Santa Clara Valley Urban Runoff Pollution Program

PUBLIC AGENCY ACTIVITIES

Performance Standard and Supporting Documents for

Water Utility Operation and Maintenance

Revised – January, 1997

(New Format)

Santa Clara Valley Urban Runoff Pollution Prevention Program

Performance Standard and Supporting Documents for
WATER UTILITY OPERATION AND MAINTENANCE

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PART I

Introduction

Performance Standards are the standards which define control measures (particular programs or tasks carried out by co-permittees). Control Measures are described Program's Storm Water Management Plan, which is the plan for the 1995-2000 NPDES municipal storm water permit period. Several Performance Standards are required under the provisions of the 1995 NPDES Permit. The development and implementation of Performance Standards is an important part of the Program during the five-year period under the NPDES Permit.

The components contained herein constitute the **Water Utility Operation and Maintenance Performance Standard.**

Purpose

The purpose of this document is to provide information which details the program and criteria for meeting the standard (work plan). Its use is intended for the individual responsible for implementing the standard, the manager that authorizes the activity, the regulator that reviews the standard and any interested party.

The level or intensity has been established based upon co-permittee community characteristics and the appropriateness of a control measure implementation for the agency (MEP).

The Water Utility Operation and Maintenance Performance Standard defines the level of implementation necessary to demonstrate the control of pollutants discharged from the operation and maintenance of municipal water supply utilities to the maximum extent practicable.

Process

The Co-permittees will provide a model or sample performance standard for each performance standard required in the 1995 NPDES Permit. Individual co-permittees will be responsible for providing or completing the performance standard package and the annual reporting on each Performance Standard. A complete set of co-permittee performance standards wilt be kept on file by Program as well as the author agency.

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Performance Standard

1. Have you conducted an inventory of all key O&M activities every three years?

   yes no If no, explain:

2. Have you identified routine and unplanned non-storm water discharges from the above activities?

   yes no If no, explain:

3. Have you adopted the model or developed your own Water Utility Pollution Prevention Plans (WUPPP)?

   yes no If yes, describe whether you have adopted the area-wide WTJPPP with modifications or developed your own WUPPP. If no, explain:

4. Are you implementing the WUPPPs?

   yes no If no, explain:

5. Have you conducted the annual training to applicable staff on WUPPP implementation?

   yes no If yes, describe training conducted during the past year. If no, explain:

6. Have you coordinated the WUPPP elements with water utility project planning?

   yes no If no, explain:

7. Have you included applicable WUPPP elements in contract and services agreements?

   yes no If no, explain:

8. Have you evaluated the effectiveness of BMPs (listed in WUPPPs) during the past year?

   yes no If yes, describe any changes in your OMPs during the past year.

   If no, explain:

9. Have you maintained accurate documentation of activities related to implementation of WUPPPs?

   yes no If no, explain:

10. Are you revising the WUPPPs based on the BMPs being changed?

    yes no If no, explain:

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PART II

Performance Standard Components

This Performance Standard applies to discharges resulting from the operation and maintenance (O&M) of municipal water supply systems within the Santa Clara Valley Urban Runoff Pollution Prevention Program, which comprises the Santa Clara Valley Water District, the County of Santa Clara, and the thirteen cities in the County. The water supply systems covered by this Performance Standard extend from a utility's source of supply to its customers points of connection, and include treated and untreated potable water supply systems, reclaimed (recycled) water supply systems, raw water systems, and non-potable water.

The following four components are designed to achieve pollutant reduction or pollution prevention benefits to the maximum extent practicable while the safety and continuity of the public water supplies are maintained.

Component I. Inventory of discharges by each affected water utility

Every three years, conduct an inventory of all key O&M activities, and identical routine and unplanned non storm water discharges from these activities.

Component 2. Pollution Control

Implement the pollution control measures identified in the Water Utility Pollution Prevention Plan (WUPPP) to manage chlorine, biocides, and algaecides and prevent erosion and sedimentation.

Component 3. Staff/Contractor Training and Coordination

Conduct annual training for applicable staff; coordinate WUPPP elements with water utility project planning; and include applicable WJJPPP elements (EMPs, conditions, specifications, etc.) in contract and services agreements.

Component 4. Review and Evaluate the WUPPP

Evaluate the effectiveness of the WUPPP annually. Maintain accurate documentation and revise the WUPPP as necessary.

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PART III

Section 1
WORK PLAN IMPLEMENTATION

This section contains the plan or activities to be taken to enable the applicable co-permittee to achieve the performance standard, along with an implementation schedule. The work plan will be developed by each applicable co-permittee based on its responsibilities to conduct water utilities O&M activities.

I Implementation Plan

Introduction

This Implementation Plan (IP) describes the approach that co-permittees have adopted in their effort to achieve the Water Utility Operation and Maintenance Performance Standard (WUPS). The approach in the IP is described for each of the four components in the WUPS - The actual tasks and the time line for carrying out the elements listed in this I will be determined by each co-permittee and will be included in the Program's revised Storm Water Management Plan. Co-permittees may adopt or modify the schedules attached in this section for their own. The IP elements for each WUPS component are as follows:

Component 1

Inventory of discharges by each affected water utility

- Survey agency organizational units for key O&M activities that results in discharges.
- Compile the information.
- Generate listing of discharges:

  Agency; location; quantity/rate; planned; frequency; type; unplanned; known chemical additives

Component 2

Pollution Control

- Identify discharges of concern.
- Identify and evaluate existing control measures.
- Identify gaps/weaknesses/deficiencies in existing control measures -
- Identify additional BMPs, as necessary.
- Develop additional BMPs, as necessary.
- Prepare the Water Utility Pollution Prevention Plan (WUPPP).
- Implement the WUPPP.

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Component 3

Staff/Contractor Training and Coordinations

- Annual Staff Training:
  Identify staff which require training; identify and evaluate existing training programs and materials; incorporate the following elements into a training program:
    Permit Requirements; existence of the WUPPP; how to use BMPs; where to go for questions
  Document training.

- Coordinate WUPPP elements with Water Utility project planning:
  Identify water utility planning and design staff; transmit the WUPPP to applicable staff to be incorporated into the planning and design process.
- WUPPP in contracts and service agreements:
  Identify types of contracts/agreements (C/A); develop and include standard language for C/A; notify contracting managers of standard language.

Component 4

Review and evaluate the WUPPP

- Develop mechanism to solicit feedback.
- Solicit feedback from:
  Training; contract administration; field operations; inspection; contractors/personnel; project planning
- Evaluate effectiveness of implementing the WUPPP:
  Common types of problems; feasibility; additional BMPs or discharges of concern; trends
- Maintaining records:.
  Feedback records; WTJPPP updates; results of WUPPP evaluation

II Work Plan Implementation Schedule

This model schedule includes all the major tasks of the implementation plan. Each co permittee will complete this schedule by fl out the time line for each task. Some tasks are one Sue tasks (eg. develop WUPPPs) while others need a starting time before they become routine (eg. implement WUPPPs). Some tasks will occur annually or at a certain frequency (eg. conduct inventory or conduct staff training). Co-permittees may include other tasks in the schedule as they see fit.

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Section 2 LEGAL AUTHORITY TO IMPLEMENT

This section demonstrates that the co-permittee has the legal authority to imp the performance standard, or provides a time schedule for developing additional authority.

The co-permittees should provide references to municipal codes or ordinances that demonstrate adequate legal authority to require municipal staff and contractors to conduct O&M activities in a manner that eliminates or reduces water quality impacts. These include:

- Ordinance or section(s) of municipal code that applies to water utility O&M.
- Standard contract language (see model language below).

Example Standard Contract Language

The Clean Water Act makes it illegal to discharge pollutants into storm drain systems. The operation and maintenance of water utilities can cause storm water pollution in numerous ways. For example, storm water pollution can be caused by the discharge of sediments, chlorine, or chemical additives into watercourses, or by bank erosion, during line flushing.

The Contractor shall take all measures necessary to prevent pollutants from entering storm drains or watercourses. For the purpose of eliminating storm water pollution, the Contractor shall implement the effective Rest Management Practices (BMPs). BMPs include general housekeeping practices, appropriate scheduling of activities, operational practices, maintenance procedures and other measures to prevent the discharge of pollutants directly or indirectly to the storm drain system. These BMPs shall be maintained for the duration of the Contractor's work. The Contractor shall also be responsible for proper disposal of all waste materials, including wastes generated by the implementation of BMPs.

The following Water Utility Pollution Prevention Plan shall be implemented to prevent storm water pollution: (attached the WUPPP here).

Section 3
MODEL WATER UTILITY POLLUTION PREVENTION PLAN
Outline

The model WUPPP will include the following sections:

I How to use the WUPP

II Introduction

- A. Purpose
- B. Scope

III Background

- A. Development process
- B. Potential impacts by water utility discharges
- C. Regulatory requirements
- D. Discharges of concerns
- E. Potential impacts to receiving water bodies

IV BMP Selection

- A. BMP selection process
- B. Table of BMPs and discharges
- C. Unlisted discharges

V Reporting/Record keeping

- A. NPDES Permit requirements
- B. Evaluation

Appendices

- A. Individual BMPs
- B. Forms

Section 4
STANDARD OPERATING PROCEDURES

This section presents the co-permittee's standard operating procedures (SOPs) for implementation of the performance standard.

Example SOPs:

- Establish process for identifying problems, implementing BMPs, and follow up. An example of this is a decision chart to include:
  • Define the event
  • Assess potential impacts
  • Assess point of discharge
  • Define scope, location, and materials & equipment for implementing BMPs.
  • Notify applicable agencies and public
  • Implement WUPPP
  • Conduct follow-up inspection

- Establish responsibility for overseeing implementation of BMPs. An example of this is the organization chart of those corresponding to the above decision chart, including title and responsibility.

- Establish process for feedback on effectiveness and feasibility of BMPs from field crews.

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PART IV

Co-permittee Reporting Form
(Co-permittee Name)
(Year)

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