduct resulting from past use. Although these detectable levels may be below thresholds of toxicity, the discharge to waterways impaired by these pesticides would constitute a permit violation and subject Caltrans to enforcement.

Comment, Part 2: Applicability to “pesticides” in general - Many waterways are listed as impaired by “pesticides” with no further description of the pesticide causing the problem. Additional waterways or sediment are listed as impaired by toxicity and pesticides may be the cause of the toxicity. Although the prohibition is not clear, it implies that any type of pesticide or residue, in any amount, detected in runoff to these waterways would constitute a permit violation and would continue to be a violation until controls could be implemented to prevent any such discharge. For watersheds with listings of “unknown toxicity” or listings of a general class of pesticides, this prohibition would arguably mean that Caltrans could not use any pesticides.

Comment, Part 3: Definition of breakdown products - The proposed prohibition extends to “breakdown byproducts.” While some breakdown byproducts are even more toxic than the parent compound (e.g., oxons), many breakdown byproducts are innocuous chemicals and elements. The final breakdown process (mineralization) results in carbon dioxide, water, and minerals such as halogens, sulfur, phosphorus, nitrogen, etc. It is not appropriate to extend the prohibition generically to all breakdown products, but should be limited to breakdown products exhibiting significant toxicity.

Comment, Part 4: Applicability of other pesticide discharge permits or TMDLs – The State Water Board has issued four general permits applicable to the discharge of pesticides (posted [here](#)). However, this new proposed prohibition does not apparently allow a discharge in compliance with another Board-issued NPDES permit, if the discharge is to a listed waterway. If the State Water Board’s purpose is to require Caltrans to comply with one of the other General Permits, then the prohibition should include an *unless* clause that prohibits the discharge “unless the discharger obtains

NPDES permit coverage from one of the other General NPDES Permits for the discharge of pesticides to surface waters.” Otherwise it is a strict prohibition. Also, as crafted, it does not allow for a pesticide discharge that is in compliance with adopted and approved Waste Load Allocations or a discharge that meets an applicable water quality standard.

Comment, Part 5: Definition of Tributaries – A large portion of the state is tributary to the Sacramento-San Joaquin Delta and San Francisco Bay. The Delta is listed for three pesticides. A delta waterway (Stockton Ship Channel) is listed for three plus “Group A Pesticides.” Portions of San Francisco Bay are listed: Richardson Bay (3), Carquinez Strait (3), etc. The wording of the prohibition would appear to extend this prohibition to affect most waterways in the State.

Comment, Part 6: Biological

The term biological is inconsistent in the context of this provision and should be deleted.

ZD-8

→ **Recommendation:** The prohibition should be deleted because the permit already contains requirements to implement waste load allocations for TMDLs addressing pesticides. This additional pesticide-focused requirement is not necessary because limitations on toxicity and the TMDL program are designed to address pesticide problems as part of the general approach for addressing waterway pollutants. We have also developed alternative text for this prohibition in the Recommendations section, which may provide an approach for discharges to feasibly achieve compliance. In addition, Caltrans requests additional review time to assess the scope and potential impacts of this new prohibition.

8. Page 19 – Non-Storm Water Discharge Prohibition 2 – Exempt Non-storm Water Discharges – This prohibition has been added to this revised draft and states:

“Non-storm water discharges that pass through or under the Department’s right-of-way and that do not co-mingle with discharges from the MS4 are exempt from Prohibition B.1.

Comment: It is appropriate that Caltrans not be required to address the stormwater and other wastewater flows discharged by other parties when these flows incidentally pass through the right-of-way (“onflows”). The earlier draft of the permit required Caltrans to prohibit these flows when they contained pollutants, which is likely to apply to virtually all discharges including all agricultural and urban non-storm runoff. This new provision is a significant step forward; however, Caltrans has the following concerns:

1. *Interim period of noncompliance* - Caltrans will be in non-compliance with the permit during the interval required to prohibit or otherwise terminate these onflow discharges. At this stage, it appears that Caltrans has the following options for compliance, none of which are readily feasible:
 - *Requiring the discharge to cease* – Caltrans will have difficulty being an enforcement agent or otherwise preventing these flows from passing through the ROW. Blocking upgradient flows could potentially threaten the integrity of the roadbed. Caltrans has no authority to prohibit these types of discharges.
 - *Separating Caltrans runoff* – Caltrans could construct facilities needed to separate Caltrans roadway runoff from the non-Caltrans flows passing through the ROW. Basically, Caltrans could use pipe-jacking methods to create a separate drainage for the highway runoff. This separate drainage would need to extend to

the receiving water. This approach would result in compliance; however, identifying these locations, securing funding, completing planning, and completing construction of these new facilities will take an undetermined number of years and constitute a potentially very significant expense.

Caltrans has only been aware of this proposed requirement for several weeks and has not been able to assess the number of impacted sites and the costs and time requirements necessary to come into compliance. We request additional review time to make this assessment.

2. *Significant expenditures with no environmental benefit* - When completed, separating the wastewater flows of Caltrans runoff from other upgradient onflows (or other alternatives) will allow Caltrans to comply with this prohibition in the permit. However, these expenditures requiring building new conveyance lines for Caltrans runoff will not result in an environmental benefit—the pollutants in wastewater from upgradient discharges will continue to be a problem if they were a problem before the separation projects.

ZD-9

→ **Recommendation:** Caltrans proposes that a better and more cost-effective approach to addressing the problem of upgradient flows containing pollutants is for Caltrans to be responsible for the pollutants in the Caltrans flows at the point before they are co-mingled with other flows passing through the right-of-way. The upgradient dischargers would continue to be responsible for their own flows. This approach would be similar to the permitting approach used for sewage treatment plants (POTWs), which use a common outfall. Both POTWs are responsible for the quality of their effluent prior to the flows being co-mingled. To do otherwise will place Caltrans in a significant period of non-compliance as well as ultimately resulting in the waste of public funds with no improvement in water quality.

9. Page 19 – **Non-Storm Water Discharge Prohibition B.3 – Conditionally Exempt Non-storm Water Discharges** - This prohibition applies to remains relatively little changed from the first draft and states:

“...For discharges identified as sources of pollutants, the Department shall either eliminate the discharge or otherwise effectively prohibit the discharge.”

This sentence is followed by the standard list of 17 conditionally exempt discharges (with some modifications for this revised draft).

Comment: Virtually all urban and highway runoff and other flows such as agricultural runoff carry pollutants and are therefore “*sources of pollutants*,” which is defined in Clean Water Act, Section 502(6).

“(6) The term “pollutant” means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.” [*several exceptions are included that are not pertinent to this discussion*]

Subsequent court decisions have defined the term “*pollutant*” very broadly. The State Water Board has also argued elsewhere that *pollutant* should not be narrowly defined

([here](#) and [here](#)). In the current permit adopted in 1999 (Order No. 99-06-DWQ), the Board was concerned that Caltrans had defined “pollutant” too narrowly and specified that “*This [Caltrans SWMP] BMP program must be revised to reflect the definition of pollutant in the federal requirements...*” Specifically, the Board did not want the term limited to constituents identified as causing impairment or other harm to receiving waters.

Samples taken from many or most of these conditionally exempt discharges will inevitably contain pollutants. For example, flows from riparian habitats will contain low levels of bacteria, nutrients, and other constituents, other than pure water. Similarly, waterline flushing will contain all the minerals present in drinking water plus chemical compounds resulting from dechlorination. It is clearly not the intent of the Board to require that all “*Conditionally Exempt Non-storm Water Discharges*” contain nothing other than water; however, recent court decisions have strictly interpreted permit conditions emphasizing that “*each permit term is simply enforced as written*” (see the [revised opinion](#) by the U.S. 9th Circuit Court of Appeals regarding the LA County stormwater permit).

This permit contains an extensive monitoring program for slope lateral drains. These carry groundwater away from slopes to prevent landslides and other problems. The flows are likely to have very low constituent concentrations; however, they will contain *some* constituents that would appear to result in them being classified as being a *source of pollutants* and therefore prohibited.

Note that the *Non-Storm Water Discharge Prohibition 6* on page 20 refers to the “presence of elevated levels of pollutants” which allows the non-storm water report to focus on real pollutants of concern.

ZD-10 → **Recommendation:** This prohibition should be changed to refer to “sources of harmful pollutants” or “sources of pollutants for which the receiving water is listed as impaired” or “sources of pollutants with concentrations above receiving water objectives” or some similar wording to ensure that the prohibition correctly focuses on detrimental pollutants rather than all constituents of these conditionally exempt discharges.

10. Page 19 – Non-Storm Water Discharge Prohibition B.3 – Conditionally Exempt Non-storm Water Discharges k. Water line Flushing – Foot note #4

In order to remain conditionally exempt, discharges shall be dechlorinated prior to discharge.”

Comment: This may be minor issue but irrigation lines may use potable water that is typically chlorinated for drinking water purposes. The irrigation lines are often flushed out one time during construction to clear the lines of any dirt and debris that may be in the new lines. This is done in a controlled manner and is a critical step in the construction of a new irrigation system.

ZD-11 → **Recommendation:** Exempt 4-inch or smaller water lines that are used for irrigation purposes from the requirements of being dechlorinated prior to flushing the lines.

11. Page 20 – **Non-Storm Water Discharge Prohibition B.6** – regarding the Comprehensive Non-Storm Water Report.

*“...For those categories of discharge that have been determined to be **sources of pollutants** to receiving waters, the Department shall propose: a. Appropriate BMP control measures to effectively prohibit the non-storm water pollutant discharges and minimize the adverse impacts of such sources; [etc.] If the State Water Board Executive Director determines that any category of conditionally exempt non-storm water discharge is a **source of pollutants**... The State Water Board Executive Director may also order the Department to cease a nonstorm water discharge if it is found to be a **source of pollutants**.”* [Emphasis added]

Comment: This prohibition has the same problem as Prohibition B.3, in that a conditionally exempt discharge containing any constituent that exceed the listed water quality objectives in the Basin Plan, CTR, and the Ocean Plan would appear to be prohibited and require corrective measures. We note again that the focus on prohibiting any discharge with pollutants, regardless of concentration of those pollutants, appears to conflict with the earlier reference in this same prohibition to “*elevated levels of pollutants*” based on comparison with water quality standards.

ZD-12

→ **Recommendation:** Same as for Prohibition B.3, the term pollutants should always include a qualifier to indicate that pollutants *presenting a risk to water quality* are the ones that should be addressed.

12. Page 21 – **Receiving Water Limitations D.2** – [This provision has not changed from preliminary draft]

“2. The discharge of storm water from a facility or activity shall not cause or contribute to an exceedance of any applicable water quality standard.”

Comment: Receiving Water Limitation D.2 is also essentially a discharge prohibition. It is very similar to the language that was in the County of LA permit that was the subject of the U.S. 9th Circuit Court of Appeals opinion ([revised opinion](#)).

As we noted in our earlier set of comments, and also in this set of comments (re: *Prohibition A.4*), this limitation results in many or most discharges from highway right-of-ways likely being assessed as in violation of the permit. Consequently this limitation will trigger a massive statewide retrofit program to provide the high level treatment needed to attempt to provide highway runoff quality that does not contribute to an exceedance of water quality standards. Implementing the iterative process described in D.4 does not release Caltrans from the requirement to ensure that storm water runoff shall not cause or contribute to an exceedance.

In drafting this permit, the State Water Board appears to have taken the same position as the Chair of the Los Angeles Regional Water Board in a letter sent to the permittees stating that,

“A violation of the permit [receiving water limitations] would occur when a municipality fails to engage in a good faith effort to implement the iterative process to correct the harm.... Even if water quality does not improve as a result of the implementation efforts, there is no violation of the permit’s receiving water

provision as long as a good faith effort is underway to participate in the iterative process.”

Although the approach summarized in the letter has been the standard approach for MS4 compliance in the past, the 9th Circuit decision indicates “*each permit provision is simply enforced as written.*” The iterative process does not provide a shield to enforcement.

ZD-13

→ **Recommendation:** See recommendation for Prohibition A.4. WQS exceedances, rather than resulting in permit violations per se, should trigger more in-depth assessments based on a scientifically based approach (see permit [Attachment E](#), page 10).

13. Page 21 – Receiving Water Limitations D.4 – regarding compliance with the provisions mandating compliance with WQSs

Comment, Part 1: As discussed in earlier comments, the iterative approach established by this provision does not shield a discharger from enforcement action contrary to the Board’s intent.

“The SWMP shall be designed to achieve compliance with Sections A.4, D.2 and D.3 of this Order”

Comment, Part 2: Because compliance with WQS is financially and technically challenging for urban and highway runoff, it is not feasible to create a SWMP that provides compliance. For example, bacteria are ubiquitous in stormwater runoff, often at concentrations above WQS, yet BMPs are not available to control these bacteria. (The exception is high levels of bacteria resulting from sanitary sewer overflows and other significant sources.) Similarly, dioxins (TCDD) are present in rainwater runoff at levels that are typically one or two orders of magnitude above standards specified in the California Toxics Rule.¹

ZD-14

→ **Recommendation:** This provision should include an attainable SWMP requirement such as designing the SWMP to reduce the discharge pollutants presenting a risk to water quality and to specifically address pollutants causing an identified impact on beneficial uses on a prioritized basis.

14. Page 21 – Receiving Water Limitations D.5. regarding continuing or recurring exceedances

“5. Provided the Department has complied with the procedure set forth in Provision E.2.c.3)c) of this Order and is implementing the revised SWMP required by Provision E.1., the Department is not required to repeat the procedure called for in Provision E.2.c.3)c) for continuing or recurring exceedances of the same receiving water limitations unless directed...”

Comment, part 1: This statement regarding not needing to repeat the same procedure appears to conflict with Provision E.2.c.2)a)ix (p. 30) which, in fact, requires repeated implementation of monitoring and BMP construction until effluent or receiving water exceedances are no longer detected (as shown in Fig. 1, **WQ Monitoring Chart**, p. 32).

¹ Gervason, Ron, and Lila Tang, San Francisco Bay Regional Water Quality Control Board, Dioxin in the Bay Environment—A Review of the Environmental Concerns, Regulatory History, Current Status, and Possible Regulatory Options, February 1998.

Comment, part 2: As noted in comments above, this process does not necessarily mean the discharge is in permit compliance since a single exceedance of WQS clearly violates *Prohibition A.4* regardless of the statement that “*the Department is not required to repeat the procedure*” for continuing exceedances.

Comment, part 3: The construction of the permit is awkward and difficult to understand because the “traditional” iterative process is buried back in Section E.2.c. **Monitoring and Discharge Characterization Requirements** (beginning p. 27) and because the new Table 1 and Figure 1 Chart appear to create a parallel iterative process that potentially is an endless loop if exceedances in effluent and WQS persist. These sections need to be brought together to improve reader comprehension.

ZD-15

→ **Recommendation:** A new and achievable approach is needed for MS4 compliance.

15. Page 27 – E.2.c.1 – Characterization of Discharges c.1) – Mandated assessment of compliance for previous characterization sites. [*this provision has been significantly changed from the preliminary draft*]

“1) ...For discharges in the Characterization Study that meet the criteria in Provision E.2.c.2)a)ix), the Department shall investigate the source of the pollutants and, where appropriate, eliminate any illegal connections/illicit discharges (IC/ID), or follow the procedure specified in Provision E.2.c.2)a)ix).”

Comment: Provision E.2.c.2)a)ix) is the procedure beginning on page 30, where *Action Levels* (actually exceedance frequency levels) are used to determine whether to monitor the receiving water, complete a focused watershed evaluation for receiving water exceedances, implement BMPs, and continue effluent and possible receiving water monitoring until effluent or receiving water do not show exceedances.

Therefore, this permit provision requires Caltrans to re-assess the sites used for the Characterization Study and implement BMPs to prevent the apparent exceedances shown in the study if verified by monitoring in the receiving water.

The *Discharge Characterization Study Report* ([CTSW-RT-03-065.51.42](#)) showed a high frequency of exceedances in the effluent for some pollutants over 97% for copper and lead, over 86% for zinc, as well as persistent exceedances for several pollutants such as fecal coliform (43%). (*See Table 3-18, p. 60.*) It is likely that many of these effluent exceedances will be linked to exceedances in the receiving water.

This requirement may require a massive retrofit program for many of the 180 sites (and associated watersheds) monitored for the *Characterization Report*. At a minimum, sites and watersheds with limited or no dilution will require control e.g., effluent dependent waterways where the receiving water will have concentrations very similar to the effluent discharged and will therefore be classified as exceeding WQS. These discharge locations exceeding WQS, as well as other similar discharge points within the watershed will require the retrofit of treatment BMPs. (Non-treatment BMPs are very unlikely to bring these discharges into compliance.) In watersheds where the beneficial use is MUN², iron

² Most Regional Water Boards have used the drinking water standards (applicable to tap water), as the appropriate surface water standards for MUN-classified waterways.

and aluminum from natural sources (soils) will also result in a high frequency of exceedances.

This retrofit program is in addition to the retrofit program that will be triggered by the new monitoring sites that are part of the new characterization monitoring program required by this proposed permit.

ZD-16

Recommendation: As proposed previously regarding *Prohibition A.4*, rather than basing BMP retrofits on exceedances, a prioritized program of addressing discharges impacting beneficial uses should be used.

16. Page 27 – E.2.c.2) – Water Quality Monitoring – No changes, but the following new text:

“iii)...On a site specific basis, the Department need not analyze for constituents in Attachment II where the Regional Water Board finds that there is little chance that they are present in the discharge.”

Comment – The monitoring list in Attachment II contains many more effluent monitoring constituents than any other MS4 permit in the state. In fact, many MS4 permittees are not required to do any effluent monitoring (see Regional Board 2 MRP).

Caltrans began characterizing statewide discharges from roadways in 1994-1995, before the 1999 permit was issued. The 2000 – 2003 effort included over 60,000 data points from 180 sites. The [Fact Sheet](#) discusses the need “to assess long-term trends in storm water quality” but does not provide any justification for re-implementing a new and much broader characterization effort including many constituents that are not relevant to most stormwater discharges or associated receiving waters.

ZD-17

Recommendation: This list should be significantly shortened to include only key parameters, traditionally monitored for stormwater, and should focus—as discussed in the Fact Sheet—on periodically assessing long-term trends based on the previous monitoring and the constituents assessed in the previous monitoring. Additionally, this monitoring program should not rely on the discretion of the individual Regional Water Boards to sanction modifications to the list, which does not promote statewide consistency. A constituent list synchronized with other MS4s would promote watershed collaboration.

17. Pages 30–33 – E.2.c.2) a) ix) – Action Levels and Water Quality Monitoring Process - Including retrofit of treatment controls – new text:

p. 30: “ix) Figure 1 is a flow chart of the water quality monitoring process. For every location where the criteria or action levels in Table 1 are not equaled or exceeded, monitoring may be discontinued and the Department will select a new location from the candidate pool.

Table 1. Water Quality Action Levels ...[continuing with table and text]”

This provision establishes a new approach for MS4 compliance that we have not seen in any other MS4 permits or guidance. It raises several significant compliance issues that need to be addressed. We are concerned that it will result in many instances of unavoidable non-compliance.

Comment, Part 1- Compatibility with prohibitions - This flow chart (Figure 1), Table 1, and the associated text establish a compliance program or process for responding to exceedances in the effluent. Basically two or 3 exceedances in the effluent (“*Action Levels*”) potentially trigger receiving water monitoring and the iterative process of BMP implementation until the exceedances cease in the effluent or receiving water.

However, this process is not compatible with the rest of the permit. Specifically, the Prohibitions and Receiving Water Limitations (A.4, D.2, D.4) establish an absolute requirement to comply with water quality standards. It appears that one exceedance of water quality standards is a violation of the permit because it violates one of these provisions, however Table 1 provides different criteria.

However, the process described in provision E.2.c.2) a) ix establishes a different criteria. For example, a single exceedance in the effluent would not trigger the Action Levels (no further monitoring would be required), but would translate into an exceedance of receiving water standards for EDW or locations where dilution is limited. Therefore the E.2.c.2) a) ix appears to conflict with the prohibitions and receiving water limitations.

Comment, Part 2 – Organization - Placing the action levels and associated procedure in the *Monitoring and Discharge Characterization Requirements* section is awkward and confusing.

Comment, part 3 – Extent of watershed – Table 1 and associated requirements specify that Caltrans complete a watershed analysis when an exceedance of standards is identified in the effluent to determine if other Caltrans runoff discharges in the watershed are similar and likely contributing to the exceedance. Does a watershed constitute an entire drainage (e.g., Los Angeles River and tributaries) or USGS Hydrologic Areas (e.g., San Fernando HA) or just sub-areas? This definition will have a major impact on the number of outfalls that will need to be retrofitted to come into compliance.

Comment, part 4 – Third party monitoring - Various NGOs are establishing stormwater monitoring programs with training and other assistance from the Board as part of the [Clean Water Team](#). How are effluent or receiving water exceedances identified by these groups to be addressed? The permit refers to exceedances as determined by the Boards or Caltrans. Do citizen exceedances need to be addressed if Caltrans has already implemented the procedures in [E.2.c.3\) c\)](#), since Receiving Water Limitation 5 (p. 21) specifies that Caltrans “*is not required to repeat the same procedure called for in Provision E.2.c.3) c) for continuing or recurring exceedances of the same receiving water limitations*” unless directed to do so by the Regional Water Board EOs?

Comment, part 5 – Co-mingled discharges - How do these requirements apply to discharges co-mingled with other MS4s? Can these co-mingled discharges be either direct or indirect?

Comment, part 6 – Title – It may be preferable to title the table: *Water Quality Exceedance Frequencies*, to avoid confusion with other action levels. These are not *Action Levels* as typically used in California stormwater permits or as identified by the Board’s Blue Ribbon Panel.

ZD-18

→ **Recommendation** – The conflict with the absolute prohibitions in Sections A and B needs to be resolved and the key compliance questions listed above need to be explained and made consistent with the rest of permit.

18. Page 40 – E.2.d.1) a) ii) (7) – Available BMPs

“The Department shall not exclude an effective stormwater treatment control method or device from consideration solely because that method or device has not been approved by the Department”

Comment - There are many BMPs that may work for local and small MS4s that are not appropriate for highway application. In addition, the language implies use or consideration of proprietary devices. Caltrans projects follow Federal Highway Administration (FHWA) regulations on allowable materials and products selection (23 CFR Part 635.411), which prohibits the payment of a premium or royalty for a proprietary product, except in a very narrow range of circumstances.

ZD-19 → **Recommendation** – This requirement should be deleted. There is no basis in the Clean Water Act for requiring implementation of unproven BMPs.

19. Page 48 – E.2.d.1) b) iv) c) Stream Crossing Design Guidelines to Maintain Natural Stream Processes

Comment: Stream crossings are permitted by the Calif. Dept. of Fish and Game, and design should be part of the F&G Code 1600 permit process.

ZD-20 → **Recommendation** – What is the basis within the Clean Water Act for including these design guidelines? They appear to have no relationship to the NPDES discharge permit program? This provision should be deleted.

20. Page 51 – Provision E.2.e.1) a) – Vector Control – All water must drain in 96 hours after rain.

Comment: Vector Control requirements exceed Federal CWA requirements. According to the City of Burbank v SWRCB, 308 P.3d 862, 870 (Cal. 2005), this requirement is subject to Water Code Section 13241 factors in accordance with Water Code section 13263(a) as a matter of law.

ZD-21 → **Recommendation** – This requirement should be deleted. Alternatively, provide justification for the provision in the Fact Sheet and at a minimum, include an option for exceptions depending on weather characteristics.

21. Page 58 – E.2.e.4) – Biodegradable Materials

“The Department shall not use or allow the use of soil stabilization products that contain non-biodegradable materials within waters of the United States or waters of the State at any time.”

Comment: [District Work Plans] This requirement may be overly restrictive and create an inability to stabilize soil in a vegetated swale or ditch. The Department agrees with the intent to use more environmentally friendly non-plastic and biodegradable products for permanent erosion control and when have revised our standards to reflect this goal.

However, this requirement may eliminate several options that may be the best available technology, such as Turf Reinforcement Mat (TRM)

ZD-22

Recommendation – The last sentence in this section should be deleted or clarified so it meets the intention of the goal of environmentally friendly but does not eliminate all the available tools for a given area.

22. Page 59 – E.2.h.4) d) – Agricultural Irrigation Return Flows: new text:

“d) Agricultural Irrigation Return Flows

As part of its routine maintenance operations, the Department shall conduct surveillance of agricultural irrigation return flows entering the MS4. Irrigation return flows that are not regulated by WDRs, conditional waivers of WDRs, or prohibitions of discharge shall be reported to the Regional Water Board”

Comment: Thousands of instances of return flows passing under the right-of-way exist in California. These vary from large permanent agricultural ditches carrying return flows (and possibly irrigation water) to occasional incidental runoff entering the drains placed at regular intervals along the highways. Conducting surveillance and reporting these, even as part of routine maintenance, would constitute a major workload for the maintenance crews requiring training, development of reporting mechanism, etc.

Additionally, it is impossible in the field to determine whether any particular flow is regulated by “*WDRs, conditional waivers of WDRs, or prohibitions of discharge.*” It will also be difficult, if not impossible, for maintenance crews to distinguish between return flows and other flows such as irrigation water (containing no return flows) and drainage water not from agricultural irrigation.

As noted previously, a related issue is that since all return flows likely carry “pollutants” as defined in the Clean Water Act, they may all be technically prohibited, although this issue needs additional clarification.

ZD-23

Recommendation: Remove this new provision.

23. Attachment IV

Comment – This Attachment now includes EPA approved TMDLs. EPA TMDLs do not have implementation plans, or Caltrans-specific waste load allocations or compliance due dates. What are the minimum compliance requirements for these TMDLs? Some TMDLs list deadlines that are past due (2002, 2006, etc.). Page 63 specifically states that compliance dates that have already passed are enforceable as of the effective date of this Order. Caltrans will be considered to be out of compliance 50 days after permit adoption. This could be a major compliance problem depending on the obligations assumed to be Caltrans, and the time needed to implement the necessary controls.

ZD-24

Recommendation: Remove this provision regarding compliance dates that have already passed as being enforceable as of the effective date of this Order (or relatively soon thereafter). This is another example of structural non-compliance that simply exposes Caltrans to litigation and penalties with no reasonable means of readily achieving compliance.

24. Attachment VIII Glossary

Comment – Definition of Low Impact Development

This definition is not consistent with EPA’s language and intent. EPA states that LID “is an approach to land development (or re-development) that works with nature to manage stormwater”... and “promotes the natural movement of water”... The draft NPDES permit definition does not emphasize this natural based approach.

- ZD-25** → **Recommendation:** Rewrite the definition of LID to be more consistent with EPA and apply it consistently throughout the permit. Include this language in the definition of LID is an approach to land development (or re-development) that works with nature to manage stormwater”... and “promotes the natural movement of water” in the beginning of this definition.

Clarifications and Other Comments

25. General clarifications needed (not referring to specific pages)

- ZD-26** → 1. 9th Circuit Court decision regarding Los Angeles County discharge – has the Board assessed the impacts of this decision on MS4 compliance. Is a legal review available?
- ZD-27** → 2. When do Minimum Mandatory Penalties (MMPs) apply regarding the limitations in this permit. We understand that MMPs apply to violations of effluent limitations. [CWC § 13385(h) and (i)]. Are the prohibitions effluent limitations for purposes of MMPs since they constitute an effective effluent limitation of zero? Are waste load allocations (WLA) numeric effluent limitations, for purposes of MMPs? How would they apply to MS4 stormwater discharges?

26. Page 11 – Finding 19 – Deletion of numeric effluent limits for Lake Tahoe

Comment: Red strikeout of “*Tahoe numeric limits apply to this order*”

- ZD-28** → **Recommendation:** Clarify if this means the Tahoe effluent limits no longer apply? Alternatively, do they apply through the Lake Tahoe CGP, and just to construction rather than highway runoff?

27. Page 14 – Finding 34 – Reference to [USEPA memorandum](#) of November 12, 2010, that revised USEPA’s November 22, 2002, memorandum regarding the use of numeric water quality-based effluent limits (WQBEL) to implement TMDL waste load allocations.

- ZD-29** → **Comment:** The Board has used this memo to justify the use of numeric limitations as opposed to the standard practice of requiring BMPs. Due to considerable controversy regarding this policy memo, USEPA [opened it up for comments](#) and requested these comments be submitted by May 16, 2011. EPA will decide whether to retain, rescind, or

modify the memo. As of 9/2/11, USEPA staff has indicated they plan to make a decision “later this fall.” Consequently, the permit finding should clarify that this memo cannot be used for regulatory support until USEPA makes its decision. Contacts for further information: Kevin Weiss, NPDES Stormwater Program (weiss.kevin@epa.gov) or Jamie Fowler, TMDL Program (fowler.jamie@epa.gov).

28. Page 14 – Finding 35 – Changes to Finding regarding implementation of Load Allocations and Waste Load Allocations.

The addition of “roads in general” to this Finding highlights the questionable inclusion of Load Allocations in an NPDES permit. The November 22, 2002 memorandum referenced in this Finding specifically cited not including Load Allocations in NPDES permits since Load Allocations are assigned to NON-point source dischargers. If the Water Board chooses to include compliance with Load Allocations assigned to “roads in general” in the Caltrans MS4 NPDES permit, then it must pursuant to *City of Burbank v SWRCB*, 308 P.3d 862, 870 (Cal. 2005), apply Water Code §13241 factors as required by Water Code § 13262(a). This is because requiring compliance with Load Allocations exceeds the mandates of the Federal Clean Water Act as a matter of law.

Comment: This Finding, including changes to the wording, appears to indicate that Caltrans may in some cases be responsible for Load Allocations (LA; which apply to non-point sources), as well as the Waste Load Allocations (WLA; which apply to permitted sources such as Caltrans).

This is not appropriate because it would place Caltrans in the position of ensuring compliance with Load Allocations assigned to others. For example, in the North Coast Region, many of the TMDLs focus on controlling sediment from non-paved roadways such as those in forests and on farmland and assign Load Allocations to these sources. Although Caltrans may be included in these TMDLs, the bulk of the effort is focused on addressing non-point (non-NPDES) runoff not normally related to Caltrans activities or facilities.

ZD-30 → **Recommendation:** This Finding should state explicitly that joint implementation does not make Caltrans responsible for Load Allocations or WLA assigned to others when these other parties do not meet their obligations. As currently worded, the Finding appears to make Caltrans responsible for overall implementation. Caltrans requests the Water Board delete references to Load Allocations (LA) in the Findings and in the Order.

29. Page 15 – Finding 41 – Same topic as Finding 19 – Deletion of numeric effluent limits for Lake Tahoe

ZD-31 → **Recommendation:** Clarify if the red strikethrough of ‘~~Tahoe numeric limits apply to this order~~’ means the Tahoe effluent limits no longer apply? Or do they apply through the Lake Tahoe CGP?

30. Page 15 – **Footnote 2** – Regional Water Board to prepare explanation and demonstration of BMPs needed for implementing its TMDLs

ZD-32 → **Recommendation:** Clarify if this means that it is necessary to wait for Regional Water Board action prior to engaging in a TMDL strategy? Also, as noted in other comments, provisions related to TMDLs but not part of the formal TMDL adoption process, should not be applied as permit provisions.

31. Page 25 – **E.2.b.2)** – **Legal Authority** [*this provision has been partially changed from the preliminary draft: “ordinance” has been deleted*]

a) The Department shall establish, maintain, and certify that it has adequate legal authority through ordinance, statute, permit, contract or other means to control discharges to and from the Department’s properties, facilities and activities.

Comment: As noted in a previous comment, water law generally prohibits Caltrans from blocking these flows onto (or through) the highway right-of-way (ROW). Many different types of upgradient flows pass through the ROW including flows from agriculture, forests, urban areas, etc. and Caltrans has few options to address these discharges. This fact is recognized in this revised draft which allows Caltrans to “pass-through” upgradient non-storm water flows that are not co-mingled with Caltrans by classifying them as “exempt non-storm water discharges” (p. 19). Consequently, how does the Board propose that Caltrans demonstrate the required authority over these discharges as stated in the permit provision?

ZD-33 → **Recommendation:** This section should specify that Caltrans legal responsibility for potential problem on-flows is limited to reporting them to the Regional Water Board. Clarify.

32. Page 26, 27 – **E.2.b.6)** – **Incident Reporting - Non-Compliance and Potential/Threatened Non-Compliance** (second paragraph) [*this provision has been partially changed from the preliminary draft*]

The Department shall report all potential or threatened non-compliance to the State Water Board and appropriate Regional Water Board in accordance with the “Anticipated noncompliance” provisions described in Attachment VI (Standard Provisions). The report shall describe the timing, nature and extent of the anticipated non-compliance. An Incident Report Form is not required for anticipated non-compliance. Anticipated non-compliance may be for field or administrative incidents only

The *Incident Report Form* (posted [here](#)) includes the following line item for reporting:

“Monitoring data indicates an exceedance of a defined standard. Defined standards include TMDL Waste Load Allocations, Regional Water Board numeric limits or objectives, and California Ocean Plan prohibitions.”

ZD-34 → **Comment, Part I:** Based on the reporting form, previous exceedances of standards must be reported as part of this requirement. With the possible exception of discharges receiving a high level of instantaneous dilution, virtually all discharges contain at least several stormwater constituents that typically exceed standards, at least in the effluent.

(See Table 3-18, p. 60, *Discharge Characterization Study Report*, [CTSW-RT-03-065.51.42](#)). Based on this requirement, it would appear necessary to report *potential or threatened non-compliance* prior to or after occurrences (or both) for essentially every discharge. Clarify what the intent is here.

ZD-35 → **Comment, Part 2:** “*Anticipated non-compliance may be for field or administrative incidents only.*” Clarify what other kinds of incidents exist. Are not all incidents either field or administrative?

ZD-36 → **Comment, Part 3:** *The Department shall report all potential or threatened non-compliance ... in accordance with the “Anticipated noncompliance” provisions...* The meaning of “anticipated non-compliance” in the Standard Provisions appears different from “potential or threatened.” Clarify, perhaps with an addition in the Glossary. One or more examples in the Glossary would also be very helpful.

Recommendation: Clarifications should be provided.

33. Page 27 – E.2.c.1) – Characterization of Discharges – Problems with reuse of previous data. New text requires data from the old characterization sites to be used for discharge/compliance assessment/new BMPs as outlined in this revised draft permit.

Comment: The use of these old sites and data raises several problems:

- (1) The old characterization sites were mainly edge-of-payment (EOP) sites. This data may not be representative of actual ROW discharge at these sites.
- (2) Each site was monitored for more than three events. The methodology proposed in E.2.c.2)a)ix cannot clearly be used with these larger data sets (need to clarify how the data would be applied).
- (3) Some constituents on the current Constituent List were not monitored at these sites. It is unclear if partial application of the compliance requirements for these sites is an issue.

ZD-37 → **Recommendation:** The following alternatives should be evaluated regarding the use of the previous characterization work:

- The Characterization sites should be counted against the number of monitoring sites required by this permit. In other words, the Characterization sites would be considered in lieu of some of the new sites, thus reducing monitoring costs.
- Data from sites where substantial water quality changes are expected between the EOP and edge of ROW should be disqualified as being representative of current discharges to the receiving water. These sites could be potential candidates for monitoring under E.2.c.2.a.ix.

34. Page 27 – E.2.c.1) – Characterization of Discharges – Slope Lateral Drains [*this provision has been slightly changed from the preliminary draft*]

The Department shall conduct characterization monitoring of slope lateral drains. The Department shall sample for constituents as indicated in Attachment II, unless the Regional Water Board has approved a more limited set of monitoring constituents. A minimum of 5 sites shall be monitored each year. Sites shall be identified in the Monitoring Site Selection

Report and are subject to review by the Regional Water Board. Monitoring results shall be reported in the Monitoring Results Report.

Comment – Slope lateral drains are used to relieve hydrostatic pressure behind retaining walls and slopes. Flows are generally minimal – typically barely more than drips, and usually less than a GPM. Monitoring 5 of these locations for 46 constituents ([Attach. II](#)) each year for the life of the permit is a significant waste of public funds. (Some constituents are extremely unlikely to be present in significant quantities or are difficult to measure in this context: coliform, the glycols, TPH diesel, gasoline, oil), total organic carbon, orthophosphate (total and dissolved) and other nutrients, acute and chronic toxicity, pesticides, flow rate (by calibrated field instrument)). It may be difficult even accumulating enough flow to run the toxicity tests for a minimum of 5 species. Although this permit revision has added the option of the Regional Water Boards approving a lesser program, they may choose not to.

This proposed monitoring appears separate from the monitoring program specified in provision vii establishing the Monitoring Site Selection Report (p. 29).

ZD-38

→ **Recommendation** – We request this item be clarified to require monitoring only when maintenance staff, Board staff, or others suspect these slope drains may be a significant source of pollutants. Singling out what is probably the smallest source of non-storm water flow is not appropriate for an extended monitoring program.

35. Page 27 – E.2.c.1) – Characterization of Discharges

... follow the procedure specified in Provision E.2.c2) a)ix).

ZD-39

→ **Comment & Recommendation:** It is very difficult to readily identify the Provisions due to the number/outline system used in this draft. A clearer organizational structure would facilitate compliance as well as keeping key related provisions together.

36. Page 28 – E.2.c.2) a) v) – First flush requirement

Comment: The first and last paragraphs of this Provision specify “first flush” capture. From the context, it is clear that this refers to “seasonal first flush,” not “event first flush.”

ZD-40

→ **Recommendation:** Change the language “first flush” to “seasonal first flush” for clarity.

37. Page 28 – E.2.c.2) a) v) – Toxicity

Toxicity testing need not be continued at a given site if toxicity is not present in the first wet- and dry-weather samples.

Comment: Laboratories can perform a ‘screening’ toxicity test that only yields a pass/fail result.

ZD-41

→ **Recommendation:** This screening test should be sufficient to satisfy this requirement. If screening results are positive, then full toxicity testing will be performed.

38. Page 28 – E.2.c.2) a) v) – Water Quality Monitoring – Toxicity – new text regarding acute and chronic toxicity testing:

Comment: The toxicity monitoring is excessive. The rationale for these specific tests is not clear, as well as the relationship to the proposed *Draft Policy for Toxicity Assessment and Control*. The proposed monitoring in this revised draft seems significantly out of proportion to that in the Policy:

From the Draft Policy:

At a minimum, all toxicity monitoring programs established pursuant to this Policy shall include provisions requiring Phase I and Phase II MS4 dischargers, and individual industrial storm water dischargers to conduct four chronic toxicity tests during each year of the permit cycle as follows: one chronic toxicity test shall use samples from the first storm event of the wet season; a second chronic toxicity test shall use samples from a subsequent wet season storm event; and the two remaining chronic toxicity tests shall use samples obtained during the dry season.

The Caltrans discharges are almost always much smaller in volume compared with MS4 discharges. No other MS4 permit has an extensive toxicity monitoring requirement.

ZD-42 → **Recommendation:** The permit should simply require implementation of the *Policy for Toxicity Assessment and Control* when it is adopted, specifically the provisions of *Section B. Storm Water Dischargers Regulated Pursuant to NPDES Permits*. Interim requirements based on the draft *Policy* can be used before adoption of the Policy, but after adoption, the Policy should be basis for the monitoring.

39. Pages 28, 29 – E.2.c.2) a) vii – Constituent List.

Comment: This provision specifies that monitoring of direct discharges into non-ASBS areas must be conducted according to California Ocean Plan requirements.

ZD-43 → **Recommendation:** Clarify – For ASBS, should Caltrans use the constituent list in the Permit, Table B in the Ocean Plan, or some other list (e.g., special protections requirements)?

40. Page 29 – Provision E.2.c.2 a) viii – Water Quality Monitoring

ZD-44 → **Recommendation:** Clarify – based on this paragraph, if each sampling location is a combined dry and wet weather location, a total of 50 sampling locations would be required per year, rather than 100. Is this interpretation correct?

41. Page 29 – E.2.c.2) a) viii – Water Quality Monitoring

ZD-45 → **Recommendation:** Clarify if the candidate pool includes the Characterization Study sites (E.2.c.2). We request that the total sites needed per year (200 in Year 1, 400 in Year 2, etc.) should include any of the Characterization Study sites selected for further monitoring.

42. Page 29 – E.2.c.2) a) viii – **Monitoring Site Selection Report** – new text:

There shall be at least one site in each watershed for which the Department has been assigned a TMDL waste load allocation or other implementation actions in Attachment IV.

Comment: Depending on the definition of “watershed,” this basis for designation sites may result in more than 100 sites per year.

ZD-46

Recommendation: Clarify if TMDL compliance sites (i.e., TMDL-required monitoring) can be used to meet this watershed requirement. The requirement for monitoring where Caltrans does not have a Caltrans-specific WLA should be deleted.

43. Page 33 – E.2.c.2) a) ix – **Water Quality Monitoring – Table 1 – 10% difference**

ZD-47

Recommendation: Clarify why Indirect Discharges are assessed with only 10% difference in the exceedance criteria compared to Direct Discharges. This level of difference is within sampling error for environmental monitoring. The risk and impact of Indirect Discharges is expected to be generally much less than for Direct Discharges. If the permit continues to use this threshold approach, it may be better for Indirect Discharge exceedance be changed to “ ≥ 3 exceedances of a WQO by 50 % or more” and “ ≥ 2 exceedances of a WQO by 100 % or more. (In the Recommendations, we propose alternative compliance approaches.)

44. Page 33 – E.2.c.2) a) ix – **Water Quality Monitoring** – definition of exceedance –

For indirect discharges to receiving waters, the Regional Water Board Executive Officer shall determine if the discharge is a threat to receiving water.

ZD-48

Recommendation: Clarify the basis to be used by the Regional Water Board to determine if the discharge is a threat to receiving water. A clearly defined and objective criterion is essential for consistent determinations by the Regional Water Boards and to allow Caltrans to assess when BMPs have brought a discharge into compliance. In other words, a clear compliance goal is needed.

45. Page 33 – E.2.c.2) a) ix – **Water Quality Monitoring – Need for startup time** - New language states:

The Department shall begin the iterative process and install or modify its BMPs in consideration of all sources contributing to the exceedance, and resume discharge monitoring for the constituents causing or contributing to the exceedance.

Comment: If BMPs are implemented at sites, there may be a need for at least one year of soil stabilization and vegetation establishment. In other words, the facilities need to be brought into full operation.

ZD-49

Recommendation: The monitoring should only resume after one year/two years of soil stabilization and vegetation establishment for sites where structural BMPs are implemented.

46. Page 33 – Footnote 9 – Indirect discharge defined as 300 feet away.

ZD-50 → **Recommendation:** Clarify if this definition also applies to ASBS.

47. Page 34 – E.2.c.2) a) x – Water Quality Monitoring – Language states:

Regional Water Board Executive Officers are authorized to add monitoring locations to the SSR’s candidate pool, and designate specific locations in the SSR for monitoring.

ZD-51 → **Recommendation:** Clarify that the total number of sites in candidate pool and sites monitored still be limited to those specified in E.2.c.2.a.vii. As noted previously, the Regional Water Boards may use this provision to request unlimited monitoring. Limits on total number of sites should be included.

48. Page 34 – E.2.c.2) b) – Receiving Water Monitoring – Language states:

Receiving water monitoring shall include the constituents exceeding the criteria and...

ZD-52 → **Recommendation:** The word “include,” suggests that there may be more constituents.” – Request language change from “include” to “be limited to.”

49. Page 34 – E.2.c.2) b) – Receiving Water Monitoring – Language states:

Receiving water monitoring shall ... include testing for chronic toxicity when required by a Regional Water Board.”

ZD-53 → **Recommendation:** We request that chronic toxicity testing should only be considered by the Regional Water Board if toxicity is present in the effluent.

50. Page 34 – E.2.c.2) b) – Receiving Water Monitoring – This section specifies that highway and post mile information be included for every receiving water monitoring site.

Comment: It is Caltrans’ experience that this information is not always available for receiving water sites.

ZD-54 → **Recommendation:** We request adding ‘where applicable’ to this requirement.

ZD-55 → **51. Page 35 – E.2.c.2) b) – Lab QC requirements** – This section requires that Caltrans must “prepare, maintain, and implement” a Quality Assurance Project Plan.

Comment: These documents already exist for organizations like SWAMP and will probably be similar or identical to the one Caltrans implements.

Recommendation: We request that Caltrans be required to review the SWAMP QAPP, and use it if it is suitable, rather than creating and updating a new one.

52. Pages 35 – E.2.c.2) b) Discontinuing monitoring – new text:

Receiving water monitoring may be discontinued when appropriate control measures have been implemented and effluent monitoring does not trigger the criteria in Provision E.2.c.2)a)ix).

ZD-56 → **Comment and Recommendation:** This should be changed to clarify that receiving water monitoring and effluent monitoring may be discontinued when the receiving water monitoring shows no exceedances, even if effluent monitoring continues to trigger the criteria (Action Levels). For example, pH objectives will probably always be triggered but pH changes or other non-compliance in the receiving water may not be present. Clarify.

53. Page 36 – E.2.c.2) d) – Analytical Constituents.

Comment: This provision stipulates that the Board may require additional monitoring if further information is required. It also states that the Regional Water Boards can petition the Board to add monitoring constituents

ZD-57 → **Recommendation:** As noted in earlier comments, these requirements should not be open-ended. This could potentially expose Caltrans to considerable and unpredictable costs.

54. Page 36 – E.2.c.2) e) – Data reporting – This section requires that Caltrans provide laboratory reports upon request.

Comment: Caltrans currently plans to keep laboratory reports in electronic (PDF) form. This is much easier and less expensive than receiving and organizing all laboratory reports from all monitoring consultants. PDF documents are normally acceptable for regulatory purposes.

ZD-58 → **Recommendation** – We suggest changing the language “... the Department shall submit copies of laboratory analysis reports in electronic (PDF) format ...”

55. Page 37 – E.2.c.3)c – Receiving Water Limitations Compliance– [This section has not changed substantially from the preliminary draft]:

Comment: This and the following section describe the standard iterative approach for compliance. However, the 9th Circuit opinion, referenced previously, indicates that the iterative approach does not result in compliance if a water quality standard has been exceeded. At a minimum, this section is mistitled.

ZD-59 → **Recommendation** – This key description of compliance procedures is located on page 37, but referenced on page 21. In addition this section appears somewhat duplicative of provision E.2.c.2)a)ix. Clarify, or possibly bring the compliance activities into one permit location for better understanding.

56. Page 37 – E.2.c.3) d) – **Toxicity** – “Requires that the Department perform Toxicity Identification Evaluations (TIEs) on a site-specific basis.

Comment: TIEs are costly and often have indeterminate results. This requirement could result in considerable but unpredictable laboratory costs

ZD-60 → **Recommendation** – This requirement should have some limitation when the TIE cannot resolve the toxicity source.

57. Page 38 – E.2.c.4) – **Trash and Litter** – This section stipulates that Caltrans must record and report weight and volume of gross solids removed by activates such as storm drain maintenance and the Adopt-a-Highway program.

Comment: Current Department practices may not satisfy this requirement; identify the justification in the Clean Water Act for requiring this reporting.

ZD-61 → **Recommendation** – Clarify the basis of this requirement and the extent of new reporting being requested. This requirement should be deleted if it cannot be based on the CWA.

58. Page 38 – E.2.d.1 – It appears that when the definitions of New Development and Redevelopment are combined, ALL Caltrans projects (unless they are defined as a Routine Maintenance Activity) would be subject to the Project Planning and Design Requirements. Routine Maintenance Activity does not have a separate definition. It is only referenced within redevelopment. Since redevelopment still has the term "replacement", there will be confusion and misinterpretations by the Regional Water Boards when trying to determine what is considered to be a Routine Maintenance Activity.

Comment: Additional clarity is necessary to eliminate any confusion to what types of projects (activities) are truly routine maintenance and are not subject to the planning and design requirements. Caltrans will be able to focus effort and resources on those projects that warrant treatment.

ZD-62 → **Recommendation** –Add a separate definition for routine maintenance. Routine maintenance includes those activities to maintain the original line and grade, hydraulic capacity, or the original purpose of a facility. This includes pavement overlays, pavement replacement, etc.

59. Pages 38–39 – E.2.d.1) a) i) – **Projects Subject to Post Construction Treatment Requirements.**

“The Department shall implement post construction treatment control BMPs for the following new development or redevelopment projects:

- (a) Projects that create 5,000 square feet or more of new impervious surface.*
- (b) All projects discharging directly to environmentally sensitive areas.*
- (c) All projects located in watersheds subject to a final TMDL that assigns the Department a waste load allocation.*

(d) All projects discharging directly to 303(d) listed water bodies for which Department highways or facilities have been identified as causing or contributing to the impairment.”

Comment: Essentially, all projects (Caltrans and Non-Department) within Caltrans ROW will be required to follow the post construction treatment control requirements. This will cause confusion when trying to determine how to ensure compliance. The treatment requirements do not appear clear and will cause confusion (What are the treatment requirements for those projects that have no new impervious area? Will projects with minimal new impervious still be required to treat the existing impervious areas?) to Caltrans and the Regional Boards.

ZD-63

→ **Recommendation:** Revise the trigger to be for those projects within Caltrans ROW to be any project that creates 1 acre or more of new impervious.

60. Page 39 – E.2.d.1)a) – The 5,000 SF trigger of the "creation, addition, or replacement" of a new impervious surface was intended for local municipalities to apply to non-highway facilities. (Page 9, Attachment 8 Glossary definition of Redevelopment.)

Comment: The 5,000 SF trigger is not appropriate for highway land use. The inclusion of the term “replacement” causes confusion with those projects that would otherwise be considered to be routine maintenance.

ZD-64

→ **Recommendation** –The trigger for highway facilities should be based on addition of 1 acre of new impervious area. In addition, the term “replacement” should be removed. In addition, the term “replacement” should be removed.

61. Page 40 – E.2.d.1) a) ii) (7) – Numeric Sizing Criteria – Excess Volume –

...the excess volume may be treated by a flow-through treatment system.

Comment: The draft Permit specifies a flow rate to design BMPs for ‘excess’ volume on a flow-based standard, but does not provide similar criteria for a volume based standard.

ZD-65

→ **Recommendation** – Clarify that the total water quality volume from the 85th percentile event must be treated, if that is in fact the requirement.

62. Page 41 – E.2.d.1)a)iv) – The language under the "Scope of Design Criteria Applicability for Redevelopment Projects" appears to be defining the "scope" of impervious to which the project (Caltrans/Non-Department) is required to treat. Essentially, the language states that if a project is increasing the impervious surface by less than 50 percent of the total existing impervious surface, then the project is ONLY required to treat the "added impervious."

However, footnote 11 requires that all projects that have new impervious, that cannot be hydraulically separated, must at least consider treatment for all existing impervious surfaces.

Comment: Most Caltrans projects are linear in nature and cannot be hydraulically separated. Therefore, the minimum amount of “required treatment area” will significantly

increase. For example, a shoulder widening project could increase the minimum area to be treated by 8-10 times.

ZD-66 → **Recommendation** – Footnote 11 should be deleted in its entirety.

63. Page 41 – E.2.d.1) a) iii) – Source Control Design Principles

Comment: This language under this section does not match with the title of the section.

ZD-67 → **Recommendation:** Delete language.

64. Page 41/42 – E.2.d.1.a.v – Alternative Compliance with Treatment Control Criteria.

- Footnote 12 – Requires the treatment of “... an equal area of area of new and/or replaced impervious surfaces of similar land uses...” This gives the expectation of treating areas that would be considered a routine maintenance activity. In addition, Caltrans only has one land use.
- Footnote 13 and 14 – Requires the Monetary Amount necessary to provide “operations and maintenance costs equivalent to what would have been incurred over the project lifetime for the foregone on-site treatment.” Caltrans does not have a mechanism to provide the funding of this type.

Comment: While it appears that this section is supposed to be an option for those projects that are not able to provide treatment controls on-site, the language has been written to be a requirement and not as an option. In addition, much of the language in Footnotes 12, 13, and 14 will be infeasible.

ZD-68 → **Recommendation:** Revise the footnotes to be in-line with Department’s ability to contribute equivalent funding.

- “Alternative Compliance is not applicable to projects subject to treatment requirements based on a waste load application assigned to the Department.”

Comment: This language will limit the ability for a project to be in compliance while also trying to meet the requirements of the waste load allocation.

ZD-69 → **Recommendation:** Delete this language.

65. Page 42 – E.2.d.1.a.vi – Projects Discharging to CWA 303(d) listed waters.

Comment: This section seems to be redundant to the treatment trigger listed under E.2.d.1.a.i.1.d. It is unknown how this language would apply to the planning and design requirements.

ZD-70 → **Recommendation:** Delete this language.

66. Page 47 – E.2.d.1)b)i)(1) – The trigger for Hydromodification evaluation has been modified to include all projects that add 10,000 SF or more of new impervious surface. This is not appropriate for Caltrans projects and conducting hydromodification for small projects would

not result in water quality benefit. The previous threshold was 1 acre of new impervious, which was consistent with the Construction General Permit (CGP).

Comment: This lowered threshold is not appropriate for highway projects. Caltrans is typically less than 2% of the area of most watersheds. A hydromodification analysis for small projects would not result in commensurate water quality benefit.

ZD-71 → **Recommendation** – The trigger for hydromodification evaluation should be limited to projects that add 1 acre of new impervious area.

67. Page 42-48 – E.2.d.1)b) – Under the Hydromodification process, it appears Caltrans is responsible for addressing naturally unstable channels, including those where the impacts of Caltrans projects do not change the hydrograph. The existing geology will lead many channels to have a rating below "good" or "excellent."

ZD-72 → **Recommendation** – Clarify that Caltrans is not responsible for mitigation of naturally unstable channels. This should also be addressed in the flow chart.

68. Page 48 – E.2.d.1) c) – Stream Crossing Design Guidelines to Maintain Natural Stream Processes – What is meant by "Natural channel materials" as written in one of the guidelines for stream crossings. "Natural channel materials at road crossings shall be maintained." As written, it implies that existing channel crossings that are not made of "natural channel materials" would have to be reconstructed.

ZD-73 → **Recommendation** – Clarify that pipe conduits and riprap may be used where roadways cross streams. They appear to be prohibited. There are many locations that use concrete, imported rock slope protection (RSP), plastic pipe (e.g., PVC), etc. as part of the crossings.

69. Pages 51 – E.2.e.1) – 1) Vector Control: previous and new text

Comment: These requirements would appear to preclude the use of wet ponds as a treatment control for stormwater, although in certain situations they are cost effective and have other environmental benefits. For example, mosquito fish, and certain predatory insects (backswimmers: *Buena* and *Notonecta*) can be part of an integrated pest management program that can be effective for controlling vectors in wet ponds.

ZD-74 → **Recommendation:** The following change should be made to allow wet ponds to be used:
All storm water BMPs that retain storm water shall be designed, operated and maintained to minimize mosquito production, and to drain within 96 hours of the end of a rain event, unless designed to ~~exclude~~ control vectors.

70. Page 51 – E.2.e.2) b) – Storm Water Treatment BMPs

b) The Department shall inspect all installed storm water treatment BMPs at least once every year, beginning one year after the adoption of this Order.

Comment: Caltrans has extensive experience with the maintenance of BMPs specified in our SWMP. Our experience shows that the inspection frequency for BMP maintenance should be adaptive based on the location and that not each BMP must be inspected each year, and some will require more frequent inspections.

ZD-75

→ **Recommendation** – Modify this language to allow Caltrans to implement a directed adaptive maintenance inspection program.

71. Pages 51 and 52 – E.2.e.2) c) – Storm Water Treatment BMPs – Retained sediments

Comment: This generalized statement implies the sediment is toxic waste, which most sediment deposits are not. The probable toxic and/or litter load of sediment should be determined by several factors including location, (rural or urban), traction sand recovery, and ditch cleaning (with or without vegetation). A decision should then be made as to whether disposal or re-use would be appropriate.

ZD-76

→ **Recommendation** – This sentence should be deleted, or reasonable decision-making discretion should be allowed by the supervisor based on location, past analysis, and visual characteristics. Possible text: “*Retained sediments should be evaluated to determine the potential for re-use or disposal.*”

72. Page 53 – E.2.e.5) c) ii) – Conduct Pilot LID Retrofit Projects, Reporting

Comment: The draft Permit requires monitoring of LID retrofit pilot projects. There are many well-documented studies on LID BMP performance in highway and non-highway environments. The requested information will be redundant, is not needed to implement the requested retrofit program, and would not be a prudent use of state funds.

ZD-77

→ **Recommendation** – Reduce and redirect this monitoring to projects/designs that would help Caltrans with developing LID strategies.

73. Page 53 – E.2.e.5) c) ii) – Conduct Pilot LID Retrofit Projects – The new language states:

ii) In the Year 4 Annual Report, report the status, results, and lessons learned from the pilot studies, including their effectiveness and technical and economic feasibility.

Comment: The language here suggests water quality monitoring, although this is not clear since “effectiveness” monitoring may be just site assessments and not treatment effectiveness.

ZD-78

→ **Recommendation** – Clarify if water quality monitoring required as part of Pilot LID Retrofits study.

74. Pages 64 – E.4.c. – Supplemental TMDL Implementation Plan and TMDL Status Review Report

Comment: These requirements create redundant TMDL tasks; therefore, they are not needed.

ZD-79 → **Recommendation:** This should be deleted, because the TMDL regulations do not provide authorization for these tasks.

75. Page 56 – E.2.h.3) b) ii) – Vegetation Control: new text

by using native species and using mechanical and biological methods for control of exotic species, [underlined text was added to this revised draft]

ZD-80 → **Comment & Recommendation:** The Department policy states plants should be tolerant of local environmental conditions such as sunlight, aspect, water availability, temperature, soil, water quality, air quality, and wind, as well as proven to be durable adjacent to highways and in transportation facilities. California native plants should be incorporated into the design, taking into account local plant communities and species availability, to the maximum extent feasible. For example Oleander plantings in median strips are planted as it is very hardy and requires limited care. However, Oleander is not native; this addition has no basis in the Clean Water Act.

The text should be reworded to reflect planting of the most appropriate plant for the need and the environment.

“of exotic species” should be deleted from the sentence to make the language broader in relationship to vegetation control.

76. Page 57 – E.2.h.3) d) – Landslide Management Plan

Comment: Similarly, there is no basis for this plan in the Clean Water Act.

Mass wasting is a long-standing geologic term that describes certain erosional and depositional processes that occur in nature. Mass wasting is not a “waste discharge;” therefore, it should not be regulated as such. In many locations, water quality is not at risk and these locations should not be included in this plan. In addition, it is not clear how this proposed requirement differs from the Slope Inspection inventory/ program?

ZD-81 → **Recommendation** – Should be deleted.

77. Pages 58 – E.2.h.4) s) – Spill Response: Spills not covered or reported to EMA/OES

Comment: Since all spills threatening public health or the environment must be reported to EMA, when would the requirements of a) ii) and a) iii) apply?

ZD-82 → **Recommendation:** Is this provision needed in the permit since all spills threatening the environment would be reported pursuant to 4) a) i)? Clarify or give examples. Also, has EMA modified its procedures so that it notifies impacted MS4s of spills reported under provision 4) a) i)? This would seem to be a key factor to ensuring MS4s are informed. One remaining “OES” needs to be changed to EMA.

Recommendations

78. General compliance approach applicable to Caltrans and potentially to other MS4s:

Comment: The TO applies two performance standards to Caltrans discharges. First, Caltrans must reduce pollutants to the maximum extent practicable. This is accomplished by implementing the SWMP identified in the Permit (see page 17 – **General Prohibition A.1**). However, there is no numeric metric to assess how well Caltrans is doing to meet the MEP standard. The use of action levels as envisioned by the Blue Ribbon Panel could serve as the metric. This is the approach taken by the San Diego Regional Water Board with the Riverside County Stormwater NPDES permit.

Second, the TO requires that Caltrans discharges not cause or contribute to an exceedance in the receiving water. The Department has done considerable monitoring and data analysis to identify the pollutants of concerns (those pollutants that pose water quality compliance issues). These Points of Compliance (POCs) are not going to change, so creating 100 new monitoring sites will likely not modify the list and the compliance concerns.

Recommendation: We suggest the Board consider two possible compliance options:

ZD-83

→ **Alternative 1)** This approach would have Caltrans develop a POC-specific plan that would be applied to outfalls that exceed MEP type action levels (as developed by the Water Board’s 2006 Blue Ribbon Storm Water Panel - posted [here](#)). The POC-specific plan could establish a priority process so that Caltrans can focus on outfall discharges causing the greatest environmental harm (using multiple lines of evidence). It would allow for a proactive approach and lead to water quality improvement. Furthermore, the work could be integrated into the TMDL implementation plan and thereby serve two purposes. The current TO does not allow for such prioritization and effective use of resources.

The POC-specific action plans for such discharges would be based on historical monitoring data.

Alternative 2)

MEP pollutant control, the technology-based minimum requirements in the Clean Water Act, could be addressed using the approach proposed by the Blue Ribbon Panel ([here](#)).

Water quality standards would be addressed using a triad approach similar to that being developed by the Water Board to implement [sediment quality objectives](#).

- **Elevated pollutant concentrations in the effluent** – Exceedances in the effluent, if frequent and elevated, would identify sites needing further assessment, but by themselves would not necessarily require corrective measures. The Blue Ribbon Panel action levels could also be used to identify these potential problem discharge locations.
- **Effluent toxicity and other indicators of potential impacts** – For pollutants regulated to protect the biota, evidence of effluent toxicity would indicate a higher

level of priority. A discharge with elevated bacteria to an AB 411 beach would also be an indicator of elevated priority.

- **Identified and significant impacts on beneficial uses** – These would be the highest priority for response:
 - Evidence of decreased or disturbed biota (aquatic toxicity or excessive nutrients)
 - Beach postings (REC1 impacts)
 - Bioaccumulation of pollutants by receiving water species

This approach should be scientifically based. (See permit [Attachment E](#), page 10).

- **Retrofit controls** – Prioritized sites would be addressed based on highest priority locations and available funding.

Note that MS4 compliance with MEP is required by the CWA; strict compliance with WQS; however, is discretionary with the State (see *Defenders of Wildlife v. Browner*). Therefore, the state has considerable discretion in how to approach compliance with WQS.

79. Caltrans requests that requirements exempt safety projects.

ZD-84

Comment: The Safety Improvement program (SHOPP 201.010) projects are among the Department's top priority for funding and construction and are intended to reduce the number and/or severity of collisions. Projects are selected after a thorough analysis of the collision history. An extensive evaluation of potential countermeasures is conducted to address the safety need.

Only improvements that have a safety benefit greater than the capital cost of the project over its service life are selected in the Safety Improvement program. The Department uses the Traffic Safety Index (TSI) as the tool for evaluating the safety benefits of these highway improvement projects. Using previous collision history, the TSI is determined by estimating the number and cost of collisions that may occur on the existing facility if no further improvements are made, and subtracting from it the fewer number and cost of collisions that are expected to occur with the improvement. This collision cost savings, when divided by the capital cost of the improvement and converted to percent, is the TSI. A TSI of 200 is a benefit cost ratio of one when discounted for future benefits at 6% over the project life of twenty years.

80. Equivalent alternative water quality technology.

ZD-85

Comment: The SWRCB and the RWQCB will actively support the implementation by Caltrans of effective equivalent alternative water quality technology and BMPs, provided the treatment efficiency is supported by applied field studies.

Changes from the January draft supported by Caltrans (this is not inclusive, other changes are also supported)

81. Pages 6 and 7 – Finding 6 – Deletion of paragraph specifying that irrigation runoff “*regulated by WDRs or conditional waivers of WDRs ... are not expected to be a source of pollutants and need not be prohibited by the Department.*”

ZD-86

→ **Comment:** As we noted in our comments of March 14, 2011, this provision implied that Caltrans must prohibit all agricultural runoff covered by WDRs/waivers if this agricultural runoff conveys pollutants, which is potentially most or all agricultural runoff. It also implied that Caltrans must also prohibit all other agricultural runoff (i.e., not covered by WDRs/waiver) and other non-permitted runoff passing through the Caltrans right-of-way (ROW). This would have placed Caltrans in an untenable position of being required to terminate potentially many thousands of upgradient flows that pass under the ROW. We therefore strongly support removing this paragraph. As discussed in later comments, the proposed new approach in this revised draft of requiring Caltrans to physically separate its runoff from these other flows also has significant potential problems.

82. Page 15 – previous Finding 41 [*now deleted*]

ZD-87

→ **Comment:** As discussed in reference to Finding 19, this is an appropriate deletion (reference to Lake Tahoe HU numeric limitations).

Fact Sheet ([here](#))

ZD-88

→ The Factsheet needs to be updated to be consistent with the Order. In several cases, new permit requirements have been added without any discussion of the background or justification in the Factsheet. Factsheets, although not enforceable, can lead to confusion in permit interpretation by the Regional Water Boards and third parties.

PERMIT ATTACHMENTS

Attachment I: Incident Report Form – Non-Compliance and Potential /Threatened Non-Compliance

ZD-89 → 83. OES – The form has a line item: “Has OES been notified?”

Comment – The new term is California Emergency Management Agency, rather than OES.

ZD-90 → 84. **Emergency Incident:** These include Embankment Failure, Traffic Accident, and Spill.

Comment – In many circumstances, these incidents present no risk to water quality. This item should be clarified to indicate that a risk to water quality must be present before reporting is necessary. Otherwise thousands of reports will have to be filed that are not relevant to the Water Boards.

85. “**Defined standard**” – One of the line reporting items for Field Non-Compliance is:

“Monitoring data indicates an exceedance of a defined standard. Defined standards include TMDL Waste Load Allocations, Regional Water Board numeric limits or objectives, and California Ocean Plan prohibitions.” [Emphasis added]

ZD-91 → *Comment* – The Glossary contains no definition of “defined standard” or “standard.” Generally, standard in the context of NPDES permits refers to State adopted “water quality standards” (WQS) approved by USEPA and established pursuant to requirements in the Clean Water Act. “Defined standard” as described above appear to be a subset of WQS, but additionally include waste load allocations (WLA), which may be included in Basin Plans but may not be WQS because they are neither criteria (objectives in California) nor beneficial uses. Clarify.

86. Discharge of prohibited non-storm water. Another line-reporting item for Field Non-Compliance is “*Discharge of prohibited non-storm water.*”

ZD-92 → *Comment* – Non-storm water, when it is a source of pollutants, is prohibited. “Pollutants” is defined very broadly in the Clean Water Act. Since virtually all non-stormwater carries some measurable constituents (i.e., pollutants), apparently all such flows will need to be reported except for discharges where Caltrans runoff is not co-mingled with other flows. Clarify the circumstances when the Board expects these reports to be filed. Examples would also be helpful.

Attachment II: Monitoring Constituent List

87. List of Constituents – Comment: This list has not been significantly modified and continues to include many constituents that have limited or no relevance for protection of water quality or compliance with the Clean Water Act. (See comments submitted in March 14, 2011.). This list should be significantly shortened to include only key parameters, traditionally monitored for stormwater. A constituent list synchronized with other MS4s would promote watershed collaboration.

- ZD-93 → • **Reporting Limits** – A few required Reporting Limits may be difficult or even impossible to achieve. In particular, Platinum, Selenium, and Diuron may not be reported down to the stated reporting limits, and Clopyralid is an unknown.
- ZD-94 → • **Toxicity** – Both acute and chronic toxicity have associated reporting limits. It is unclear how reporting limits apply to toxicity testing. In addition, the table states an RL for TUC as 0, which may be incorrect. Check and clarify.
- ZD-95 → • **Units** – Units for pH are listed as “6.5-8.0.” This is incorrect. We suggest leaving this cell blank; pH does not really have a Reporting Limit.
- ZD-96 → • **Constituent** – The analytical method listed for Iron is 200.8. Although it is possible to analyze for Iron by this method, it is not common, and most labs do not use this method for Iron. – We suggest changing this method to 200.7.

Attachment III: Reporting Requirements

88. Items marked with a submittal date of “Within 6 months of Permit Adoption for SWRCB Approval”

- ZD-97 → **Comment** – These items should be changed to “Within 12 months of the permit effective date.” Otherwise, the effective date has limited meaning.

Attachment IV: TMDL Implementation Requirements

- ZD-98 → **General Comment:** State Water Board should verify the TMDLs listed. Many appear to be listed inappropriately in the Caltrans Permit. It should be noted that Caltrans has the largest list of TMDLs in the nation and it is important to prioritize TMDLs with limited resources available.

Comment –

The following TMDLs do not mention Caltrans in the TMDL and should be deleted from Attachment IV:

- Malibu Nutrients
- San Diego Creek Reach 1 Selenium
- Newport Bay and San Diego Creek Metals
- Rhine Channel Mercury – Caltrans is not in the watershed
- Newport Bay, San Diego Creek and Rhine Channel Organochlorine

Caltrans is named in the following TMDLs but no Waste Load Allocation has been provided. The following TMDLs should be deleted from Attachment IV:

- San Lorenzo Sediment
- Morro Bay Sediment
- Santa Maria River Watershed Pesticides
- Los Angeles River Nitrogen– (WLA is intended for POTW and not Caltrans)

Caltrans is not a major source for the pollutants being addressed by the TMDLs listed below. Caltrans participation should be limited to complying with the permit and SWMP requirements and not be committed to the TMDL requirements. It is more appropriate for Caltrans to dedicate the limited available resources to TMDLs where Caltrans roadways/facilities are a contributing source (e.g., metals, trash TMDLs). The following should list Caltrans as a minor participant or a “designated management agency.”

- Klamath River Temperature, DO, Nutrient and Microcystin
- Shasta River Dissolved Oxygen and Temperature
- San Francisco Bay PCBs and Mercury
- San Francisco Bay Urban Creeks Diazinon and Pesticide Toxicity
- Ballona Bacteria
- Marina del Rey Pathogens
- Santa Monica Beach Bacteria (Wet and Dry)
- Malibu Pathogens
- Harbor Beaches of Ventura County
- Calleguas Creek Pesticide
- Los Angeles River Nitrogen
- Machado Lake Nutrient
- Calleguas Creek Toxicity
- Clear Lake Nutrient Project
- Coachella Valley Pathogen
- Lake Elsinore Watershed Nutrient
- Big Bear Lake Watershed Nutrient
- Newport Bay Watershed Organochloride Compounds
- Chollas Creek Diazinon
- Rainbow Creek Nutrient
- Bacteria Impaired Waters I (creek and beach shorelines)
- Lower Lost River Nutrient / Temp
- Santa Clara River Chloride

89. General Comment:

Comment: Attachment IV contains numerous waste load allocations for Caltrans. Numerous TMDLs that have been developed are adaptive and waste load allocations are expected to be refined as new data become available. An example of this is the Lake Tahoe TMDL where Caltrans is estimating its own baseline load that will be updated on a schedule as new information is made available.

ZD-99

→ **Recommendation:** Include a statement in the introduction, or with the TMDL WLAs that clarify that many of the TMDLs are being implemented through an adaptive process and that WLAs may be adjusted as new information is made available.

90. General Comment – Los Angeles Region Trash TMDLs,

Comment: When the State Water Board approved the Los Angeles River Trash TMDL on April 15, 2008, Board members expressed concern that the zero trash WLAs were unrealistic. Gary Wolf (Vice-Chair) stated that it would be unrealistic to hold the dischargers responsible for the entire load of trash to the water body and stated that when the deadlines for zero trash get closer, the TMDL requirements would have to be reviewed. The Los Angeles Regional Water Board staff assured the Board members that as the compliance requirements approached that the staff would work with the dischargers to ensure that the requirements were reasonable and realistic.

ZD-100

Recommendation: This permit should only include the WLAs that are relevant to this permit term. The permit should include language that acknowledges that additional sources of trash exist that the dischargers named in the TMDL have no control over. The permit should also include language that recommends that WLAs be reviewed as the more restrictive deadlines approach. Before the final WLAs are integrated into this permit, the State Water Resources Control Board and Los Angeles Regional Water Board should work with the named responsible parties to develop realistic requirements and deadlines for trash TMDLs.

91. Page 1 – Introduction,

Comment: The introduction states that “the Department is obligated to consult each TMDL to comply with all applicable allocations and other provisions, whether included in the table or not.” Caltrans is a unique discharger and faces a unique set of opportunities and limitations. This permit should clarify TMDL requirements and ensure that these requirements are appropriate and consistent for Caltrans. Including language that states that all TMDL language is applicable whether integrated into this permit or not, neglects the unique nature of Caltrans, does not help achieve consistency between the TMDLs, and does not account for the differences between Caltrans and other traditional MS4 dischargers.

ZD-101

Recommendation: Remove the statement cited above from Attachment IV.

92. Page 4 – San Francisco Bay PCBs and Mercury TMDLs Pilot Projects:

Comment: Two of the pilot projects described under the San Francisco Bay PCBs and Mercury TMDLs are not appropriate for Caltrans

- The Pilot Projects to Investigate and Abate Locations with Elevated PCBs and Mercury Concentrations requires Caltrans to identify at least two drainage areas that contain high levels of PCBs. There are no known significant sources of PCBs and mercury within Caltrans right-of-way, and there are not likely to be any hot spots found. As a result, this requirement is not appropriate for Caltrans.
- The Pilot Project to evaluate Diversion of Dry Weather and First Flush Flows to POTWs is not appropriate for Caltrans. Caltrans does not have dry weather flows and would not likely divert flows to sanitary sewers during wet weather conditions.

ZD-102

→ **Recommendation:** Remove the requirements for these pilot projects or revise to make appropriate for Caltrans.

93. Page 13 – Marina Del Rey, Harbor Back Basins, Mother’s Beach:

Comment: The TMDL lists 11 monitoring locations within the Marina Del Rey, Harbor Back Basins, Mother’s Beach watersheds where WLAs must be met. These monitoring locations are not appropriate for Caltrans. In some of the subwatersheds that drain to the monitoring locations Caltrans may not have facilities and where Caltrans does have facilities, the load is likely to be insignificant and not contribute to any exceedances.

ZD-103

→ **Recommendation:** Revise the WLA requirements under this TMDL to reflect Caltrans minor area in watersheds and state that Caltrans may not contribute any significant load within the drainage areas to any of these subwatersheds. Also include language to state that Caltrans is not responsible for exceedances in subwatersheds where Caltrans does not have facilities, or Caltrans has not contributed to exceedances.

94. Page 14 – Santa Monica Bay Beaches during Dry and Wet Weather Bacteria TMDL:

Comment: The TMDL lists 10 dry weather monitoring locations and 10 wet weather monitoring locations within the Santa Monica Bay watersheds where WLAs must be met. These monitoring locations may not be appropriate for Caltrans. In some of the subwatersheds that drain to the monitoring locations Caltrans may not have facilities and where Caltrans does have facilities, the load is likely to be insignificant and not contribute to any exceedances.

Recommendation: Revise the WLA requirements under this TMDL to reflect Caltrans minor area in watersheds and state that Caltrans may not contribute any significant load within the drainage areas to any of these subwatersheds. Also include language to state that Caltrans is not responsible for exceedances in subwatersheds where Caltrans does not have facilities, or Caltrans has not contributed to exceedances.

95. Page 18 – Calleguas Creek and its Tributaries and Mugu Lagoon Metals and Selenium TMDL Special Studies:

Comment: Special Studies 2 and 3 are not appropriate for Caltrans

- Special Study 2 requires the identification of selenium contaminated groundwater sources. Caltrans is not a contributor to groundwater sources of selenium and any groundwater discharges of selenium in Caltrans right-of-way are most likely to be natural discharges out of the control of Caltrans. As a result, this requirement is not appropriate for Caltrans.
- Special Study 3 requires Caltrans to identify metals “hot spots”. There are not likely to be any hot spots within Caltrans right of way. Any discharge of metals from Caltrans right-of-way is likely to be from diffuse sources distributed within the watershed. As a result, this requirement is not appropriate for Caltrans.

ZD-104

→ **Recommendation:** Remove the requirements for these special studies or revise to make appropriate for Caltrans.

96. Page 21 – Calleguas Creek and its Tributaries and Mugu Lagoon Organochlorine Pesticides (OC), Polychlorinated Biphenyls (PCBs), and Siltation TMDL Special Studies:

Comment: Special Studies 1, 2, and 3 are not appropriate for Caltrans

- Special Study 1 requires Caltrans to convene a Science Advisory Panel. This is not appropriate for Caltrans.
- Special Study 2 requires Caltrans to identify land area with high OC pesticides and PCBs concentrations. There are no known significant sources of OC pesticides and PCBs within Caltrans right-of-way, and any discharge of these from Caltrans right-of-way is likely to be from diffuse sources from aerial deposition. As a result, this requirement is not appropriate for Caltrans.
- Special Study 3 requires Caltrans to evaluate natural attenuation rates, methods to accelerate attenuation, and examine WLA attainability. These studies are not appropriate for since Caltrans is likely to be an insignificant source of these pollutants.

ZD-105

Recommendation: Remove the requirements for these special studies or revise to make appropriate for Caltrans.

97. Page 24 – Calleguas Creek and its Tributaries and Mugu Lagoon Toxicity, Chlorpyrifos, Diazinon TMDL:

Comment: Several of the requirements under this TMDL are not appropriate for Caltrans

- The permit requires that Caltrans investigate the pesticides that will replace Diazinon and Chlorpyrifos in the urban environment, their impact on receiving waters, and potential control measures. There are no known significant sources of pesticides within Caltrans right-of-way, and any discharge of these from Caltrans right-of-way is likely to be from diffuse sources from aerial deposition. As a result, this requirement is not appropriate for Caltrans.
- Special Study 2 requires Caltrans to consider the results of monitoring of sediment concentrations by source/ land use type. Caltrans has one predominant land use type within its right-of-way and, as a result, this study is not appropriate for Caltrans.

ZD-106

Recommendation: Remove these requirements or revise to make appropriate for Caltrans.

98. Page 33 – Project 1 – Revised Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek) Indicator Bacteria TMDL:

Comment: The TMDL WLAs for Caltrans were estimated as existing loads from Caltrans facilities.

ZD-107

Recommendation: Include language that states that the WLAs are based on existing loads from Caltrans facilities, and that no reductions from baseline are required.

99. Pages 13 and 14 – **Finding 33** – Addition of sentence regarding TMDLs:

*“In some of these cases, multiple dischargers are assigned a grouped or aggregate waste load allocation, and each discharger is **jointly responsible** for complying with the aggregate waste load allocation.” [Emphasis added]*

Comment: In some cases, other parties to the TMDL may not be able to implement proportional reductions due to financial or other reasons. It appears that this provision assigns responsibility for the full reduction in pollutant loading to attain the waste load allocation to the State of California (Caltrans) when other parties cannot meet their obligations. Is this a correct interpretation? If so, the cost impacts could be considerable. USEPA guidance indicates that waste load allocations (WLA) should be defined as narrowly as available information allows, e.g., separate WLAs should be assigned for each municipality.

ZD-108 → **Recommendation:** Caltrans strongly recommends that individual WLAs be developed for each discharger for each TMDL and that each discharger be held responsible for its own portion of any aggregate waste load allocation.

Attachment V: Regional Water Board Specific Requirements

ZD-109 → **100. Comment and Recommendation** – Caltrans’ participation in location-specific requirements should be limited to commitments associated with TMDLs where Caltrans has a Waste Load Allocation based on an approved Basin Plan Amendment. Other location-specific requirements listed in Attachment V should be deleted to promote statewide consistency.

101. Region Specific Requirements – 2.1.c.ii – Part 2: San Francisco Bay Region –
Language states:

“Technical uncertainties regarding copper effects in the Bay are described in the Basin Plan’s implementation program for copper site-specific objectives. These uncertainties include toxicity to Bay benthic organisms possibly caused by high copper concentrations as well as possible impacts to the olfactory system of salmonids. The Department shall submit in the Year 1 Annual Report the specific manner in which these information needs will be accomplished and describe the studies to be performed with a schedule.”

ZD-110 → **Comment and Recommendation** – The Clean Water Act and NPDES permit regulations do not provide a basis for requiring research projects in NPDES permits and should be deleted.

Attachment VI – Standard Provisions ([here](#))

ZD-111 → 102. Item #2

2. Modification, Revocation and Reissuance, or Termination. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Department for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not uphold any General Permit condition.

Comment – Rather than “uphold” is the intent to say “negate” or something similar?

Attachment VIII: [Glossary](#)

ZD-112 → 103. Page 3 – Revised definition of **Maintenance Facility**. Material storage areas need to be defined. Any area that materials are temporarily stored for a local operation would be required to have an FPPP regardless of duration of storage. For example, a temporary storage area for a one-day repair job would apparently require an FPPP. Clarify.

ZD-113 → 104. Page 3 – **Glossary Permit Coverage – Industrial facility definition** – The addition of the term “industrial facility” into the draft order now potentially makes Caltrans’ equipment shops subject to the Industrial General Permit. The equipment shops would no longer be covered under Caltrans’ NPDES permit as they have been in the past. Each location could be required to obtain an Industrial permit. Clarify the Board’s intent.

ZD-114 → 105. Page 5 – Pages 54 and 55 of **Provision E.2.h.2) FPPPs and Maintenance Facilities** require FPPPs for all Maintenance Facilities. The revised definition of **FPPPs** provides examples of Facilities subject to FPPPs and is different from the definition of Maintenance Facilities.

ZD-115 → 106. Page 5 – **Facility Pollution Prevention Plan (FPPP)** – New text has been added to this draft:

Facilities subject to FPPPs include: maintenance yards/stations; material storage facilities (if not totally enclosed); equipment storage and repair facilities, roadside rest areas, agricultural and highway patrol weigh stations, decant storage or disposal locations, and permanent and temporary solid and liquid waste management sites

Comment. Some of these facilities are very small (e.g., agricultural and highway patrol weigh stations) and should not require FPPPs. FPPPs should have a size (1 acre or greater) or risk-based threshold.

ZD-116 → 107. Page 5 – **Facility** – The term “**facility**” and the different types as defined in this Attachment VIII are not used consistently throughout the draft order. Here in

Attachment VIII, “*Department facility*” is subdivided into 4 sub-categories: *Maintenance facility, Non-maintenance facility, Highway facility, and Industrial facility.*

ZD-118 → **108.** Page 7 – Definition of Maximum Extent Practicable (MEP) – The following sentence has been added:

To achieve the MEP standard, municipalities must employ whatever BMPs are technically feasible and are not cost-prohibitive. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the costs would be prohibitive. A final determination of whether a municipality has reduced pollutants to the MEP can only be made by the State or Regional Water Boards.

Comment: This new definition has two significant problems and represents a significant departure from how MEP has been defined in the past:

- a. *Change in financial criteria* – This proposed new threshold for BMPs appears to represent a shift toward requiring an MS4 to implement all BMPs that are not be cost-prohibitive, and omitting the previous criteria which included cost-effectiveness (i.e., the change would mean potentially implementing BMPs where the cost would exceed any benefit). This implies that if funding is somehow available, then the BMP should be built regardless of whether it is cost-effective. This is contrary to previous Board descriptions of MEP.³ We believe it is also contrary to USEPA guidance.
- b. *Determination of MEP* – The new wording states, “*A final determination of whether a municipality has reduced pollutants to the MEP can only be made by the State or Regional Water Boards.*” This appears contrary to EPA guidance indicating that MS4s make this decision:

EPA envisions that permittees will determine what the MEP is on a location-by-location basis and consider such factors as conditions of receiving waters, specific local concerns, and other aspects of a comprehensive watershed plan. [Emphasis added; from *Requirements for Regulated Small MS4s*, posted [here](#)]

Recommendation – The new text should be deleted in both cases, unless it can be justified by reference to the NDPES regulations or the CWA.

ZD-119 → **109.** Page 11 – **Waters of the State** – New text has been added to this draft:

This Order contains requirements to protect the beneficial uses of waters of the state. Furthermore, municipal storm water discharges are discharges that contain waste that could affect the quality of the waters of the State

³ See State Water Board Order WQ 2000-11, p. 19. , regarding MEP: “There must be a serious attempt to comply, and practical solutions may not be lightly rejected. If, from the list of BMPs, a Permittee chooses only a few of the least expensive methods, it is likely that MEP has not been met. On the other hand, if a Permittee employs all applicable BMPs, except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit to be derived, it would have met the standard. MEP requires permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive. Thus while cost is a factor, the Regional Water Board is not required to perform a cost-benefit analysis.” [Emphasis added]

Comment. This is an NPDES permit authorized under the Clean Water Act for control of discharges into waters of the U.S. as defined in the Act. Provisions that address only waters of the state, if contained in this permit, must be clearly separated so that NPDES requirements and California Water Code requirements are not conflated. For example, NPDES reporting and enforcement mechanisms cannot be applied to discharges to waters of the state that are not waters of the U.S. This required separation should be clarified in this definition and in the permit itself.

We request that any Water Code-only based requirements be specifically identified in the permit.

ZD-120 → **110.** Need for new terms

Comment – It would be useful to add California Emergency Management Agency and OES to the Glossary.