Chapter 2

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

I. Introduction

The goal of the Illicit Discharge Detection and Elimination Program is to detect and eliminate illicit connections and illegal discharges to the storm drain system. Illicit connections to the storm drain system from industrial facilities, commercial establishments, and even residents have been detected in many municipalities. Often they are found in old buildings and the property owner is unaware that sanitary wastewater is being discharged to the storm drain. Occasionally, illicit connections are intentional. Illegal discharges, via direct discharge or runoff, to the storm drain system from industrial facilities, commercial businesses, and residents can be a significant source of water pollution. For example, illegal discharges include the dumping of motor oil into a street gutter, the discharge of wash water from restaurants to alleyways, and chemical spills which flow into a gutter or creek.

The program is also aimed at detecting deteriorating piping in the storm drain and sanitary sewer systems. Because the piping in both systems often develops cracks and leaks with age, and because these lines are often in proximity to one another, problems of infiltration are common. Infiltration may result in sanitary sewage seeping into the storm water system and visa versa. The objectives of the City's Illicit Discharge Detection and Elimination Program are to:

- Detect and eliminate illicit connections to the storm drain system by conducting field investigations.
- Correct conditions where sanitary sewer or storm drain piping has deteriorated causing seepage and infiltration to occur.
- Detect and eliminate the illegal disposal of wastes to the storm drain system through a program that combines education, alternative disposal options, and enforcement.
- Reduce the likelihood of accidental spills in areas that drain to the storm drain system.

II. Pollutants of Concern and Target Audience

There are numerous pollutants of concern associated with illicit connections and illegal discharges, via direct discharge or runoff, to the storm drain system. EPA guidance documents name sanitary sewer overflows, illicit connections, and improper disposal of wastes as sources of storm water and receiving water pollution. The pollutants of concern include, but are not limited to, the following: sanitary waste, motor oil, paint, concrete, chemicals, hazardous waste, wash water containing soap and detergents, sediment, and debris.

The target audiences are the general public including, local commercial and industrial businesses, residents, and City staff.

In accordance with the Phase II NPDES General Permit for Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems (General Permit), the City must address the following categories of non-storm water discharges or flows (i.e., authorized non-storm water discharges) only where they are identified as significant contributors of pollutants to the Small MS4:

1. water line flushing;
2. landscape irrigation;
3. diverted stream flows;
4. rising ground waters;
5. uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)) to separate storm sewers;
6. uncontaminated pumped ground water;
7. discharges from potable water sources;
8. foundation drains;
9. air conditioning condensation;
10. irrigation water;
11. springs;
12. water from crawl space pumps;
13. footing drains;
14. lawn watering;
15. individual residential car washing;
16. flows from riparian habitats and wetlands; and
17. de-chlorinated swimming pool discharges.

Discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the U.S.

The City has reviewed the 17 categories listed above and identified some of them as potential significant contributors of pollutants to the storm drain system. These are #1, 2, 14, 15, and 16. The paragraphs below describe the reasons why the City has identified these categories and the measures taken to address these issues:

Category #1 “water line flushing” was identified as potential contributor of pollutants because some flushing activities have the potential to release chlorinated water or sediments into the storm drain system if BMPs are not used. As discussed in Chapter 1, Municipal Operations, flushing water mains at high velocities can erode soil, uproot vegetation and cause drainage problems. Chlorine, in concentrations exceeding 0.05 ppm, can kill nitrifying bacteria and other aquatic life. Thus, the City’s Water Department has developed standard operating procedures (SOPs) to ensure that all discharges from the distribution system do not reach waters of the state or that they are in compliance prior to discharge to the storm drain or sanitary sewer systems. The SOPs for these activities are included in the BMPs for Municipal Operations, Attachment 8. These SOPs are described in Chapter 1 and include the following:

Standard operating procedure (SOP) #7102-01, "Super-chlorinated Potable Water Discharges;" Standard operating procedure (SOP) #7102-02, "Low-Chlorine Potable Water Discharges;" and Standard operating procedure (SOP) #7105-01, "Sediment Control During Open Channel Water Discharges."

Category #2 "landscape irrigation" and category #14 "lawn watering" were identified as potential contributors because fertilizers and pesticides are often used on lawns and landscape plants. Thus, if these activities are conducted right after fertilizers and pesticides have been applied, then these chemicals could be washed off into the storm drain system. The City addresses these issues in one of the *Pollution Prevention Tips for Residents* brochures, which is entitled "Garden, Pool, and Spa Maintenance." This brochure is included in the Attachments section.

Category #15 "individual residential car washing" is also identified as a potential contributor of pollutants primarily due the soap that is generally washed off of vehicles into the streets during this activity. The City addresses this issue in one of the *Pollution Prevention Tips for Residents* brochures, which is entitled "Vehicle Repair and Washing." In this brochure, residents are encouraged to let the runoff drain to landscaping, discharge the bucket of soapy water into a sink rather than dumping it outside, or wash their vehicles at a commercial car wash that recycles water. This brochure is included in the Attachments section.

The City has also identified #16 "Flows from riparian habitats and wetlands" as a potential significant contributor of pollutants due to the dry weather flows from Neary Lagoon. The dry weather flows are often high in bacteria primarily due to the waterfowl that frequent the lagoon. Thus, the City has taken action to divert this flow during the dry season to the Wastewater Treatment Facility for treatment prior to discharge. Please see Chapter 1: Municipal Operations for a more complete description of this dry weather diversion.

III. Program Elements and Best Management Practices

The City first assessed and determined which elements comprised the Illicit Discharge Detection and Elimination Program, and then selected the most appropriate Best Management Practices (BMPs) in order to reduce the pollutants of concern described above to the maximum extent practicable.

The Illicit Discharge Detection and Elimination Program includes the following elements:

- ❖ Storm Drain System Map
- ❖ Legal Authority
    - Storm Water Ordinance
    - Grading Ordinance
    - Pet Waste Ordinance

- Title 4 of Municipal Code

❖ Field Investigation Measures To Detect Illicit Connections and Discharges
  - Site Inspections
  - Spill and Illegal Discharge Response
  - Storm Drain Outfall Monitoring
  - Television (TV) Camera Inspections
  - Volunteer Monitoring Programs

❖ Repairs and Rehabilitation of Sanitary Sewer and Storm Drain Pipelines & Dry Weather Storm Water Diversion

❖ Education and Outreach

❖ Household Hazardous Waste Collection Program

❖ Corrective Measures and Enforcement Procedures

The program elements are described in more detail in the sections below. The selected BMPs are listed and described under each program element.

Storm Drain System Map

In 2002 and 2003, Public Works Engineering staff re-evaluated the existing storm drain system maps. Staff inspected every City street and alleyway to verify the existence, location, and type of each storm drain facility, inlet, manhole, channel, and conveyance system, etc. marked on the maps. Corrections were made in the field onto a copy of the maps, which were then reviewed by the supervising Civil Engineer. The updated storm drain system maps were reproduced in 2003 and will be updated as necessary in the future.

Legal Authority

Storm Water Ordinance

On April 28, 1998, the City adopted a Storm Water Ordinance, which became effective on May 28, 1998. The ordinance, entitled "Storm Water and Urban Runoff Pollution Control," is Chapter 16.19 of the City's Municipal Code. The ordinance established the legal authority to prohibit illicit connections and pollutant discharges to the City storm drain system. The ordinance also provides the City with the legal authority to conduct inspections and sampling. In addition, the ordinance contains a provision requiring the implementation of BMPs, as published by the Public Works Department, by certain types of facilities. The City also has the authority to terminate illicit connections and discharges, and to initiate enforcement actions for violations of the code. Potential enforcement actions include written notices, citations, termination of discharge, and monetary penalties.

The Storm Water Ordinance prohibits non-storm water discharges to the storm drain system with a few exceptions. The permissible discharges include discharges authorized by a NPDES permit or resulting from one of the following: fire fighting activities; landscape irrigation; water line

breaks and other releases from potable water systems; foundation/footing drains; individual residential car washing; and unpolluted groundwater.

The City revised the Storm Water Ordinance in July 2003 in order to update the ordinance and incorporate new Phase II storm water regulations, and to keep it comparable with the City's Sanitary Sewer Ordinance. The revisions included an increase in monetary penalties to equivalent amounts specified in the Sewer Use Ordinance for violations of the Municipal Code. For example, civil penalties were increased from a maximum of $1,000 per day to a maximum of $2,500 per day for each violation of the ordinance. In addition, the City added a provision that prohibits the discharge of wastewater to the storm drain system from pressure washing, steam cleaning, and hand scrubbing of sidewalks and other outdoor areas adjacent to retail and commercial businesses and industrial facilities. A section was also added stating that, if a private storm drain system is not operating properly and causes the improper discharge of storm water to the street, sidewalk or storm drain system, the City may declare this condition to be a public nuisance and proceed to abate that nuisance accordingly. The Storm Water Ordinance is included in Attachment 2.

Grading Ordinance

The Grading Ordinance, officially titled "Chapter 18.45 Excavation and Grading Regulations, is a subset of Municipal Code, Title 18, Buildings and Construction. The ordinance provides technical regulations on grading and excavation in order to:

- Safeguard life, health, safety and the public welfare.
- Protect fish and wildlife, riparian corridors and habitats, water supplies, and private and public property.
- Protect the environment from the effects of flooding, accelerated erosion and/or deposition of silt.

Illegal discharges due to grading and excavation work may be pursued in accordance with the Grading Ordinance. Enforcement of the Grading Ordinance may also be conducted in accordance Title 4 of the Municipal Code.

In April 2004, the City reviewed and modified the Grading Ordinance in order to strengthen the ordinance regarding implementation of BMPs, including those for erosion and sediment control both prior to commencing construction activities and for the duration of the construction project. Modification of the Grading Ordinance included a requirement that all construction projects abide by the City's mandatory BMPs. In addition, the City included a provision that erosion and sediment control BMPs be in place and implemented, as appropriate, prior to commencing construction activity including grading or vegetation removal.

The City also added the most important BMPs from the City's mandatory BMPs for Construction Work to the "Excavation and Grading Regulations" section of the Grading Ordinance. In addition, the Grading Ordinance was modified to include a requirement that Post-Construction BMPs, in accordance with the City's mandatory BMPs for Development and

Remodeling Projects, be in place upon completion of a construction project. The City modified the Grading Ordinance. The Grading Ordinance is included in Attachment 3.

Pet Waste Ordinance

The City's Municipal Code, Chapter 8.14, regulates dogs and other domesticated animals. Section 8.14.215, Removal of Dog Droppings Required, requires dog owners to pick up after their pets to ensure that the droppings are not left on public property. This is an important mechanism to help reduce the amount of pet waste, which may harbor bacteria and other pathogens, from being discharged into the storm drain system. The ordinance is included below:

> **8.14.215 REMOVAL OF DOG DROPPINGS REQUIRED.**
> Any person owning, having an interest in, harboring or having charge of the care, custody, control or possession of any dog which defecates upon public property (including, but not limited to, streets, walkways and parks) in the city of Santa Cruz must immediately remove and properly dispose of the feces. Failure to so remove and dispose of the feces shall constitute an infraction. Nothing herein shall be deemed to authorize any person to enter upon the private property of another without permission. (Ord. 88-63 § 4, 1988: Ord. 82-22 § 2, 1982).

Title 4 of the Municipal Code

Title 4 is entitled "General Municipal Code Enforcement." It is the chapter of the Municipal Code that was established in 2000 to provide a comprehensive code enforcement system for the City. In summary, Title 4 provides definitions, details, and specific procedures for a variety of code enforcement measures. For example, Title 4 provides for the issuance and recordation of Notices of Violation; the authority to inspect; the authority to issue a Notice to Appear and Release Citations, and the power to arrest. Title 4 also details the procedures regarding Judicial Remedies and Administrative Remedies available to the City for violations of the Municipal Code and applicable state codes. In addition, Title 4 details Summary Abatement and Administrative Abatement procedures for public nuisances and code violations. Lastly, Title 4 provides for the recovery of civil penalties and abatement costs. Please refer to Attachment # 5 for a copy of Title 4.

Field Investigation Measures To Detect Illicit Connections and Discharges

Field investigations will be used to detect illicit connections and discharges, and prevent potential future illegal discharges. Site inspections and spill and illegal discharge response will be the primary methods used. The City will also use TV camera inspections to detect illicit connections. Other measures, such as dye testing, will be used in special circumstances or on a "case by case" basis. The field investigation measures are described below.

Site Inspections

The City has conducted site inspections at industrial and commercial facilities for many years. Site inspections are conducted by the Environmental Compliance Inspectors under the supervision of the Laboratory/Environmental Compliance Manager. The industrial facilities inspected include both "Categorical Industries" regulated by 40 CFR and "Significant Industrial Users." A Significant Industrial Users is defined as a facility that has an average wastewater flow

of 25,000 gallons per day, a concentrated waste flow, or the potential to have an adverse affect on wastewater workers, the wastewater collection system, or the Wastewater Treatment Facility. Commercial facilities that have been regulated by the City for many years include restaurants and dry cleaners.

In order to reduce storm water pollution and in an effort to be proactive, site inspections at industrial facilities and restaurants now include inspection of storm drains and a review of spill prevention and control measures. Beginning in 2000, site inspections at restaurants now include an evaluation of BMP implementation. For example, inspectors check to see where the kitchen mats are cleaned because the discharge of mat wash water to the storm drain system is prohibited. A more complete summary of the Food Service Facilities program is included in the Commercial Facilities Program chapter. The BMPs for Food Service Facilities are included in the Attachments.

In 1999, the City developed a Vehicle Service Facilities Program for auto repair shops and other vehicle related businesses. This program includes annual site inspections, which focus on storm water pollution prevention education and compliance with BMPs for Vehicle Service Facilities. Site inspections also include a check of all storm drain inlets on the property. A more complete summary of the Vehicle Service Facilities program may also be found in the Commercial Facilities Program chapter. The BMPs for Vehicle Service Facilities are included in the Attachments section.

Currently, the City's Environmental Compliance Division conducts site inspections at approximately 3 categorical industrial facilities, 13 "significant users," 7 dry cleaners, 325 food service facilities, and 110 vehicle service facilities. Regular site inspections at these facilities are conducted a minimum of once per year, or more frequently if a problem or violation is detected. In general, site inspections are conducted as a result of one or more of the following conditions:

1. Routine inspection
2. Spill complaint
3. Observation of suspicious activity
4. Evidence of polluted runoff
5. Detection of a sanitary sewer violation
6. Sources known (from past experience) to be generators of illegal discharges
7. Need to verify the proper installation of grease interceptor devices, piping, and drains during construction or remodeling projects
8. Follow-up inspection due to previous or suspected noncompliance

If a violation of the Storm Water Ordinance is discovered during a site inspection, the Inspector will review the site practices with the business owner/manager to determine the source of the violation and to discuss potential ways to correct the problem. Additional efforts to educate the facility owner or manager will be made, if necessary, including follow-up visits and phone calls

or meetings to discuss the problem and go over the BMPs. Corrective measures and enforcement actions may be implemented as described later in this chapter.

Site inspections also typically include an educational aspect in order to inform or remind the facility owner or manager about the new storm water regulations and how to prevent discharges to the storm drain system. The Environmental Compliance Inspectors distribute BMPs when they conduct site inspections and discuss any facility issues or practices that may have the potential to discharge pollutants to the storm drain system. All site inspections are documented and entered into the Environmental Compliance database.

Planning Department Building Inspectors inspect all new and remodeled facilities multiple times during construction and upon completion. In the inspection process, Building Inspectors ensure that all drains and pipes have been installed correctly and that all sanitary wastes are plumbed to the sanitary sewer.

BMP #ID-1: Environmental Compliance Inspectors Conduct Site Inspections At Regulated Businesses

Spill and Illegal Discharge Response

The City responds to all reports and complaints of spills and illegal discharges to the storm drain system as soon as possible. Field inspections and investigations are conducted as a result of the following:

1. Complaints received from the general public
2. Staff observations of suspicious activities
3. Line blockages, leaks, or breaks
4. Physical indications that a spill or illegal discharge has occurred

Investigations of spills and illegal discharges may be conducted in a variety of locales and under a variety of conditions. Field investigations include inspecting creeks and storm drains, alleyways, residential areas, or business sites.

Storm drain inspections are generally conducted after a complaint or tip is received from a resident, business or City staff. Occasionally, storm drain inspections are conducted spontaneously when City staff is working in the field and a suspicious discharge is noticed. Storm drains are checked in order to detect illegal discharges and track them back to their source. These inspections may include the visual inspection of storm drain outfalls, drainage channels, manholes, and catch basins for signs of an illicit connection or discharge. Signs of an illicit connection or discharge include:

- ► dry weather flows;
- ► excessive wet weather flows;
- ► odors, oil and grease, or other pollutants; and

► unusual or unexplainable pipes or connections to the City's system.

Which division responds to a spill or illegal discharge depends several factors such as: the type of spill or discharge; where it is located; what the source is; if it was noticed while doing field work; and who received the report or complaint. For example, Environmental Compliance Inspectors typically carries out site inspections. Environmental Compliance or Wastewater Mains staff may conduct storm drain outfall and manhole inspections depending on the situation. Frequently, Wastewater Mains staff will refer a problem that they are aware of to the Environmental Compliance Office for additional follow-up. This is also true for cases of chronic line problems or discharges. The City may also call other agencies, such as the Fire Department or County Department of Environmental Health, to respond to an illegal discharge especially if the presence of hazardous materials is suspected.

An Incident Response Report is completed after each field investigation. All investigations are tracked on a database. If a source of an illicit connection or discharge is identified, the City will require termination of the violation and, possibly, corrective actions. Corrective measures and enforcement procedures are discussed in detail in the "Corrective Measures and Enforcement Procedures" section below.

BMP # ID-2: Conduct Spill and Illegal Discharge Response

Storm Drain Outfall Monitoring

The City monitors several storm drain outfalls along West Cliff Drive (at Auburn Street, Almar Avenue, and Woodrow Avenue), which discharge directly into Monterey Bay, for coliform and enterococcus bacteria on a quarterly basis. In addition, these stations are routinely monitored as part of the sanitary survey for evaluating single sample maximum excedances of the bacteria levels at the 30 foot contour depth at nearshore stations.

Neary Lagoon is monitored for coliform and enterococcus bacteria at least once, routinely before during and after the diversion program to treat the lagoon's water prior to discharge to the ocean.

If samples from monitoring of storm drain outfall reveal high bacterial count in excess of the single sample maximum for Fecal Coliforms or Enterococcus, Environmental Compliance Inspectors are routinely tasked to investigate the cause and follow up samples are collected and analyzed. In addition, ammonia samples are collected and analyzed to provide information on the possibility of anthropogenic source of the elevated bacteria. Additional coordination with Wastewater Mains crew is made so that they can be informed to observe and report on any illicit activities that may contribute to the elevated numbers report.

This is an effective method to determine if an illegal cross-connection from a sanitary sewer lateral exists. In addition, if a suspicious discharge is noticed while sampling, staff attempts to follow the discharge back to the source in order to identify the cause. Once a source is identified, the City contacts the responsible party. If the responsible party is a business, the City may conduct a site inspection of the facility to determine why the discharge is occurring and how it

can be corrected. In addition, the monitoring results also provide a long-term database which may help to characterize discharge at storm drain outlets.

The City has created an Environmental Enforcement Response Plan (ERP) and included it by reference in the Municipal Code to furnish a range of responses to illicit actions or illegal discharges to the storm drain system. All of the options available to the City require that the illegal discharge be terminated and that measures are taken to prevent reoccurrence. If compliance is not achieved in a timely fashion, the City issues additional enforcement actions that may include corrective measures, a discharge termination date, and monetary penalties. Additional appropriate enforcement actions are determined according to a schedule published in the Enforcement Action tables within the ERP. In general, enforcement actions are escalated in severity until the problem is corrected.

The County of Santa Cruz also regularly monitors local creeks, the San Lorenzo River, other water bodies, and certain storm drain outfalls. The purpose of the County's program is to test for coliform bacteria and nitrates. If the County field staff suspects the presence of an illegal discharge, they also try to determine the source by tracking upstream.

BMP #ID-3: Conduct Storm Drain Outfall Monitoring for Bacterial Indicators at three locations along West Cliff Drive (at Auburn Street, Almar Avenue, and Woodrow Avenue)

Television (TV) Camera Inspections

TV camera inspection is an excellent method to assess the condition of underground pipes and to detect illegal connections. Portions of the City's approximately 50-mile storm water system are inspected with a TV camera in specific situations, such as when road paving is planned or there is a suspected problem in the pipes. In these cases, the underground photos are scrutinized for the presence of illegal connections to the storm drain system. As part of the City's Storm Water Management Program, TV camera inspections of the storm drain lines will be conducted each year as budgeting allows and on an as-needed basis. In addition, TV camera inspections maybe used on a "case by case" basis such as when an illegal connection is suspected.

BMP #ID-4: Conduct Television (TV) Camera Inspections of Storm Drain Lines

Volunteer Monitoring Program: First Flush

"First Flush" is a region-wide volunteer monitoring event conducted during the first storm of the rainy season. The Monterey Bay Sanctuary Citizen Watershed Monitoring Network coordinates First Flush in cooperation with the Coastal Watershed Council. First Flush is an annual event that is conducted simultaneously at participating cities throughout the Monterey Bay area. Resident volunteers collect storm water samples, which are then sent to a laboratory for analyses. The volunteers receive training in sample collection prior to the First Flush event. Sample results could potentially alert the City to illicit discharges or illegal connections upstream of the sampling sites. First Flush tends to receive much publicity since the findings of the annual event are released to the news media and are generally published by all the major newspapers

The City began sponsoring First Flush in 2002 and intends to continue sponsoring the event budget permitting. The First Flush Volunteer Monitoring Program is included in Chapter 4: Public Education.

BMP #ID-5: Sponsorship of First Flush

Repair and Rehabilitation of Sanitary Sewer and Storm Drain Pipelines & Dry Weather Storm Water Diversion

Deteriorating or leaking pipes, in the sanitary sewer or storm drain system, can cause pollution in our waterways. Sanitary sewer and storm drain pipelines are often laid in close proximity to each other making them particularly susceptible to infiltration. Infiltration of sewage and other pollutants into the storm drain system occur as the underground pipes age and develop cracks, leaks, and breaks. Infiltration is especially a problem in lower lying areas of the City, particularly near the San Lorenzo River, because the water table is so high.

Pipes may also have structural failures, which are repaired by the City as soon as they are detected. A break in a sewer lateral or main can result in a direct discharge to a creek, the San Lorenzo River, or other water body depending upon the location. City line maintenance crews rapidly clean up spills and correct blockage problems using the City's Vactor (vacuum) trucks.

A complete description of City measures to repair/rehabilitate sanitary sewer and storm drain lines, and private sewer laterals is included in Chapter 1: Municipal Operations. Please also see Chapter 1: Municipal Operations for a complete description of the City's Dry Weather Storm Water Flow Diversion work, including the retrofitting of pump stations along the San Lorenzo River in order to divert urban runoff and groundwater to the sanitary sewer system for treatment during the dry season rather than pumping this water into the San Lorenzo River.

These projects help to reduce sanitary sewer line spills that might flow to the storm drain system and into the San Lorenzo River. In addition, diverting urban runoff redirects illegal discharges and bacteria from decomposing materials away from the River and to the Wastewater Treatment Facility for treatment prior to discharge. This work thus helps to reduce the bacteria levels in the San Lorenzo River and the San Lorenzo River Lagoon, which are both listed as impaired for pathogens and included under the RWQCB adopted *TMDL for Pathogens in the San Lorenzo River Watershed Waters*.

Education and Outreach

Education of the general public, business owners and employees, and City staff is an integral part of the Illicit Discharge Detection and Elimination Program. The following list highlight the City's efforts to inform the public about the hazards associated with illegal discharges and improper disposal of waste. Please refer to the Public Education Program chapter, Chapter 4, for a complete description of each of these BMP efforts and a list of the measurable goals:

- Pollution Prevention Messages
- Storm Drain Inlet Stenciling
- Public Events
- Outreach Information for Residents
- Outreach Information for Businesses
- Clean Ocean Business Program
- Monterey Bay Area Green Business Program
- O'Neill Sea Odyssey Education Program
- Pesticide Management Education Program (Our Water Our World)
- Coastal Clean-Up Day
- Earth Day Santa Cruz
- Earth Vision Environmental Film Festival
- Support for Volunteer Monitoring Programs-First Flush
- City of Santa Cruz Website:
  - Environmental Compliance Section
  - Environmental Programs Section
  - City's Storm Water Management Program (SWMP)

❖ Assessment of the Public Education Program

❖ Potential Future Programs

A telephone number to report illegal discharges or dumping is included on all pertinent BMP Brochures and Outreach Materials. In Permit years 3 and 4, the City will develop and implement a public storm water hotline number to receive complaints and disseminate storm water information. A well publicized hotline number should help to both decrease illicit discharges and increase public participation. The City will advertise the hotline number, track the types of complaints received, and track staff responses.

BMP #ID-6: Develop and Implement A Public Storm Water Hotline Number

Household Hazardous Waste Collection Program

The ability for residents to legally and conveniently dispose of household hazardous waste is important so that these wastes are not illegally discharged into the storm drain or sanitary sewer systems, or illegally dumped at the landfill.

Thus, the City jointly operates a Household Hazardous Waste (HHW) Drop-Off Facility at the City's Resource Recovery Facility (which is comprised of the landfill and Recycling Center) in partnership with the County of Santa Cruz. The HHW Drop-Off Facility is located in the Recycling Center area. Residential household hazardous wastes are accepted from 7:30 a.m. to 3:30 p.m. every Saturday. The County of Santa Cruz manages the facility and maintains the records.

The HHW Drop-Off Facility accepts only certain residential household hazardous wastes. The accepted wastes include the following: art and hobby supplies, antifreeze, aerosol cans, auto batteries, bag house or scrubber wastes, brake fluid, diesel, engine or parts cleaners, gasoline, herbicides and pesticides, household batteries, household cleaners, solvents, degreasers, solvents, flammable liquids, outdated medicines, paint and paint products, pesticides, photographic chemicals, pool, hot tub and spa supplies.

At the HHW Drop-Off Facility, the public is allowed to drive in and drop off up to 15 gallons of liquid and 125 pounds of solids wastes, or a combination of HHW. All items are inspected, and the good items and materials are displayed in the HHW store for the public.

The HHW Drop-Off Facility does not accept the following: chemicals or chemical sludge that are toxic, corrosive, irritants, or a strong sensitizer; infectious wastes; radioactive wastes; asbestos wastes; tank cleaning sludges or sediments; wastes containing free liquid exceeding state regulatory limits; explosives; and commercial hazardous wastes.

Corrective Measures and Enforcement Procedures

Violations of the Storm Water Ordinance generally fall under one of two categories: (1) illicit connections to the storm drain system, and (2) illegal dumping or discharges. As previously mentioned, when the City determines that a violation has occurred, the City typically contacts the responsible party and conducts a site inspection. The responsible person or facility is then required to take appropriate corrective measures to eliminate any illicit connections or to cease

the illegal discharge as soon as possible. If the responsible party is a resident or private home, then staff informs them about the new storm water ordinance and explains why illegal discharges are harmful to the environment. The City prefers to focus on educational efforts to correct residential pollution problems, rather than issuing written enforcement actions.

Industrial facilities and commercial businesses are also required to take measures, such as structural improvements or employee education, to eradicate illicit connections or prevent the reoccurrence of illegal discharges. The City provides them with educational materials on storm water issues and pollution prevention practices. Enforcement actions may also be taken, depending upon the seriousness of the violation and any measures implemented by the facility to correct the problem. The appropriate enforcement actions are usually determined on a "case by case basis." If the situation involves a chronic violator or if compliance is not achieved in a timely fashion, enforcement actions are escalated until the violations have ceased and the problem is permanently corrected. There are a wide variety of enforcement actions that may be taken by the City. They are briefly summarized below and may be found in greater detail in the Storm Water Ordinance under "Administrative Remedies (Section 16.19.190)" and "Judicial Remedies-Civil/Criminal (Section 16.19. 200)."

- **Warning:** A warning may consist of a verbal notice or a written informational letter to the facility owner or manager.
- **Administrative Action-Notification of Violation and Citation:** A Notification of Violation is a written notice to the facility owner or manager stating that the site has violated the City Municipal Code and that the discharge must cease. In general, violation letters state a date by which time the noncompliance must be corrected and may include a statement warning of additional enforcement actions, including fines, if the problem is not corrected.
- **Administrative Action-Show Cause Hearing:** Administrative actions generally include a structured process to ensure that remedial actions are taken to terminate an illicit connection or discharge, and to prevent its reoccurrence. An administrative action specifies a time frame to correct the identified problem based on the severity or complexity of the problem. If a violation is not corrected by timely compliance, the City may issue a citation for fines, up to $2,500 per day.
- **Administrative Action-Emergency Termination:** The City may take steps to prevent or terminate an illegal discharge if the discharge presents an imminent threat of substantial endangerment to the health or welfare of persons or to the environment.
- **Summary Abatement of Certain Nuisances:** Abatement of a nuisance, which is a menace to public health and safety, with all costs are charged to the responsible party.
- **Judicial Remedies**-Civil/Criminal: In such an action, the City may seek all appropriate judicial relief including, but not limited to, injunctive relief and damages in the minimum of two thousand five hundred dollars per violation per day. In the case of criminal liability, the City may seek criminal penalties and incarceration in the maximum amount prescribed by the California Penal Code for infractions and misdemeanors.

IV. Program Implementation

City Personnel

The Public Works Department is primarily responsible for implementing the Illicit Discharge Detection and Elimination Program. The work overlaps several divisions within the department, namely Engineering, Environmental Compliance, (within Wastewater/Pretreatment Division), and Wastewater Mains. The City provides training for each employee who is directly involved in the program upon hiring and throughout the year as pollution issues come up or regulations change. Training includes periodic meetings within each department or division to discuss work issues. The City also occasionally provides classes, taught by a contractor, on pollution prevention methods. For example, in April 2002, the City offered a class (taught by a contractor) to all "field crews" and other personnel on Best Management Practices for sediment control. In addition, the City encourages staff to attend off-site classes and workshops, offered by other agencies and organizations, on related pollution prevention issues and practices.

The Engineering Division is responsible for coordinating the City's efforts among the various participating departments and divisions. The Engineering Division, along with Wastewater Mains, also reviews the results of the TV camera inspections for evidence of line breaks, cracks, and illegal connections. Engineering is also responsible for updating the maps of the storm drain system. As part of the Storm Water Management Program, Engineering and Environmental Compliance staff will publish and distribute Best Management Practices. While these are not direct elements of the Illicit Discharge Detection and Elimination Program, education and outreach efforts should help reduce the occurrence of illicit connections and illegal discharges to the storm drain. Engineering and Environmental Compliance staff also wrote the draft for the new Storm Water Ordinance that was finalized by the City attorney.

The Environmental Compliance Inspectors respond to spill reports and complaints from both the general public and the Wastewater Mains Division. They also respond to referrals from the County's Department of Environmental Health. Environmental Compliance Inspectors conduct site inspections and issue enforcement actions. As previously mentioned, they spend a portion of routine site inspections conducting education on storm water pollution issues and distributing BMPs. They also conduct storm drain inspections to determine the source of illegal discharges. The inspectors sample suspect discharges, when necessary, to determine what the pollutant is and to help identify the source. The Inspectors, in general, accompany Wastewater Laboratory staff when collecting storm drain outfall monitoring samples.

The Wastewater Mains Division is responsible for maintaining the sewer and storm drains systems. The field crew spends a majority of their time in the field and, therefore, they are valuable "eyes" for the program. The Wastewater Mains Division crews may also investigate the cause of an illegal or suspicious discharge. As previously mentioned, they usually report illegal or suspicious discharges to the Environmental Compliance Office. In addition, they also report all sewer line blockages, which often result in discharges to the storm drain. The Wastewater

Mains Division, in coordination with Engineering, conducts TV inspections of specific sections of the storm drain system whenever roadwork is planned or illicit connections are suspected. They will also work with Engineering in the annual planned TV inspections of the storm drain system. Lastly, the division conducts dye testing of drains and sewer lines in question. Table 2-1 indicates which department/division is responsible for implementing each of the program BMPs.

Implementation Timetable and Measurable Goals

The City is currently implementing the Illicit Discharge Detection and Elimination Program. Measurable goals will be used to track the City's efforts to reduce illicit connections and discharges, and to evaluate the success of the program each year. A list of the BMPS, measurable goals, and the implementation schedule are detailed in Table 2-1 below:

Table 2-1
BMPs, Measurable Goals, and Implementation Schedule

BMP #	BMPs	Measurable Goals	Responsible Dept. or Division	Implementation Schedule
	Field Investigation Measures To Detect Illicit Connections and Discharges			
ID-1	Environmental Compliance Inspectors Conduct Site Inspections At Regulated Businesses	1. Inspect 100% permitted industrial facilities 2. Inspect 100% vehicle service facilities 3. Inspect 100% food service facilities	Public Works: Environmental Compliance Public Works: Engineering Planning: Building	Year 1-5
ID-2	Conduct Spill and Illegal Discharge Response	Respond to 100% complaints and reports of illegal discharges	Public Works: Environmental Compliance Public Works: Wastewater Mains	Year 1-5
ID-3	Conduct Storm Drain Outfall Monitoring for Bacterial Indicators at Three Locations Along West Cliff Drive	Quarterly monitoring	Public Works: Environmental Compliance Public Works: Wastewater Laboratory	Year 1-5
ID-4	Conduct Television Camera Inspections of Storm Drain Lines	Please See Chapter 1	Public Works: Wastewater Mains	Year 1-5
ID-5	Sponsorship of First Flush-please see Chapter	Please See Chapter 4		

BMP #	BMPs	Measurable Goals	Responsible Dept. or Division	Implementation Schedule
	4			
	Repair and Rehabilitation of Sanitary Sewer and Storm Drain Pipelines & Dry Weather Storm Water Diversion			
	Please See Chapter 1	Please See Chapter 1		
	Education and Outreach			
ID-6	Develop and Implement A Public Storm Water Hotline Number	1. Plan for hotline number 2. Hotline number operational	Public Works: Engineering Public Works: Wastewater Mains Public Works: Environmental Compliance Planning: Building	1. Year 3 2. Year 4
	Please See Chapter 4 for Other Public Ed BMPs	Please See Chapter 4		
	Corrective Measures and Enforcement Procedures			
ID-7	Implement Corrective Measures and	Eliminate 100% of identified illicit discharges	Public Works: Environmental	Year 1-5

BMP #	BMPs	Measurable Goals	Responsible Dept. or Division	Implementation Schedule
	Enforcement Procedures in Accordance with the Storm Water Ordinance		Compliance Public Works: Wastewater Mains Public Works: Engineering City Attorney's Office	

Table 2-1: Responsible Department or Division Contact Information

Public Works Department: Engineering
Associate Civil Engineer, (831) 420-5428

Public Works Department: Environmental Compliance Office, Wastewater/Pretreatment Division
Laboratory/Environmental Compliance Manager, (831) 420-6045

Public Works Department: Wastewater Laboratory, Wastewater/Pretreatment Division
Laboratory/Environmental Compliance Manager, (831) 420-6045

Public Works Department: Wastewater Mains/Flood Control
Public Works Operations Superintendent, (831) 420-5535

Planning Department: Building
Chief Building Official, (831) 420-5127

City Attorney's Office
City Attorney, (831) 420-6200

V. Program Documentation and Reporting

The City will maintain records to document program implementation and annual progress. The City will report the results of the program in the annual SWMP report to the Regional Water Quality Control Board. The report will include information and a summary of the progress made relative to the measurable goals.