

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 1, 2006

Storm Water Panel Report
Deadline: 9/1/06 5pm

Ms. Song Her
Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100



By email: commentletters@waterboards.ca.gov
Fax: (916) 341-5620

Subject: Comment Letter – Storm Water Blue Ribbon Panel Report

Dear Ms. Her:

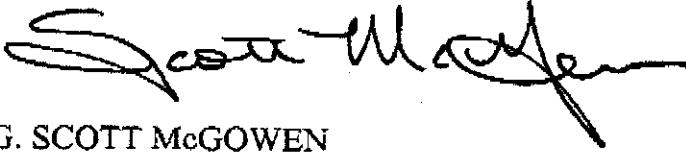
The California Department of Transportation (Department) is pleased to provide comments on how the recommendations of the report by the Storm Water Panel (Panel) should be used by the State Water Resources Control Board (State Board). In general, the Department agrees with the findings of the Panel, but there are specific actions that we request the State Board conduct in lieu of some recommendations. Our comments are directed at the recommendations related to the Municipal and Construction components of the Panel's report, as the Department is not subject to the General Industrial Permit. The recommendations of the Panel further demonstrate and support the need for the State Board to establish policies and standards to ensure consistent implementation of storm water practices under National Pollutant Discharge Elimination System (NPDES) Permits, pertaining to municipal, construction and industrial activities.

Once again, thank you for the opportunity to provide our comments on the Panel report. We look forward to working with the State Board on our recommendations and those of others in order to improve storm water quality throughout California.

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Detailed comments are provided as an attachment to this letter. If you have any questions, please contact me at (916) 653-4446.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott McGowen". The signature is fluid and cursive, with a long horizontal stroke at the end.

G. SCOTT McGOWEN
Chief Environmental Engineer

Enclosure

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ATTACHMENT

California Department of Transportation Comments on Storm Water Numeric Limits – Blue Ribbon Panel Report

General Report Comments

A particularly important observation of the Panel was overlooked in making the final recommendations. Page 15 of the report notes that there is no required training or certification program for contractors, preparers of pollution prevention plans, field inspectors or even personnel charged with monitoring. However, the State of Washington has a certification process for individuals who prepare Storm Water Pollution Prevention Plans (SWPPPs). Also, our Department requires within construction contracts a minimum level of training (24 hours) for a designated water pollution control manager.

Recommendation

The State Board should develop a program for credentialing specific staff responsible for storm water actions at a construction site. The State Board or another State agency could manage the credentialing program. Fees collected under the Construction General Permit could be used to support this program.

Comments on the Municipal Recommendations

The Department concurs with the conclusion; *"it is not feasible at this time to set enforceable numeric effluent criteria for municipal BMPs and in particular urban discharges."* The discussion and recommendations indicate that numeric limits are not feasible given the extreme variability of flow, volume, and constituent concentration in urban runoff. The report concludes that better treatment BMPs are needed and the feasibility of effluent criteria can be reassessed once these better controls are developed, constructed and maintained.

The dramatic variability of urban runoff (in terms of flow magnitude and constituent concentration) makes application of numeric objectives impractical. This position is further supported by USEPA in their policy regarding TMDLs and waste load allocations. This policy states in part:

"EPA's policy recognizes that because storm water discharges are due to storm events that are highly variable in frequency and duration and are not easily characterized, only in rare cases will it be feasible or appropriate to establish numeric limits for municipal and small construction storm water discharges. The variability in the system and minimal data generally available make it difficult to determine with precision or certainty actual and projected loadings for individual dischargers or groups of dischargers. Therefore, EPA believes that in these situations, permit limits typically can

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be expressed as BMPs, and that numeric limits will be used only in rare instances."

Further, the Department supports in principle the process outlined in the flow diagram on page 11 of the Panel's report, and identifies a very similar process in guidance¹ used for implementing treatment controls on capital projects. Our guidance stresses the selection of infiltration as the best means of treating storm water and then defers to a 'targeted design constituent' approach should infiltration be infeasible. This approach promotes the selection of treatment controls that best address targeted constituents identified in the watershed's Section 303(d) list, or in an established Total Maximum Daily Load (TMDL) applicable to the project location. Alternatively, when no constituent is listed for the waterway, the pollutants of concern need to be specifically identified and targeted.

Recommendation

- Requirements should remain flexible in order to allow for other strategies to address numeric limits established by TMDLs
- The State Board should define what is "significant construction and reconstruction." Many Regional Boards are resorting to an impervious surface criterion to dictate what projects must consider treatment controls; however, not all Regional Boards agree on the how much new impervious surface requires implementation of treatment controls. Moreover, the basis for the numeric values has not been identified or supported by scientific study.

The "state-approved" BMPs referenced on page 11 of the Panel's report are undefined. The nine Regional Boards and the State Board do not agree upon a common list of treatment controls, let alone how the various treatment controls rank for providing treatment of storm water.

Recommendation

The Department has an approved list of treatment controls selected based on sound science and our BMP Retrofit Pilot Study²; The Department's BMP approval and evaluation process should be considered as a model for implementing a standard method of analysis in considering treatment controls for qualifying projects.

¹ Caltrans Storm Water Quality Handbook Project Planning and Design Guide, CTSW-RT-02-057, July 26, 2005. See pages E-28 through E-32 to see how treatment control selection resembles that defined by the Panel. <http://www.dot.ca.gov/hq/oppd/stormwtr/PPDG-with-revisions-7-26-05.pdf>

² BMP Retrofit Pilot Program – Final BMP Report, CTSW-RT-01-050, January 2004, http://www.caltrans.ca.gov/hq/env/stormwater/special/newsetup/_pdfs/new_technology/CTSW-RT-01-050.pdf

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The use of BAT/BPJ for control selection within the municipal program is difficult to understand and its application to the municipal program is questionable. Such terminology confuses implementation of the stormwater regulatory program. The technology standard for municipalities is maximum extent practicable (MEP). To date the use of the standard urban runoff mitigation measures (SUSMPs) have been defined as MEP.

Recommendation

The Board should not pursue the Panel's proposed BAT/BPJ approach for addressing 303(d) listed waters. The MEP standard should be applied to Condition 1 in the flow chart. As described at 40 CFR 125.3, BAT developed using BPJ is the regulatory procedure for identifying technology-based limitations. TMDLs are a water quality-based requirement. As described in the report, BAT may provide for too much treatment or not enough.

The statement regarding Condition 3 indicates TMDL requirements may be less stringent than BAT. In other words, discharge to a listed waterbody could trigger more treatment than would be required after the TMDL is completed. This makes no sense. Why should more public funds be expended than are necessary to achieve water quality standards?

Recommendation

We recommend the Board not implement this provision.

The Panel was tasked with looking at the feasibility of developing "quantifiable measures" (including numeric limits). The Panel almost entirely focused on treatment control BMPs: their design criteria, performance, selection and maintenance.

In fact there is little discussion regarding source control and the use of the current iterative process. The lack of discussion regarding other quantifiable measures limits the usefulness of the final report.

Recommendation

The Board should recognize the value of source control programs and assist permittees in eliminating barriers to their implementation, and not focus all resource expenditures on treatment controls at the expense of source controls.

We agree with the Panel that successful longstanding treatment is dependent upon dedicated inspection and maintenance of the treatment controls. Most methods for ensuring success revolve around proper financing of the maintenance, but ultimately it is the responsibility of the municipality to ensure that resources for maintenance are available. We do not agree that burdensome checklists become a measure of maintenance; a log of the maintenance should be sufficient.

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Recommendation

- Municipalities should be required to institute a self-audit mechanism for routinely evaluating a representative number of treatment controls on an annual basis. A self-audit process would be less resource intensive and would ensure objectivity in the review of the treatment controls installed within their jurisdiction.
- We recommend the Board carefully consider the recommendations for Action Levels (AL). ALs based on a broad assessment of performance at many locations may not be appropriate because they do not take into account the wide variation in source strength in the municipalities and other permitted locations. In addition action levels should be used as a "trigger" mechanism to initiate investigation of problematic areas.

The Report mentions two other concepts on page 14 of the report (hydromodification and low-impact development). Some Regional Board staff members are currently attempting to implement these requirements in new permits. These efforts are apparently being conducted without consistency in application and without scientific or engineering merit, especially in cases where hydromodification is imposed on specific projects and not within the context of a watershed plan.

Recommendation

The State Board should conduct research into hydromodification and Low-Impact-Development and advise the Regional Boards on which elements are appropriate for regulating storm water.

The Report concludes that hydromodification impacts are important, but that such controls "should be completed under a watershed management plan, and not site by site."

The Department agrees with this conclusion. Our linear infrastructure makes it impractical to construct hydromodification mitigation facilities on a site-by-site basis, and our facilities generally represent a very small fraction of the watershed area.

Recommendation

Hydromodification controls should be an integral part of a master-plan which addresses land development projects within the watershed. The planning and funding of such controls should be the responsibility of the municipal programs rather than the Department. Urban stream courses should be re-engineered based on a comprehensive watershed assessment rather than by requiring hydromodification controls on infill projects and projects in tributary urban fringe areas.

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Comments on the Construction Recommendations

On page 15 of the Report, the Panel concludes "that active treatment technologies make Numeric Limits feasible" for construction sites, yet later information in the report raises "reservation and concerns" on the use of active treatment systems.

The Department investigated the use of active treatment systems (ATS), especially coagulants, with mixed results and also identified potential toxicity from use of treatment chemicals. We perceive the focus on active treatment systems sends the wrong message to the construction industry. The fact sheet to the General Construction Permit states, "the BMPs shall primarily emphasize source controls such as erosion control and pollution prevention methods."

Recommendations

We recommend that the State Board not attempt to encourage or mandate the use of ATS on construction site until more research has been completed on the proper use and performance of these systems. Source controls should continue to be encouraged as the primary method of pollutant control.

Action levels established during the next General Construction Permit should be those that can be tracked through direct field measurements. A construction site manager can compare the field data with the action levels and then take immediate corrective action to bring the site into control. The parameters that best lend themselves to making field measurements are those for turbidity and pH, in conjunction with photo documentation.

Recommendation

Numeric action levels should be based on some defined increase of turbidity or change in pH in comparison with normal runoff from the site. Normal runoff could be established by measuring up-gradient flows into the site or deciding upon a nearby reference site that is consistent with the original land use and physical characteristics of the site.