California Regional Water Quality Control Board
San Francisco Bay Region

Linda S. Adams
Secretary for
Environmental Protection

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Arnold Schwarzenegger
Governor

MAY 0 4 2007

Date:
File No. 1538.09 (JBO)

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Notice of Violation

7005 1820 0005 8828 4639
Alameda County Public Works Department
c/o Daniel Woldesenbet, Ph.D., P.E., Director
399 Elmhurst St.
Hayward, CA 94544

7005 1820 0005 8828 4646
Alameda County Community Development Agency
c/o James "Buzz" Sorensen, Director
224 W. Winton Ave. Rm 110
Hayward, CA 94544

7005 1820 0005 8828 4653
Alameda County General Services Agency
c/o Aki Nakao, Director
1401 Lakeside Dr. 10th Floor
Oakland, CA 94612

7005 1820 0005 8828 4660
County of Alameda California
Susan Muranishi, County Administrator
1221 Oak St #555
Oakland, CA 94612

Subject: **Notice of Violation of the Alameda Countywide Clean Water Program NPDES Municipal Stormwater Permit and Technical Report Requirement Pursuant to Water Code Section 13267**

Dear Mr. Woldesenbet, Mr. Sorensen, Mr. Aki, and Ms. Muranishi:

This Notice of Violation provides formal notice that Alameda County is in violation of its National Pollutant Discharge Elimination System Permit (NPDES Permit No. CAS0029831, Order No. R2-2003-0021) and requires you to take immediate actions to minimize further violations. These actions are listed below.

OBSERVED VIOLATIONS

As you are aware, unincorporated Alameda County is a Permittee under the Alameda Countywide Clean Water Program's National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit. Water Board staff met with staff from Alameda County's Public Works, Community Development, and General Services Agencies on January 26, February 22, and March 20, 2007. The purpose of these meetings was to evaluate the County's compliance with Provisions C.3.a. through C.3.o. (New and Redevelopment Performance Standards) of the County's Permit. During these meetings and upon review of the County's annual stormwater reports for fiscal year 2005-2006, Board staff observed permit violations including the following:

- Section C.3.b, Development Project Approval Process. The County has not provided proof of modification of its development project approval process to fully comply with stormwater requirements;
- Section C.3.c, Applicable Projects - New and Redevelopment Project Categories. The County has not demonstrated that it has a process by which all applicable new and redevelopment projects are identified, leading to non-compliance with stormwater requirements.
- Section C.3.d Numeric Sizing Criteria for Pollutant Removal Treatment Systems. Some applicable private and public development projects have been approved without stormwater site design, source control and/or treatment measures. Other projects have been approved without properly hydraulically-sized stormwater treatment measures.
- Section C.3.e, Operation and Maintenance of Treatment Measures. The County has not demonstrated that it has a mechanism to verify that post-construction stormwater measures are installed as specified. The County has no mechanism for requiring an agreement for long-term maintenance of post-construction stormwater requirements. The County does not have a post-construction stormwater measure inspection program in place.
- Section C.3.j, Site Design Measures Guidance and Standards Development. Site design measures that minimize stormwater runoff have not been completed and fully implemented within the project approval process(es).
- Section C.3.n., Reporting, including Pesticide Reduction Measures. Impervious surface forms, the method the County uses to collect required data, are not always completed.
- Section C.3.o, Implementation Schedules. The County is in non-compliance with deadlines in the implementation of Provision C.3. for all of the above items.
- A tracking system is not in place, or is not consistently used, to document that the stormwater requirements of Provision C.3. are being implemented.

Board staff notes that, while many violations were observed, the County's own projects under development by its General Services Agency will include stormwater treatment measures such as bioretention areas, pervious paving, bioswales, and planter boxes.

REQUIRED TECHNICAL REPORT

We require the County to submit a technical report to this office by July 20, 2007. This technical report must contain the following information:

1. A list of projects containing one acre or more of impervious surface and not deemed complete as of February 15, 2005, that have received planning approval without stormwater site design, source control, and/or stormwater treatment sized as required under Provision C.3., and
2. A list of projects containing 10,000 sq.ft. or more of impervious surface and not deemed complete as of August 15, 2006, that have received planning approval without stormwater site design, source control, and/or stormwater treatment sized as required under Provision C.3.

This report is to be completed using the enclosed sample table, which the Alameda County Clean Water Program has electronically. Although not all of the information called for on the table will be available, the County must certify that the information provided is as complete and accurate as possible.

REQUIRED ACTIONS, INCLUDING TECHNICAL REPORT

The County shall take immediate steps to comply fully with Provision C.3. We require the County to correct the above violations by submitting a separate technical report identifying how the County will correct each violation and what steps the County has taken, or plans to take, to comply with all Provision C.3. requirements. The technical report shall be submitted to this office by June 15, 2007. The report must:

1. Include a list of tasks and subtasks required to implement each Provision, C.3.a. through C.3.o., Order No. R2-2003-0021. State whether or not each task has been implemented to date, and provide documentation for tasks that are fully implemented.
2. Identify which County Agency(ies), Department(s), Division(s), and staff position(s) is(are) responsible for implementing each task. Where multiple Agencies, Departments, Divisions and or staff positions are responsible, delineate which positions are responsible for which sub-tasks.
3. For those tasks which are not fully implemented, state what must be done to achieve full implementation, the staff positions responsible, and the date by which each item will be in full compliance.
4. Delineate the County's private project application and review process. For each step in the process, identify all applicable stormwater requirements; the party responsible for ensuring the requirement is met; and the tracking mechanism the County will employ to verify compliance.

5. Describe the tracking system(s) the County will use to document compliance with stormwater requirements for (1) development and redevelopment projects undergoing review, (2) construction projects, and (3) operation and maintenance.
6. State who (by job title) is/are responsible for ensuring that:
   - Projects are required to contain stormwater source controls, site design, treatment, and hydromodification management as required by Provision C.3.;
   - The County staff who carry out Provision C.3. duties receive appropriate and on-going training;
   - Appropriate information materials are given to all project applicants;
   - Tracking systems are utilized for stormwater requirements during project design, installation and inspections; and
   - The Annual Report contains an evaluation of the effectiveness of the County's Provision C.3. program as a whole, including areas of focus for improvement.

In complying with Provision C.3., please consider that the County should fully inform private projects applicants of all stormwater requirements early in the process, such as before the application is accepted for review. "Fitting in" post-construction stormwater designs/treatments later can lead to (1) missed opportunities for designing features that minimize stormwater runoff, (2) more costly and/or more difficult to maintain BMPs, and (3) greater potential for noncompliance with Permit requirements.

WATER CODE § 13267 INFORMATION

This is a formal requirement for technical reports pursuant to California Water Code Section 13267. The Water Board needs the required information to assess the extent of the noncompliance and ensure that future new and redevelopment projects that are subject to Provision C.3. requirements are regulated by Alameda County. You are being required to submit this information because stormwater pollution controls are necessary to protect water quality in Alameda County and the San Francisco Bay. Failure to respond or late response to this requirement may subject you to additional civil liability imposed by the Board to a maximum amount of $5000 per day. Any extensions of the time deadline set forth above must be confirmed in writing by Board staff.

Please be informed that the County may be subject to an enforcement action for violation of the Permit. Pursuant to §13385 of the California Water Code, the Board may impose administrative civil liability of up to $10,000 per day of each violation.

If you have any questions, please contact my staff Jan O'Hara at (510) 622- 5681 or johara@waterboards.ca.gov.

Sincerely,

acting for Bruce H. Wolfe
Executive Officer

Enclosures:

- C.3.n Sample Reporting Table
- 13267 Fact Sheet
- August 5, 2004, Letter from Bruce Wolfe to BASMAA Managers on use of storm drain inlet filters and oil/water separators to meet the requirements of NPDES municipal stormwater permits

cc: Robert Hale, via email

Alan C. Lloyd, Ph.D.
Agency Secretary

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Fact Sheet – Requirements For Submitting Technical Reports Under Section 13267 of the California Water Code

What does it mean when the regional water board requires a technical report?
Section 13267[1] of the California Water Code provides that "...the regional board may require that any person who has discharged, discharges, or who is suspected of having discharged or discharging, or who proposes to discharge waste...that could affect the quality of waters...shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires."

This requirement for a technical report seems to mean that I am guilty of something, or at least responsible for cleaning something up. What if that is not so?
The requirement for a technical report is a tool the regional water board uses to investigate water quality issues or problems. The information provided can be used by the regional water board to clarify whether a given party has responsibility.

Are there limits to what the regional water board can ask for?
Yes. The information required must relate to an actual or suspected or proposed discharge of waste (including discharges of waste where the initial discharge occurred many years ago), and the burden of compliance must bear a reasonable relationship to the need for the report and the benefits obtained. The regional water board is required to explain the reasons for its request.

What if I can provide the information, but not by the date specified?
A time extension may be given for good cause. Your request should be promptly submitted in writing, giving reasons.

Are there penalties if I don't comply?
Depending on the situation, the regional water board can impose a fine of up to $5,000 per day, and a court can impose fines of up to $25,000 per day as well as criminal penalties. A person who submits false information or fails to comply with a requirement to submit a technical report may be found guilty of a misdemeanor. For some reports, submission of false information may be a felony.

Do I have to use a consultant or attorney to comply?
There is no legal requirement for this, but as a practical matter, in most cases the specialized nature of the information required makes use of a consultant and/or attorney advisable.

What if I disagree with the 13267 requirements and the regional water board staff will not change the requirement and/or date to comply?
You may ask that the regional water board reconsider the requirement, and/or submit a petition to the State Water Resources Control Board. See California Water Code sections 13320 and 13321 for details. A request for reconsideration to the regional water board does not affect the 30-day deadline within which to file a petition to the State Water Resources Control Board

If I have more questions, whom do I ask?
Requirements for technical reports indicate the name, telephone number, and email address of the regional water board staff contact.

Revised August 2005

[1] All code sections referenced herein can be found by going to www.leginfo.ca.gov.

California Regional Water Quality Control Board
San Francisco Bay Region

Terry Tamminen
Secretary for Environmental Protection

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http://www.swrcb.ca.gov/rwqcb2

Arnold Schwarzenegger
Governor

Date: August 5, 2004
File No. 1538.09 (KHL, JBO)

BASMAA Managers
c/o Geoff Brosseau
BASMAA Executive Director
1515 Clay Street,
Suite 1400
Oakland, CA 94612

Subject: Use of Storm Drain Inlet Filters and Oil/Water Separators to Meet the Requirements of NPDES Municipal Stormwater Permits

Dear BASMAA Managers:

This letter responds to your requests to clarify the Water Board's review of an aspect of municipal stormwater permittee compliance with requirements to include treatment controls in new development and significant redevelopment projects. Please assist us in distribution of this letter to BASMAA member agencies and other interested parties.

The Board regularly receives inquiries regarding the inclusion of stormwater treatment control measures to remove pollutants from new development and redevelopment project runoff. As a state agency, the Board does not endorse specific treatment control products. Also, there is currently no State certification program that would certify the effectiveness of a particular product.

However, the Board's role does include determining permittees' compliance with their NPDES stormwater permits. This includes determining that municipalities have reduced the discharge of pollutants in storm water to the Maximum Extent Practicable (MEP). While not specifically defined within federal clean water law, MEP refers to implementing best management practices (BMPs) that are effective in addressing pollutants, generally accepted by the public, of reasonable cost, and technically feasible.

When reviewing compliance with permit requirements for new development and redevelopment projects, Board staff looks to see that permittees have required projects to incorporate appropriate source controls to prevent the discharge of pollutants, design measures to reduce impervious surface, and treatment controls to remove pollutants from runoff. We review whether these

measures have been appropriately designed to be effective, given the existing state of knowledge. For example, is a vegetated swale designed within parameters specified in existing literature as being effective? Such parameters include minimum residence times, maximum flow depths and velocities, limits on swale longitudinal and side slopes, inclusion of a subdrain if in very tight soils, and similar considerations.

Oil/Water Separators

Another example, vault-based oil-water separators, also known as water quality inlets, was originally designed for industrial use. These have been recognized to be generally ineffective at removing pollutants at concentrations seen in urban stormwater runoff, because removal rates are low and those pollutants that are removed are often flushed out by subsequent storms, especially when a separator is not frequently maintained. With the exception of projects where oil and grease concentrations are expected to be very high, and other controls are included in a "treatment train" approach, Board staff is unlikely to consider oil/water separators as a means of meeting the MEP standard.

Storm Drain Inlet Filters

Storm drain inlet filters, also known as drain inlet inserts, also have been shown to have limited effectiveness in removing pollutants from urban stormwater runoff, due to the nature of their design. Inlet filters are typically either bags or trays of filter media that are designed to catch and treat runoff as it enters the storm drain. They are manufactured stormwater treatment controls, and are typically popular because they have a low capital cost relative to other controls and can be placed into a traditional engineered storm drain design without altering that design.

In determining whether drain inlet filters meet the MEP standard, we reviewed the existing state of knowledge. Board staff's assessment of studies and literature reviews for this class of controls has found the following:

- Filters are subject to clogging and/or blinding by sediment, trash, and vegetation, resulting in runoff bypassing the filter and/or flooding;
- Maintaining filter performance requires very frequent maintenance (as often as during and after every storm). Manufacturers in practice understate the maintenance requirements for this class of devices. In practice, maintenance is not completed at an effective frequency, particularly to avoid bypass of the filter element clogged with debris;
- Inlet filters, by virtue of their location below a storm drain grate, are out of sight. This can lead to reduced maintenance resulting from the filters being out-of-sight, and thus out-of-mind;
- Filter performance may decay rapidly over a time frame that is significantly shorter than typically recommended replacement or maintenance intervals;

- Filters appear to have very limited ability to remove dissolved pollutants, smaller particulates, and emulsified oil and grease, and may have a limited ability to remove oil and grease as it is found in urban runoff. The filter element in inlet filters is small and easily bypassed if fouled to prevent flooding.

The limited space within a storm drain inlet appears to preclude highly effective treatment. To the extent that treatment is accomplished, it appears that these controls require an intensive maintenance regime—one that is expensive and which, based on our experience in the Bay Area, is ultimately not completed once the controls have been installed.

A list of references reviewed is attached and includes reports prepared by Bay Area municipal stormwater programs that found the effectiveness of existing inlet filter products to be very limited. Based on our review of these references and experience in the Bay Area, it would be very unlikely for a proposal using inlet filters as the sole treatment measures to meet the MEP standard.

Fortunately, there are a variety of effective controls available to project proponents and designers as alternatives to inlet inserts. These include a range of landscape-based controls (e.g., vegetated swales, bioretention areas, planter/tree boxes, ponds, and stormwater wetlands) and a series of manufactured controls (e.g., vault-based hydrodynamic separators, vault-based media filters, and other solids removal devices). With few exceptions, these controls appear to function more reliably to remove pollutants, and thus would better represent "MEP."

Each type of BMP should be used in situations for which it is appropriate. For example, the City of Oakland is working to limit trash discharged into Lake Merritt. For that project, controls that primarily remove trash may be most appropriate. For most new development projects, however, BMPs that address the broad spectrum of urban runoff pollutants, from trash to fine particulates and soluble pollutants, are needed.

We recognize that inlet filter products with substantially improved performance may be developed in the future. Also, certification programs like Washington State's "Evaluation of Emerging Stormwater Treatment Technologies," which reviews technologies to determine whether they are at least as good as existing non-proprietary measures, may establish viable treatment measures. As with any aspect of the NPDES stormwater program, we anticipate that the municipal stormwater programs and the Board will continue to review information as it is developed so as to best determine what constitutes MEP, and to help ensure the reasonable cost in implementation of effective BMPs.

If you have any questions or further comments, please contact Dale Bowyer at (510) 622-2323 or via email to dcb@rb2.swrcb.ca.gov, or Keith Lichten via email to khl@rb2.swrcb.ca.gov, or at (510) 622-2380.

Sincerely,

--original signed by--

Bruce H. Wolfe
Executive Officer

Attachment: References Reviewed

C.3.n. Sample Reporting Table 2 - Group 2 Projects, City of Waterville Annual Report FY 2004-05

Project Name; Project Number; Location (cross streets); Street Address	Name of Developer; Project Phase No.[1]; Project Type and Description	Project Watershed	Site Acreage (or square footage of land disturbance)	New or Replaced Impervious Surface Area	Status of Project	Source Control Measures BMPs	Site Design Measures BMPs	Post-Construction Treatment BMPs Onsite	Operation & Maintenance Responsibility Mechanism	Hydraulic Sizing Criteria Used	Alternative Compliance		Pesticide Reduction Measures Included in Project
											Basis of Impracticability	Alternative Compliance Measures[2,3]	
Private Projects													
Waterfall Corner; Project #05-567; Liquid Lane and Flowing Drive; 4578 Liquid Lane, Waterville, CA	H_2O Development Co.; Construction of corner 10-unit strip mall with underground and limited outdoor parking.	Runoff from site drains to Rapid River, tributary to Lolling Lagoon	1 acre	30,000 ft^2	Application submitted 7/1/05; Application deemed complete 7/14/05; Application approved 8/6/05; Construction scheduled for completion by 12/06.	Stenciled inlets, trash enclosures, underground parking, street sweeping	One-way aisles to minimize outdoor parking footprint; roof drains to planter boxes	tree wells with bioretention; planter boxes with bioretention	Conditions of Approval require property owner (landlord) to perform regular maintenance. Written record will be made available to City inspectors.	BMP Handbook Method	n/a	n/a	Pest resistant plants & mulch to prevent weeds; Screens on all outdoor vents.
Public Projects													
Waterville Downtown Plaza; Project No. #05-999; Rushing Road and Bubbling Blvd; 23 Rushing Road, Waterville, CA	City of Waterville; Capital improvement project to build plaza on roof of existing parking structure.	Runoff from site drains to Crystal Creek, tributary to Pristine River, tributary to San Francisco Bay	1.5 acres	21,000 ft^2	Application submitted 6/25/05; Application deemed complete 7/13/05; Application approved 7/26/05; Construction began 8/3/05 and scheduled for completion 10/05.	Downspouts connected to landscaping	Pervious pavement for entire plaza area	tree wells with bioretention; planter boxes with bioretention	Signed statement from Waterville Public Works assuming post-construction responsibility for treatment BMP maintenance.	WEF Method	n/a	n/a	Pest resistant plants & mulch to prevent weeds

If a project is being constructed in Phases, each Phase should have a separate entry.

On separate page, give a discussion of the alternative compliance site, the treatment BMPs installed, the calculations used to size the treatment BMPs installed, and the project's dollar amount contribution to the alternative compliance site.

For Regional Projects, on separate page, discuss how the dollar amount paid into the Regional Project was calculated. Also, provide summary of what the Regional Project is (e.g., goals, duration, total estimated cost).