Storm Water Management Program

For The

CITY OF KINGSBURG

DRAFT

November, 2004

Under the California State Water Resources Control Board General Permit for Small Municipal Separate Storm Sewer Systems (MS4s) No. CAS000004

Permitee Fact Sheet

City of Kingsburg

Contact Person:

Donald F. Pauley, City Manager

Address:

1401 Draper St. Kingsburg, CA 93631

Phone:

(559) 897-5821

Population (2005)

11,237

Notice of Intent

Filed:

10/27/03

State Water Resources Control Board NOTICE OF INTENT TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT FOR STORM WATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (WATER QUALITY ORDER NO. 2003 – 0005 - DWQ)

Ι.	NOI Status									
	Mark Only One Item 1. [X]New Permittee 2. []	Change of Infor	mation WDID #:_							
II.	Agency Information									
-	A. Agency									
	City of Kingsburg B. Contact Person C. Title									
	B. Contact Person Donald F. Pauley		City Manag	ger						
	D. Mailing Address (Line 2) 1401 Draper Street E. Address (Line 2)									
	F. City Kingsburg	State CA	G. Zip 93631	H. County Fresno						
	I. Phone (559) 897-5821 (559) 8	897 - 5568	K. Email Address	lfpauley@psnw.com						
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V.	Billing Information									
	A. Agency City of Kingsburg									
	B. Contact Person	C. Title								
	Don Jensen		nance Direct	or						
	D. Mailing Address	E. Address	(Line 2)							
	1401 Draper Street									
	F. City Kingsburg	State CA	G. Zip 93631	H. County Fresno						
	I. Phone J. FAX (559) 897-5821 (559) 897	7-5568	K. Email Address dje	nsen@psnw.com						
	Fees are based on the daily population served by the Small MS4. To deter 23, Division 3, Chapter 9 Article 1), which can be viewed at www.swrcb.c			dule (California Code of Regulations, Title						
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	Check(s) should be made payable to the SWRCB and submitted to the app	oropriate RWQCB.								
	SWRCB Tax ID is: 68-0281986	•		i						
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2. [] Applying for a permit with one	or more co-peri	nittees				
The undersigned agree to work as co-permi	ittees in implementi	ng a complet	e small MS4 storm wa	ter program. The program		
must comply with the requirements found i	n Title 40 of the Co	de of Federal	Regulations, parts 12	2.32. Attach additional sheets		
if necessary. Each co-permittee must comp						
Lead Agency		Signature				
Agency		Signature	······································			
Agency		J. S. Subanaro				
Agency		Signature				
Agency		Signature				
2 N I Company Implementing Entity ((CIE)					
3. K] Separate Implementing Entity (SIE)					
A. Agency						
Kingsburg Joint Union Eleme B. Contact Person	entary School	Distric C. Title	t			
B. Contact Person	•	C. Title				
Dr. Mark Ford	····	Su	<u>perintendent</u>			
D. Mailing Address		E. Address	(Line 2)			
1310 Stroud Avenue						
F. City	Sta	ite	G. Zip	H. County		
Kingsburg		CA	93631	Fresno		
	FAX	•	K. Email Address			
(559) 897-2331	(559) 897	-4784	·			
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are significant penalties for submitting false information	on, including the possibi	lity of fine and i	mprisonment. Additionally,			
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V						
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II. Certification						
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assure that qualified personnel properly gather and eva	aluate the information su	bmitted. Based	on my inquiry of the person	or persons who manage the system, or		
those persons directly responsible for gathering the inf	formation, to the best of	ny knowledge a	nd belief, the information st	abmitted is true, accurate, and		
complete. I am aware that there are significant penalti						
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A Printed Name:	•					
A. Printed Name: Donald F. P.	autey					
	>					
B. Title: City Manage						
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C. Signature: D. Date: 10/28/03						
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VI. Discharger Information (check applicable box(es) and complete corresponding information)
1. [] Applying for Individual General Permit Coverage

2. [] Applying for a permit	with one or more o	o-permittees		
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if necessary. Each co-permittee n	nust complete an NOI			
Lead Agency		Signatu	ıre	
Agency		Signatu	ure	
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K] Separate Implementing	Entity (SIE)			
A. Agency Kingsburg High Scho				
B. Contact Person Linda Clark	or bistrict	C. Title	Superintendent	
D. Mailing Address 1900 18th Avenue		E. Addre	ess (Line 2)	
F. City		State	G. Zip	H. County
Kingsburg		CA	93631	Fresno
I. Phone (559) 897-7721	J. FAX		K. Email Address	
H. Operator Type (check one) 1. [] City 2. [] County	3. [] State 4. [] I	Federal 5. [x]	Special District 6. [] Government Combination
Minimum Control Measures being [x] Public Education [x] Construction	g implemented by the [] Public [] Post Co	SIE (check all that ap Involvement onstruction	ply) [] Illicit Dischar; [] Good Housek	
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Storm Water Management Program

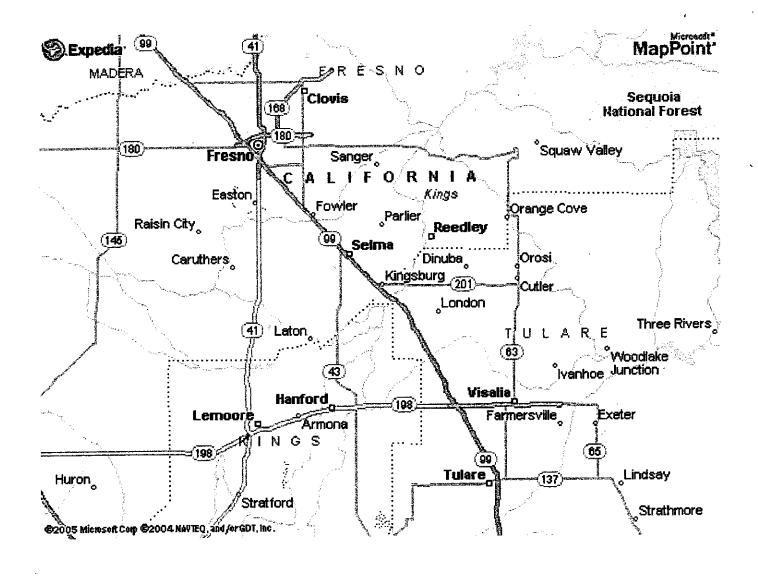
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Section 2	Storm Water Systems Descriptions and Needs Assessment
Section 3	Storm Water Management Program
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Section 4	Performance Measurement and Reporting

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City Map Storm Drain Master Plan, Existing Drainage Zones B.

LOCATION MAP



Section 1 Introduction

This Storm Water Management Program (SWMP) describes the stormwater quality management activities proposed by the City of Kingsburg ("City") in compliance with the federal stormwater quality regulations, 40 CFR, Part 122 et seq. (phase II), Porter-Cologne Water Quality Control Act § 13376, and with the State Water Resources Control Board General Permit for Municipal Separate Storm Sewer Systems (MS4s) No. CAS000004. The City of Kingsburg has filed the Notice of Intent to participate in the State's General Permit.

The federal and state regulations require designated MS4s to develop a plan to undertake six Minimum Control Measures (MCMs). The permitee's are also required to demonstrate a 5year work plan. The Storm Water Pollution Prevention Plan must also include performance measures for the work plan. This report describes the control measures, work plan and performance measures for the City of Kingsburg.

The Minimum Control Measures include:

- 1. Public Outreach and Education
- 2. Public Participation and Involvement
- 3. Illicit Discharge Elimination
- 4. Construction Site BMPs Over 1 Acre
- 5. Post Construction BMPs
- 6. Municipal Activities

The City of Kingsburg provides storm drainage for the entire community. The storm drainage system includes pipelines, local retention basins, as well as one discharge outlet to the Kings River. Storm drainage serves residential, commercial and industrial land uses. The City of Kingsburg is a full service municipality providing Police, Fire, Ambulance, water, storm drainage, streets and park services to the community.

The objectives of this Storm Water Pollution Prevention Plan are:

- To meet the requirements of the SWRCB General Permit.
- To address stormwater quality concerns specific to the community.
- To provide a plan consistent with the community's values and means.
- To involve the community in development and implementation of the plan in order to meet the requirements with the least cost impact.

Section 2 Storm Water System Description and Needs Assessment

This Section describes the City, its storm drainage system, stormwater quality concerns, projected growth, and demographics. This Section also describes the current status of stormwater quality control measures implemented by the City. The needs assessment for the City's Storm Water Management Plan, based on current activities and the presence of potentially polluting factors in the storm water system are also addressed. There is not enough site-specific information currently available in the City of Kingsburg to identify specific pollutant sources.

1. Description of the City

Storm Water Infrastructure

The City of Kingsburg's storm drain system consists of several independent networks of storm drain catch basins and pipes that discharge into 11 excavated basins throughout the City. Each of these networks are classified into 11 distinct drainage zones (see Appendix B).

The streets in the developed areas of the City have curb and gutter street systems with gutter inlets collecting the storm water. The City's storm drainage system is primarily a closed system where the majority of the storm water is contained within the City facilities. The system has one controlled discharge into the Cole Slough Canal and limited discharge into the Palladina Canal. Approximately one-third of the City's storm drainage system drains directly into the Kings River. The City is working with the Consolidate Irrigation District (CID) to eliminate this discharge by redirecting it to a basin owned and operated by CID.

The City of Kingsburg does not operate any combined sewer and Stormwater pipelines or discharges. The only treatment received by the separate Stormwater system occurs in a limited manner at the retention basins.

Storm Water Operations and Maintenance

The City conducts a variety of municipal operations that have a relationship to storm water quality, including stormwater collection system maintenance, street sweeping, a leaf collection program, streets maintenance, parks maintenance, and fleet operations. Many of these operations reduce impacts on storm water quality. Most of these municipal operations are housed at the Corporation Yard.

1. Storm Drainage

Overall the City of Kingsburg's storm drainage system is in good condition. The City's sole storm water lift station and pipelines are cleaned and repaired as needed. Catch basins are cleaned once a year before the beginning of the rainy season. Storm basins are also part of the City's parks system and receive regular maintenance including lawn mowing and inspection.

Boyle Engineering Corporation completed an update to the City's Storm Drainage

Master Plan that was adopted by the Kingsburg City Council in June of 2005.

2. Water and Sewer Field Operations

City of Kingsburg Public Works staff respond to water line breaks and storm drainage backups as needed. The City has an established procedure for responding to spills that might impact storm drainage and public health. During a spill, catch basins are sandbagged as necessary to prevent release to receiving waters, spills are cleaned up and the resulting waste is disposed of as appropriate.

The City does have a water conservation program that includes public education and information. This program will be expanded to include storm water quality messages for the community.

3. Streets

Street maintenance activities include overlays, pothole patching and crack sealing. Currently, the City's capital improvement program includes reconstruction of streets. Streets operations include street lighting, traffic signals and signage.

4. Street Sweeping, Leaf Pickup Program

Street sweeping is performed by a private vendor contracted by the City. The vendor is required to use air/vacuum type street sweeping equipment. All residential, commercial and industrial streets are swept biweekly. The downtown area is swept twice per week All paved alleys are swept twice per year (October and January). The collected street sweepings are hauled to a compost site.

The Leaf Pickup Program is performed by public works staff. Leaves are set out by residents in street piles in residential areas for pickup during November and December. The collected leaves are hauled off to a compost site.

5. Parks Maintenance

The City operates 7 parks and recreational facilities with four of those serving as combined parks/drainage basins. Maintenance includes the application of fertilizer and pesticides, mowing, pruning and litter removal. Chemical are applied at agronomic rates and at appropriate times to minimize chemical release in runoff.

Fire Fighting

The Kingsburg Fire Department is responsible for fire fighting within City limits. Fire fighting can result in runoff of excess fire fighting water to storm drains. The potential for fire fighting water containing pollutants has not been assessed, but is not expected to be a significant source due to the fact that the City averages less than two structural fires a year.

7. Fleet Maintenance

The City operates a fleet of cars, trucks and heavy equipment for public works, functions. The fleet is operated and maintained at the Corporation Yard. Vehicle maintenance is conducted under cover. Vehicle washing occurs on a paved area. All hazardous material is stored in above ground tanks or containers and removed by licensed recyclers.

8. Corporation Yard

The City's Corporation Yard is the site for vehicle parking and maintenance, building maintenance supplies, and the field office for streets, water and storm drain operations. The containment of industrial chemicals, batteries, vehicle drips, and painting materials is indoors. The Corporation Yard is paved. Runoff in this area flows to adjacent street curb and gutter system and ultimately into a detention basin.

Storm Water Quality

The City's land uses include residential, commercial and industrial areas. These land uses have the potential to generate pollutants. Community activities that are likely to be contributing to runoff pollution include automobile maintenance and washing, building construction, landscape maintenance, pest control, restaurants, pet waste disposal, municipal infrastructure maintenance, industrial activities, new development and redevelopment.

The City of Kingsburg does not conduct any specific or routine monitoring of storm water quality. No particular chronic or acute concerns have been identified with Kingsburg's storm water quality to date. City staff has not observed non-stormwater discharges or flows from the following list (as defined in the draft General Permit section D .2.c (6)) that are significant contributors of pollutants to their MS4 and exist in Kingsburg.

- 1. Water line flushing
- 2. Landscape irrigation
- 3. Rising ground waters
- 4. Uncontaminated ground water infiltration to separate storm sewers
- 5. Uncontaminated pumped ground waters
- 6. Discharges from potable water sources
- 7. Foundation drains
- 8. Air conditioning condensation
- 9. Residential car washing
- 10. Dechlorinated swimming pool discharges

Projected Community Growth

Kingsburg is a mostly residential community, with a downtown commercial core, and a small industrial area. The City's population was estimated at 11,237 by the DOF in 2002.

In November 2004 the citizens of Kingsburg overwhelmingly approved an amendment to the City Charter mandating that the Planning Commission and City Council implement growth

management regulations. Consistent with that mandate the City has adopted a Growth Management Ordinance limiting the number of housing units built in a year to 115 units with exceptions for affordable and seniors housing. The plan for future storm water infrastructure requires that new development will construct and dedicate necessary storm drainage facilities including participation in the development of master Storm Drain basins as identified in the recently adopted Storm Drainage Master Plan.

Funding of Storm Water Activities

Storm water operations and maintenance costs are funded by the General Fund, development impact fees and newly formed Lighting and Landscape Districts. There is currently not a separate line item for Storm Water operations & maintenance in the City's annual budget.

New storm drainage infrastructure is constructed by developers in accordance with City design standards, and then dedicated to the City, or constructed by the City through the use of funds already collected through developer fees. Some ongoing operations & maintenance costs for newly developed areas are covered by lighting and landscape districts, managed by the City. Capital funding for rehabilitation of existing storm drainage facilities is provided by local funds and grants from state or federal sources. The capital improvement program funding level for storm water purposes varies depending on annual funding and over all capital improvement program priorities.

Legislative Authority for Storm Water Activities

Kingsburg was incorporated in 1908 and became a Charter City in 1998, is empowered to provide public works services, collect service fees, and to set regulations related to storm water quality. The City establishes an annual budget based on established service standards for storm drainage and other municipal maintenance activities.

The City of Kingsburg's Municipal Code addresses various aspects of storm water quality control. The Municipal Code will need to be updated to incorporate stormwater quality measures relevant to the SWRCB General Permit. Among the topics to be evaluated are the prohibition on pollutant discharges to the storm drainage system, construction activity procedures and fees, and the enforcement protocol for violations.

Receiving Streams

Storm Runoff

The Kingsburg's Stormwater system discharges approximately one-third of the storm water collected in the City to one outfall on the Kings River. Because the Kings River is a major watershed of the State, the City's stormwater discharge volume represents a minor percentage of the river's storm event flow.

Section 3 Storm Water Management Program

Approach

Due to the already in place maintenance practices, the City of Kingsburg assumes that a less than typical level of urban runoff pollution exists in its storm water runoff and that a variety of Citywide pollution prevention activities can be adopted to further minimize that pollution. Insufficient evidence is available about specific sources of pollutants to develop a more targeted approach. The pollution prevention activities to be undertaken are organized into the following Minimum Control Measures:

- 1. Public Outreach and Education
- 2. Public Participation and Involvement
- 3. Illicit Discharge Elimination
- 4. Construction Site Best Management Practices
- 5. Post Construction Best Management Practices
- 6. Municipal Activities

The approach to storm water pollution prevention will also be an adaptive management plan. The results of each year's activities will be evaluated in preparation for the next year's work. Priorities and scheduling of activities may change from this initial plan based on the needs of the community to meet the overall objective of reducing the potential for pollution in urban runoff. This section outlines the control measures in each of the 6 categories to be undertaken during the 5-year permit period.

TASK CODING: The tasks numbers are coded to indicate where they fit into the 5-year work plan. The first number indicates the year of the activity. The second number identifies it within the year, usually as part of a continuing program element that corresponds with one of the six Minimum Control Measures.

I. PUBLIC OUTREACH AND EDUCATION

The objectives of the Public Outreach and Education Element of this Storm Water Management Plan are:

- To raise public awareness that citizen actions has an impact on storm water quality in the City's system,
- To involve the public in the development of the Storm Water Management Plan, and
- To develop support for the necessary funding.
- A. General Public Education on Storm Water Quality impacts and prevention measures.

The purposes of these tasks are to provide the widest communication with the general public about what they can do to prevent storm water pollution.

Develop or purchase public outreach and education materials, such as brochures, posters and coloring books for general public information about storm water quality control.

Since the NPDES Stormwater Program was established in 1991, a number of the Phase I permitee's have developed a wide range of public education materials that are in the public domain, and available for use by Phase II permitee's. Examples can be found in the Model Urban Runoff Program or by contacting Phase I permitees.

- Task 2.1 Distribute educational materials to the public schools, cultural events and Library, and through the City's utility bills.
- Task 3.1 Distribute educational materials at point of sale of household, automotive and garden chemicals, at cultural events, and other relevant venues.
- Task 4.1, 5.1 Review needs and results, and conduct additional public education, based on the community's response to the first three years of outreach.

At the completion of each year's public education program, the City needs to review the results and set priorities for the next year's target audience for storm water quality control education. For example, if a neighborhood has been the focus of education related to crankcase oil dumping in storm drains, results can be measured by the number of occurrences of such dumping before and after the education effort.

B. Education of Specific Community Groups

The purpose of this task is to focus on certain business types that have a higher potential to generate pollutants in municipal runoff. The first of these are restaurants and automotive repair shops. Other businesses that may benefit from focused education include commercial/residential landscape service providers, vehicle cleaning services, pool service companies, and pest control companies.

Task 2.2 Prepare and distribute education materials to all restaurants and auto repair shops about Best Management Practices for their business.

Since the NPDES Storm Water Program was established in 1991, a number of the Phase I permitee's have developed public education materials to focus on the high risk behaviors of certain businesses. Many of these public education materials are in the public domain, and available for use by the Phase II permitee's. Examples can be found in the Model Urban Runoff Program or by contacting the Phase I permitee's. Santa Clara Valley Water District and the Fresno Metropolitan Flood Management District are leaders in this area.

- Task 3.2 Follow-up education with restaurants and auto repair shops.
- Tasks 4.2, 5.2 Educate additional targeted business groups, with the highest potential for storm water polluting actions.

Depending on the results in the first three years of public education for targeted businesses, and new information gathered during the early years of the SWMP, the City should adapt their management plan for educating certain businesses. For example, if good results are achieved with restaurants and vehicle repair shops, then public education for business could be shifted to the next highest priority business sector.

II. PUBLIC PARTICIPATION AND INVOLVEMENT

The objectives of the Public Participation and Involvement Element are:

- To educate the public about the relationship between community activities and runoff pollution,
- To educate about specific pollutants and what citizens can do about them, and
- To foster participation in community-based projects and volunteer activities regarding pollution prevention.

The purpose of these activities is to support community participation in preventing and eliminating sources of pollution in urban runoff. The second purpose is to provide opportunities for the community to prioritize the types of activities that should be included in the Storm Water Management Program and any implementing ordinances, as adopted by the City Council. These two processes provide a key connection between the behaviors of the community and the most cost effective means of preventing pollution.

A. Storm Drain Marking and Community Cleanup Events

Task 1.2 Purchase storm drain stencils or placards for volunteers to mark storm drain inlets.

Since 1991, vendors have developed and Phase I permitee's have tested the effectiveness of storm drain inlet marking devices. The City will need to evaluate marking devices best suited for its storm drain system, and the work force available to install them.

Task 1.3 Begin organizing volunteers to stencil storm drain inlets.

The City has some experience in working with volunteers for community-based efforts.

- Task 2.3 Mark 1/3 of the City's storm drains or install marking tiles using volunteers whenever possible. Use City crews or alternative work programs when volunteers are not available or appropriate.
- Task 3.3 Mark the next third of the City's storm drains, as in Task 2.3.
- Task 4.3 Mark the final third of the City's storm drains, as in Task 2.3.
- Task 5.3 Maintain marking program.

Task 2.4, 3.4, 4.4, and 5.4

Continue the City's twice a year Community Cleanup events.

These cleanup events, two weeks in the spring and one Saturday in the fall, are staffed by the City's contract refuse service provider and are coordinated with the County's household hazardous waste disposal schedule when possible.

B. Legislative Action

- Task 1.4 Conduct a public workshop on the proposed Storm Water Management Program, to educate the community on upcoming activities, and seek their input on the most appropriate approach.
- **Task 1.5** Prepare a draft Storm Water Quality ordinance or update an existing ordinance.

The Storm Water Quality ordinance needs to address allowable non-storm water discharges to the storm drain system, a prohibition on the discharge of pollutants to the storm drainage system, and a tiered enforcement protocol and due process for violations. The ordinance may include provisions to recover the cost of enforcement actions. The ordinance may include the authority for incentive programs or public recognition of businesses that display good environmental citizenship.

Task 1.6 City Council adoption of Storm Water Quality ordinance.

The City Council should take legislative action to enact or update the Storm Water Quality ordinance, in order to provide the authority for City staff to undertake certain actions required in the Storm Water Management Plan, and by the SWRCB Small MS4 General Permit.

Task 2.5 Educate businesses and all new developments about the new Storm Water Ordinance.

City staff should develop press releases, handouts, newsletters or other materials to provide businesses and the development community with the information they need on their role in preventing storm water pollution. Examples are available from Phase I permitee's on how to undertake this kind of business education.

III. ILLICIT DISCHARGE DETECTION AND ELIMINATION

The objectives of the Illicit Discharge Detection and Elimination Element are:

- To control illicit discharges to storm drains by field surveys and investigations,
- To prevent improper disposal of wastes through a program that combines public education, alternative disposal options and enforcement as needed, and
- To contain and clean up accidental spills utilizing proper methods.

The purpose of this section is to provide a program under which uncontrolled sources of pollution directly discharged to storm drains are eliminated. The work plan for the Illicit Discharge Detection and Elimination Element will establish permissible discharges to storm drains, establish enforcement procedures for violations of the discharge standards, conduct field investigations and provide a complaint/spill response program. Some of these tasks overlap with the Public Involvement and Participation Element described above.

Illicit discharges can include improper dumping of crankcase oil and antifreeze, household chemicals or other deleterious materials into storm drains. It can even include the discharge of chlorinated swimming pool water into a storm drain. This part of the program is the most detection and enforcement oriented part of the SWMP.

The City will need to conduct an assessment of the extent and nature of illicit discharges that are occurring in the City. Then the detection and elimination program can be prioritized towards the most probable source of illicit discharges.

The City has only a few businesses that are subject to the SWRCB Industrial General Stormwater Permit. The potential for pollutants from these businesses is considered low, and so this Work Plan does not include a requirement to monitor these industries' compliance with the SWRCB industrial permit.

Task 1.7 Develop the outline of Illicit Discharge Detection and Elimination Program. The City should be scheduled to adopt this Program by the third year.

This task should include the work plan for periodic inspection of the storm drain system, and the plan of action for responding to any illicit discharges identified. Illicit discharges include illegal dumping into the City's storm drain system. A two part approach is needed for these possible pollution sources. Illicit discharges are discovered by periodic inspection of pipelines, ponding basins and by responding to complaints of odors or foul water in storm drains. Illegal dumping detection may require a hotline system for citizen reporting of observed dumping, and education of City employees and the public to report illegal dumping. The work plan needs to set priorities among the activities and include an annual assessment to adapt the management of the Illicit Discharge Detection and Elimination Program to the highest priorities.

Task 2.8 Develop a map of the City's storm drain system, showing areas to be targeted for illicit discharge surveillance. The map should be the basis for geographically tracking storm water quality data as monitoring data accumulates, in order to address site-specific pollution sources. It is intended this mapping be developed

during years two and three.

The City has current, up-to-date maps of the storm drain system. The objective of this task is to maintain a map(s) that tracks all reported incidents of illicit discharges on an annual and by location basis.

Task 2.6 Conduct pilot surveillance for illicit discharges. Review and revise the scope and the approach to detecting illicit discharges, for the purpose of refining the multi-year program.

The first year's work on illicit discharge detection and elimination should be focused on understanding the scope of the problem, if any, and the effort that will be required to address the entire City. The pilot program will test various detection methods, such as to assess costs, equipment needs and effectiveness in detecting illicit discharges. The results of the pilot test should be used to refine a multi-year program to address illicit discharges City wide on a periodic basis.

Task 2.7 Eliminate illicit discharges by cooperation of dischargers whenever possible, or by City action or enforcement action if necessary. Inspections will be on-going, being performed as a part of the City's system maintenance. See Task 1.7

The City needs to develop a procedure for eliminating illicit discharges and illegal dumping. This may include education, voluntary compliance, mandatory compliance with a violation citation, and legal action, as each case warrants. Staff responsibilities should be established for enforcement. Whenever an illicit discharge or illegal dumping situation is identified, the City needs to take action with the responsible parties to eliminate the pollution source.

Task 3.5, 4.5, and 5.5

Conduct an annual survey of the City for illicit discharges. The performance measure should be to survey the entire City on an annual basis.

Task 3.6, 4.6 and 5.6

Eliminate illicit discharges as they are found, as in Task 2.7. This task will also include training of staff and provide for community education. See Section 2.

IV. CONSTRUCTION SITE RUNOFF CONTROL, OVER 1 ACRE

The objective of the Construction Site Runoff Control Element is:

• To develop and implement a control program to reduce the potential for the discharge of pollutants into urban runoff from construction sites over 1 acre.

In March 2003, the Federal regulations required construction sites over 1 acre to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). Construction over 5 acres has been subject to the regulations since 1991. A SWPPP describes the Best Management Practices that will be used during construction to reduce the sources of potential pollution, control sediments and educate construction workers. Under the General Storm Water Permit for Small MS4s, cities participating in the General Permit will be delegated the regulatory authority and responsibility to require SWPPPs and inspect their implementation at construction sites.

The City may consider using the existing resources such as the State Storm Water Handbook for Construction as guidance for Best Management Practices.

Task 1.8 Educate all local developers, construction firms and building department staff about the new requirements for Best Management Practices during construction.

Developers and construction firms in the San Joaquin Valley have already been working with the Stormwater Pollution Program in Phase I cities and for any project over 5 acres. Building Departments in Phase I cities should be able to assist the permitee in developing their own program, design standards and plan review procedures to incorporate stormwater pollution prevention measures. Prepare handouts, design standards and guidance documents specific to the City.

Require Storm Water Pollution Prevention Plans (SWPPPs) in accordance with the SWRCB General Permit for Construction Activities, after March 10, 2003, for all construction over 1 acre, for both public and private projects. The City will review all SWPP's. The City will also develop inspection procedures, a checklist for inspections and procedures to identify priority sites for inspection and enforcement. Establish a tracking system for inspections and develop a reporting system for submittal of public information and development procedures for responding to information.

Each project over 1 acre will now be required to include stormwater pollution prevention measures in the design and construction of the project. Then the owner or developer is required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and to submit a Notice of Intent (NOI) and fee to the RWQCB. The RWQCB sends the developer back a notice with the project's WDID number.

In order to obtain a building permit, the developer will also have to provide the City with a copy of the project's NOI and SWPPP. The City reviews the SWPPP and the project plans to determine that the construction and post-construction BMPs are appropriate for controlling the potential pollutant sources from the site. This review is part of the regular plan review and building permit issuance.

Once the project is permitted, the City's inspectors observe the implementation of the BMPs to assure that they are effective. This can include observing where concrete and stucco washout is occurring, the containment of construction chemicals, the control of dirt being tracked off-site, the installation of on-site pollution prevention structures, etc. When the project is complete, the developer sends the RWQCB a Notice of Termination.

Task 2.9 Implement Storm Water ordinance enforcement provisions to deal with problem sites. The task goal is to establish a system for enforcement of storm water violations. Site inspections would include all construction sites. All effort will be made to perform inspections prior to and after rain events and during the winter months. Priority sites will require more frequent inspection, based upon job site conditions.

The adoption or upgrading of a stormwater ordinance, in Task 1.6, will provide an enforcement protocol to deal with any problems in stormwater control at construction sites.

Task 2.10 Develop or revise the City's grading ordinance to incorporate sediment control measures for storm water quality protection. The requirements of job site SWPP's and BMPs shall be complied with. Establish a storm water hotline for the public and develop procedures for receiving and responding to complaints. The ordinance will include enforcement provisions including fines and the ability to stop work on construction if significant problems are identified and not corrected by the developer.

The City's grading ordinance may need to be revised to coordinate with the storm water pollution prevention measures called for in this Storm Water Management Program.

Task 3.7 Continue training for inspectors and plan review staff on SWPPP requirements and best management practices.

After the initial phases of the Work Plan, City staff may need continuing education in new materials and methods of stormwater pollution prevention that are relevant to new construction.

V. POST CONSTRUCTION BMPs

The objective of the Post Construction Best Management Practices (BMP) Element is:

• To reduce the potential for discharge of pollutants from new development and redevelopment areas, using a strategy that combines reducing and eliminating sources of pollutants, managing site runoff volumes and flow rates such that they are similar to pre-construction levels, and treating runoff as appropriate.

Existing development which generates pollution will be addressed by Public Outreach and Education, and if warranted by a serious condition, by the Illicit Discharge Elimination element of the SWMP. The City may use the existing Storm Water Handbooks or may consider Post-Construction BMPs guidance documents developed by Phase I Cities.

Task 1.10 Educate local developers about post-construction BMP requirements. Prepare handouts and guidance documents. Training will continue as required in subsequent years.

This task can be combined with Task 1.9.

Task 1.11 Develop a model Long-term Maintenance and Monitoring Agreement for Post Construction BMPs as required, that will assure that BMPs are being operated and maintained on private property.

Phase I cities have found the need to assure long-term maintenance and measurable effectiveness of post-construction BMPs by entering into an agreement with the developer. Not every project will require an agreement, just those with a high potential for pollution and complex post-construction BMPs. Examples of such Agreements are available from Phase I cities. Enter into and implement an Agreement on appropriate projects.

Task 2.11 Require appropriate post-construction BMPs on new development. Each site shall be reviewed for application of appropriate BMPs.

As discussed in Task 2.8 above, include post-construction BMPs as part of the plan review and building permit process.

Task 3.8 Training will continue on an as needed basis updating staff to latest BMPs and storm water inspection processes.

This task can be combined with Task 3.7.

- Task 4.7 Implement Storm Water ordinance enforcement provisions to deal with problem sites where post-construction BMPS are not being utilized or maintained.
- Task 5.7 Include SWPPP BMP needs in regular update of City standard specifications. Whenever the City updates its design standards, post-construction BMPs should be included.

VI. MUNICIPAL ACTIVITIES

The objective for the Municipal Activities Element is:

 To identify, develop and implement Best Management Practices and good housekeeping procedures to address urban runoff pollution associated with municipal operations.

The City provides water, storm drain, streets, parks and recreation services. The program is a progression of activities that educate City staff and then take positive action to eliminate the potential sources of storm water pollution from municipal activities.

- Task 1.12 Develop a training program regarding BMPs for municipal activities, such as good housekeeping, landscape maintenance, chemical use, containment of industrial chemicals and fuels, sediment and erosion control.
- Task 1.13 Conduct an inspection and assessment of all municipal activities, such as the Corporation Yard, street pavement maintenance activities, parks fertilizer and pesticide applications, etc. Prioritize the BMPs to be implemented within City operations.

The State BMP Handbooks and the Model Urban Runoff Program provide guidance on how a city should conduct an assessment of their physical plant for the potential to release pollutants to storm drainage. Potential sources such as material storage, vehicle maintenance, and field activities are included.

Task 2.12 Conduct BMP training for all field supervisors, construction inspectors and design engineers for the City's own construction projects.

This task can be combined with Task 1.9.

- Task 2.13 Begin implementation of BMPs for municipal operations and capital improvement projects. Particular focus shall be on the corporation yard to bring it into compliance with the latest BMPs for storm water pollution prevention.
- Task 2.14 Develop or update the Emergency Response Plan for responding to chemical spills on City streets and into storm drains.

The Plan should include first responder risk assessment methods, notification procedures, public access control, collaboration with public safety officials, cleanup protocols, incident closure, and outside resources such as hazardous materials cleanup contractors or mutual aid agreements. The type of spills to be covered should include hazardous materials.

- Task 3.9 Conduct follow-up training for City staff, on an as-needed basis for specific topics related to municipal activities.
- **Task 3.11** Assess street sweeping effectiveness.

Conduct targeted studies to optimize street sweeping effectiveness reviewing the frequency of sweeping for residential, commercial and industrial areas.

Review and revise BMPs for municipal activities with operational staff input.

Task 4.8

Table 3.1 Summary of Pollution Work Plan

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Control Measure	Year 1	Year 2	Year 3	Year 4	Year 5
Public Education and Outreach	1.1 Develop brochures	2.1 Distribute Educational materials	3.1 Distribute Educational materials	4.1 Assess additional public educational needs	5.1 Assess additional public educational needs
		2.2 Begin education of restaurants and auto repair shops about BMPs	3.2 Follow up education with restaurants and auto repair shops	4.2 Educate additional business groups	5.2 Educate additional business groups
Public Participation and Involvement	1.2 Buy storm drain stencils				
THY OF CHICAL	1.3 Organize volunteers to mark storm drains	2.3 Mark storm drains using volunteers	3.3 Mark storm drains in the next section of the City	4.3 Mark more storm drains as needed	5.3 Mark more storm drains as needed
	1.4 Conduct public workshop on the proposed SW Pollution Prevention Plan	2.4 Conduct annual community cleanup events	3.4 Conduct annual community cleanup events	4.4 Conduct annual community cleanup events	5.4 Conduct annual community cleanup events
	1.5 Write draft or revise SW quality ordinance	2.5 Educate businesses about the new ordinance			
	1.6 Governing body adoption of SW ordinance				
Illicit Discharge Detection and Elimination	1.7 Develop outline of illicit discharge detection and elimination program	2.6 Conduct annual survey of City for illicit discharge	3.5 Conduct annual survey of City for illicit discharge	4.5 Conduct annual survey of City for illicit discharge	5.5 Conduct annual survey of City for illicit discharge
		2.7 Eliminate illicit discharges as found	3.6 Eliminate illicit discharges as found	4.6 Eliminate illicit discharges as found	5.6 Eliminate Illicit discharges as found
		2.8 Develop map of storm drain system and target areas			
Construction Site Runoff Control	1.8 Educate local developers, construction firms and Building Dept. on BMP requirements	2.9 Implement SW Ordinance enforcement provisions to deal with problem sites	3.7 Continue training for building inspectors and plan review engineers on SWPPP requirements		
	1.9 Require SWPP's for all construction over 1-5 acres	2.10 Develop or revise grading ordinance			

Table 3.1 Continued

Control Measure	Year 1	Year 2	Year 3	Year 4	Year 5
Post Construction BMPs	1.10 Educate local developers and engineering firms about BMP requirements	2.11 Require appropriate post construction BMPs on new development	3.8 Train building inspectors and plan review engineers on SWPPP requirements	4.7 Implement SW Ordinance enforcement provisions to deal with problem sites	5.7 Include SWPPP BMPs needs in regular update of City standard specifications
	1.11 Implement Long-term Maintenance And Monitoring Agreements for private BMPs				
Municipal Activities – Good Housekeeping	1.12 Develop training program for City Staff	2.12 Conduct BMP training for City Staff	3.9 Follow up training with City Staff		
		2.13 Begin BMP implementation	3.10 50% of BMPs implemented	4.8 100% of BMPs implemented.	
				4.9 Review and revise BMPs with staff input	
	1.13 Inspect and assess cleanliness of municipal activities	2.14 Develop or revise SOP for street or storm drain spills			

Section 4 Performance Measurement and Reporting

The purpose of this Section is to establish the methods by which the City will measure and report on efforts to implement the Storm Water Management Program. The City's performance under the General Permit will be measured in two ways:

1. Storm Water Management Program activities completed as scheduled.

2. Tabulation of potential pollutants removed from the City's environment each year. These include measures such as the tonnage of street sweepings collected each year, or the number of illicit discharges discovered and eliminated.

The performance measures are organized on the suggested worksheet shown in Figure 4.1 for routine use during the year.

In the event the City is not able to comply with the General Permit, or with the planned activities of their Storm Water Management Program, the City shall notify the Central Valley Regional Water Quality Control Board (CVRWQCB) within 30 days. If an emergency condition exists that endangers human health or the environment, the City shall notify the CVRWQCB within 24 hours of becoming aware of the circumstances, and follow up with a written report within 5 days.

By September 15th of each year, beginning in 2006, the City must submit an annual report to the Central Valley Regional Water Quality Control Board. The report shall include:

1. The status of compliance with permit conditions;

2. An assessment of the appropriateness and effectiveness of the identified BMPs;

3. Status of identified measurable goals;

- 4. Results of information collected and analyzed, including monitoring data, if any, during the reporting period;
- 5. A summary of the Storm water activities the City plans to undertake during the next reporting cycle;
- 6. Any proposed changes to the SWMP along with a justification of why the changes are necessary,
- 7. A change in the person or persons implementing and coordinating the SWMP.

Figure 4.2 is an annotated outline of the annual report to be submitted by the City.

The City will retain the records corresponding to the SWMP implementation for at least 5 years, or during the duration of the General Permit. Such records are public documents, accessible to the public in accordance with the Public Information Act.

Figure 4.1

Storm Water Management Program Monthly Tabulation of Storm Water Quality Activities

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Activity	Tally	Notes
Street Sweeping tonnage		
Garden Refuse Pickup, Tons		
Storm inlets marked		
Illicit discharges found and		
eliminated		
Corp. Yard cleanup activities		
Cleanup Event Days & Estimated		
Tons Removed		
Catch Basins and Storm Drains		
Cleaned	i	
		,
Public Education Contacts by		
Field Crews		

Figure 4.2

Storm Water Management Program Outline of Annual Report to CVRWQCB

I. Executive Summary

(This section should summarize the main challenges encountered and accomplishments achieved by the City during the year.)

II. Control Measures Implemented

- a. Public Involvement and Outreach
- b. Public Participation
- c. Illicit Discharge/Illegal Connection Elimination
- d. Construction BMPs
- e. Post-Construction BMPs.
- f. Municipal Operations.

(This section should record the Tasks completed for each control measure. This discussion may include an assessment of the effectiveness of the various Tasks. Measurements of actual potential pollutants removed from the City's environment, such as tons of street sweepings or bulky items, should be tabulated. The section should also include a report of any enforcement actions taken. If the year's tasks included any monitoring, the monitoring data should be attached to the annual report.)

III Next Year's Work Plan

(This section should present the SWMP tasks to be accomplished during the coming year. This discussion can include the justification for any adaptive management changes in the planned work, based on the effectiveness or lack thereof of a previous year's task.)

