SECTION 6

FOR ADDITIONAL IC/ID INFORMATION/REQUIREMENTS PLEASE SEE PERMIT (99-060) PAGES: 13,14, & 15.

6.0 INTRODUCTION

General Description

This program addresses procedures to detect and remove illicit discharges and improper disposal into the storm drain system. Also, included in this program is a process to identify and eliminate illicit connections.

The general objective for this program is to improve the quality of storm water by effectively prohibiting non-stormwater discharges and by reducing the discharge of pollutants to the extent practicable. To achieve this objective the City will implement the following program, which includes the following major components:

- Illicit Discharge Elimination
- Illicit Connection Elimination
- Public Reporting
- Reporting Hazardous Substances Entering the Storm Drain System

Each program component will be improved and refined, as necessary, based on annual assessments and evaluations.

6.1 ILLICIT DISCHARGE ELIMINATION

The goal of this component is to detect and eliminate illicit discharges from entering the storm drain system to reduce the discharge of pollutants from such discharges to the extent practicable. By accomplishing this goal, this will improve the quality of storm water runoff.

The primary objectives of this component are:

- Incidental spills or disposals (including sanitary sewer leaks or overflows) reported by the public or other agencies or observed by City staff during the course of their normal daily activities will be contained, cleaned up and investigated.

- Prohibited non-stormwater discharges to the storm drain system reported by the public or other agencies or observed by City staff during the course of their normal daily activities (such as surface runoff associated with wash

down from an industrial site) will be eliminated through voluntary termination or enforcement action that will result in the immediate cessation of the discharge.

- Suspected prohibited non-storm discharges in the storm drain system observed by City staff during the course of their normal daily activities, that may result from illicit connections or whose origin is unknown, will be investigated to determine the nature and source of the discharge and eliminated through voluntary termination or enforcement action.

Responsible Departments	*Responsible Position (s)*
Fire Department	Fire Chief
Harbor Department*	Executive Director
Health & Human Services	Director
Public Works Department	Director
Planning & Building	Director
Water Department	General Manager

*The Health and Human Services Department, Bureau of Environmental Health will be the lead agency that will document the incidents for NPDES reporting purposes.

6.1.1 NATURE AND TYPES OF ILLICIT DISCHARGES

The Permit has established definitions of illicit discharge and illicit disposal, which the City has adopted. The definitions are as follows:

> *Illicit Disposal: Any disposal, either intentionally or unintentionally, of material(s) or waste(s) that can pollute storm water or urban runoff.*
>
> *Illicit Discharge: Any discharge to the storm drain system that is prohibited under local, state or federal statutes, ordinances, codes or regulations. This includes all non-storm water discharges except discharges pursuant to an NPDES permit and discharges that are exempt or conditionally exempt.*

Categories of non-stormwater discharges that are described in the permit as exempt or conditionally exempt are listed in Table 6-1.

TABLE 6-1
EXEMPT AND CONDITIONALLY EXEMPT DISCHARGES

Discharges in compliance with a separate NPDES permit/waste discharge requirements or granted a discharge exemption by the Regional Board, the Executive Officer, or the State Water Resources Control Board
EXEMPT DISCHARGES 1. Flows from riparian habitats or wetlands; 2. Diverted stream flows; 3. Springs; 4. Rising ground waters; 5. Uncontaminated groundwater infiltration;
CONDITIONALLY EXEMPTED DISCHARGES 1. Reclaimed and potable landscape irrigation water; 2. Water line flushing; 3. Discharges from potable water sources; 4. Foundation drains; 5. Footing drains; 6. Air conditioning condensate; 7. Reclaimed and potable irrigation water; 8. Reclaimed and potable lawn watering; 9. Water from crawl space pumps; 10. Dechlorinated swimming pool discharges; 11. Individual residential car washing; and 12.Sidewalk washing; 13. Discharges from flows from emergency fire fighting activities.

The context of illicit discharge and illicit disposal used in this program include several categories as follows:

- Incidental spills or disposal of wastes or non-stormwater. These may be intentional, unintentional or accidental and would typically enter the storm drain system directly through drain inlets, catch basins or manholes or be deposited in the public right-of-way such that wash-off would reach the storm drain system.

- Discharges of sanitary sewage due to overflows or leaks; usually incidental but may be continuous.

- Continuous or intermittent discharges of prohibited non-stormwater other than through an illicit connection. These typically occur as surface runoff from outside the public right-of-way (e.g., wash-down area from an industrial site).

- Continuous or intermittent non-stormwater discharges through an illicit connection (see Section 6.2).

6.1.2 SPILL INVESTIGATION, CONTAINMENT AND CLEANUP

Current procedures are in place to contain, clean up and investigate illicit disposals and illicit discharges. These include procedures for sewage spills and hazardous material discharges/spills. Departments follow their respective policies and procedures for their departmental response.

6.1.3 PRIORITIZATION FOR INVESTIGATION OF ILLICIT DISPOSAL/DISCHARGE

If the investigation and elimination of all illicit disposal/discharge incidents cannot be completed within a timely manner, especially during a natural disaster, a process to determine in what order the incidents should be investigated can be used. If such a process is necessary, the following method will be implemented to prioritize problem areas of illicit disposals/discharges.

- List all illicit disposal incidents that have been reported but not yet investigated and place in one of the following categories, category 1 having the greatest priority:
  1. Hazardous, affecting public health and safety
  2. Hazardous, affecting the environment (receiving waters, air, etc…)
  3. Hazardous, affecting property
  4. Hazardous, other
  5. Non-hazardous, affecting public health and safety
  6. Non-hazardous, affecting the environment(receiving waters, air etc.)
  7. Non-hazardous, affecting property
  8. Remaining incidents

6.1.4 EDUCATION PROGRAM FOR INSPECTORS, MAINTENANCE AND FIELD STAFF

As per the Municipal NPDES Permit, City employees will be trained in pollution prevention practices. This will include but not be limited to an overview of the NPDES program, potential sources of storm water pollution, potential impacts of illicit discharges on beneficial uses, emergency spill cleanup procedures, hotline numbers, awareness of environmentally sensitive alternative products, and good housekeeping practices. The City has an outstanding “101” NPDES Training video that will be viewed by all City employees. In addition, field employees will be trained to notice illicit discharges during the course of their daily activities,

report them and contain them to the best of their ability while waiting for the proper authorities to arrive.

Specific training on illicit discharges/disposals will be conducted for inspectors, maintenance, field staff and other appropriate employees who may encounter illicit discharges/disposals during their regular activities as needed. All Permittee inspectors and other field workers shall receive training on how to identify and report illicit discharges by 12/30/99, and through annual refresher training thereafter.

Currently, extensive training in this area is given to Fire, Health, Harbor and Police Department employees on a regular basis. These programs will be amended if necessary to incorporate illicit connection/discharge issues that may not be covered. Other Departmental programs will be developed, as necessary, using the current programs as a base.

6.1.5 ENFORCEMENT PROCEDURES

Enforcement procedures will be implemented when the source and nature of the discharge is known. An enforcement program component aids in the elimination of illicit disposal or discharges.

Through municipal, state and federal legal authority enforcement procedures currently in place will continue to be used as well as polices and procedures of the respective departments.

6.1.6 RECORD KEEPING AND DOCUMENTATION

The Health and Human Services Department will be responsible for tracking incidents of illicit connections and discharges so they may be included in the annual report to the Los Angeles Regional Water Quality Control Board (LARWQCB). However, there will be incidents that will not involve the Health Department. In those instances, the individual department/division will be responsible for the record keeping and documentation on the incident. The City NPDES coordinator will annually compile the City-wide report from data kept by the following departments/divisions:

Health and Human Services Department
Harbor Department
Water Department (Storm Drain Maintenance)
Planning and Building Department
Public Works Department

The following information will be recorded by each department for each incident:

Date, Time, Location
Description of substance/material
Source of substance, if determined
Reason for the discharge
Action taken
Date incident was closed

6.1.7 SPILL AND ILLICIT DISCHARGE PREVENTION

GENERAL PUBLIC

The city has developed and continues to develop several outreach materials to inform and educate the general public. For further details and to see examples of outreach materials developed, refer to the Education and Public Outreach component of this program in Section 7.

INDUSTRIAL/COMMERCIAL

Appropriate industrial/commercial outreach materials that are developed by the County will be made available to city staff to hand out as needed while conducting their educational site visits. For further details, see the Industrial and Commercial portion in the Education and Public Outreach component of this program in Section 7.

Within 2 years (6/30/2001), all Phase I industrial facilities, restaurants and gas stations located within the Permittee's jurisdiction shall receive educational information describing illicit discharges. The information shall include: types of discharges prohibited, how to prevent illegal discharges, what to do in the event of an illegal discharge, and the array of enforcement actions the facility may be subject to, including penalties that can be assessed.

6.2 ILLICIT CONNECTION ELIMINATION

The goal of this component is to detect and eliminate illicit connections to the extent practicable. By achieving this goal, this will reduce pollutants from entering the storm drain system by way of illicit connections.

Responsible Department	*Responsible Position*
Water Department	General Manager

6.2.1 NATURE AND TYPES OF ILLICIT CONNECTIONS

The definition of illicit connection is:

> *Illicit Connection: Any man-made conveyance that is connected to the storm drain system without a permit or through which prohibited non-stormwater flows are discharged, excluding roof-drains and other similar type connections. Examples include channels, pipelines, conduits, inlets, or outlets that are connected directly to the storm drain system.*

Since the City of Long Beach does not issue permits for storm drain connections, an illicit connection is any man-made conveyance that is connected to the storm drain system through which prohibited non-stormwater flows are discharged. Roof drains, area drains, and other similar connections which are intended to convey only storm water runoff are excluded, unless they are also used to convey an illicit discharge.

6.2.2 PRIORITIZATION

Drainage areas will be ranked in the order of their potential to cause storm water quality problems. This will be achieved by using the City's geographical information system (GIS) by evaluating the integration of drainage areas, land uses, storm drain system and receiving waters.

The following approach will be used:

- Prioritize the water bodies based on the results outlined in the 1996 Water Quality Assessment Report. Water bodies not fully supporting the beneficial uses will have top priority.

- Prioritize the drainage areas contributing storm waters and urban runoff to the impacted water body based on land use. The drainage area that has the highest percentage of industrial land use will have top priority.

- Prioritize the illicit connection type to be observed within the drainage areas.

Water Quality Assessment Report

As described in Section 3, Long Beach is sandwiched between to two major rivers, the Los Angeles River and the San Gabriel River. Approximately 44 % of the City drain to the Los Angeles River and almost all of it through pump stations.

Only 7 % of the City drain to the San Gabriel River. The remaining portions (49%) of Long Beach drains to the Harbor, Alamitos Bay and coastal shoreline.

Results of the 1996 Water Quality Assessment Report are included in Appendix B and summarized in alphabetical order in Table 6-3.

TABLE 6-3

WATERBODY	ASSESSMENT
Alamitos Bay	Threatened
Alamitos Bay Beaches	Not Assessed
Belmont Shore Beach	Not Assessed
Bluff Park Beach	Not Assessed
Colorado Lagoon	Not Supporting
Coyote Creek	Not Supporting
El Dorado Lakes	Not Supporting
Long Beach Harbor	Not Supporting
Long Beach Shore Beach	Not Assessed
Los Cerritos Channel	Not Supporting
Los Cerritos Estuary	Fully Supporting
Los Angeles River Estuary	Not Assessed
Los Angeles River, Reach 1	Not Supporting
WATERBODY	ASSESSMENT
Los Angeles River, Reach 2	Not Supporting
San Gabriel River Estuary	Not Supporting
San Gabriel River, Reach1	Not Supporting

Land Use

As described in Section 3, the City of Long Beach consists of 5 major land use categories. Tables 6-4 list the land use categories, the size in acres and its priority.

TABLE 6-4

LAND USE	ACRES	PRIORITY
RESIDENTIAL	16,926	LOW
COMMERCIAL	4,784	MEDIUM
INDUSTRIAL	2,269	HIGH
INSTITUTIONAL	1,851	MEDIUM
OPEN SPACE	785	LOW

Priority is based on the amount of impervious land for each land use type. The assumptions are Residential 25%, Commercial/Institutional 75%, Industrial 80% and Open Space 15%.

Connection Type

In general, there are four types of connections to the storm drain system. The connection types vary in the cost and ease of documenting an illicit connection. Accordingly, for connection types, priorities have been established for identifying illicit connections in a cost-effective manner.

1. Through-Curb Connection (TCC)

   This connection is a pipe opening in the curb that allows a discharge to flow into the street gutter. As defined in the permit, the street gutter is part of the storm drain system.

   Historically, the City has encouraged through-curb connections rather than direct pipe connections. The City has numerous through-curb connections. Through-curb connections are the easiest and least expensive to survey for illicit connections that convey illicit discharges. They are located above ground and can be easily observed by City staff.

2. Catch Basin Connection (CBC)

   This type of connection is a pipe piercing through a catch basin wall that allows a discharge to flow directly into the catch basin. The City has approximately 3200 catch basins. City staff can observe the inside of the catch basins during regular maintenance activities for illicit connections that convey illicit discharges.

3. Open Channel Connection (OCC)

   This type of connection is a pipe penetrating a wall of an open channel that allows a discharge to flow directly into the drainage channel. Open channels are considered to be dirt V-ditches, concrete rectangular or trapezoidal channels. There are approximately 11 miles of open channel facilities owned and maintained by the City. City staff can observe the inside of open channels during regular maintenance activities for illicit connections that convey illicit discharges. Both sides of the channel will be observed which equates to investigating 22 miles of channel walls.

4. Pipe-to-Pipe Connection (PPC)

   This type of connection is an underground pipe directly connected to the City's storm drain pipe within the City street public right of way. This type of connection is the least common type of illicit connection to be found for several reasons:

   1. This type of connection requires a public works permit;
   2. Any work within the public street right of way falls under the scrutiny of public works field inspectors; and
   3. The difficulty of excavating within the street without being noticed.

   Investigating underground pipes for this type of illicit connection is the most expensive and least effective. Until 1963, the City maintained its own plumbing code separate from the national Uniform Plumbing Code (UPC). Floor drains were required to be connected to the sanitary sewer system. In the current UPC, Section 304.0 states that plumbing fixtures carrying sewage must drain into the sanitary sewer system.

   Methods to locate underground pipe connections include Dye test, Smoke test and T.V. inspections. Detailed and sophisticated techniques such as those described will be used, if a continual illicit discharge is discovered and other methods of investigations are unsuccessful in determining the source.

The four connection types are listed in Table 6-5 along with the relative number of illicit connections to be found, the cost to identify illicit connections and the ranking priority.

TABLE 6-5

CONNECTION TYPE	ANTICIPATED NUMBER	RELATIVE COST	PRIORITY
Through the Curb	HIGH	LOW	FIRST
Catch Basin	MEDIUM	LOW	SECOND
Open Channel	MEDIUM	MEDIUM	THIRD
Pipe to Pipe	LOW	HIGH	FOURTH

Priority is based on cost effectiveness. For example, observing through-curb connections will most likely capture more illicit connections at a relatively low cost in comparison to investigation of underground pipe connections.

PROGRAM PRIORITIES

Based on the combination of information from Table 6-3,6-4,6-5 and Section 3, Table 6-6, located at the end of this section, presents the priorities for the overall illicit connection program.

6.2.3 ILLICIT CONNECTION DETECTION AND INVESTIGATION

The strategy to detect and investigate illicit storm drain connections is summarized below.

A connection to the storm drain system, that is suspected or observed to be the source of an illicit discharge, will be investigated to determine the source and nature of the discharge. The connection may be discovered while investigating a suspected illicit discharge, or detected by field staff during the course of their normal daily activities.

The Permittee shall eliminate all illicit connections the Permittee becomes aware of through City inspectors or public reporting within 6 months after the Permitee gains knowledge of the connection.

The Permittee shall inspect at a minimum :

- Those portions of the storm drain system consisting of storm drain pipes 36 inches in diameter or greater; for illicit connections within 5 years (6/30/2004);
- Areas of the MS4 designated as high priority, within 2 years (6/30/2001), based on priorities identified in the storm water management plan;
- Open channels within one year (6/30/2000); and
- Storm sewers to identify the presence of conditions that may suggest the presence of illicit connections and, where information is developed that suggests such connections exist, investigate and take necessary actions to eliminate the connection.

Once an illicit discharge has occurred and an illicit connection is suspected, one of the following actions may occur:

- The connection will be terminated through voluntary action ;or

- The connection will be terminated through aggressive enforcement proceedings; or

- If the discharge is determined to consist only of exempted non-storm water, the connection will be allowed to remain and will no longer be considered an illicit connection; or

- The discharge will be permitted through a separate NPDES permit;

If the investigation and elimination of multiple suspected illicit connections cannot be investigated and completed in a timely manner, the City will prioritize potential problem areas for detection and investigation efforts under this program component, using the methodology defined in this program in Section 6.2.3.

If the suspected connection is active and it is suspected that the substance is hazardous, 911 will be called to begin the proper response.

If the substance is non-hazardous, Departmental investigation procedures will be followed.

Catch Basins and open channel systems will be investigated on a biannual basis.

6.2.4 ENFORCEMENT PROCEDURES

See 6.1.5

6.2.5 RECORD KEEPING AND DOCUMENTATION

The Storm Drain Atlas and/or the City's GIS system will serve as an excellent database to store information regarding illicit and /or inappropriate connections to the City's storm drain system and serve as an ongoing tracking system for the City's implementation efforts.

At a minimum, the following illicit connection information must be recorded and reported annually:

- Number of illegal connections identified in the past year;
- Number of illegal connections eliminated in the past year; and
- Number and type of enforcement actions, applicable to storm water enforcement, taken in the past year.

6.3 PUBLIC REPORTING

The goal of the public reporting program is to promote, publicize, and facilitate public reporting of illicit discharges and illicit disposal incidents.

The baseline objective of the program is:

- A program will be implemented to receive incoming calls from the public regarding potential illicit discharges and illicit disposal practices, communicate and coordinate a response, follow up with the complainant if appropriate, and maintain documentation.

6.3.1 RECEIVING INCOMING CALLS

Reporting can occur from a number of different sources, including:

- 562-**570-DUMP** (3867) – Local reporting and information hotline.
- L.A. County hotline referral, 1-888-CLEAN LA. The City will advertise and use the countywide hotline reporting system maintained by Los Angeles County Department of Public Works. Calls received at this location are then forwarded to the appropriate municipality. In the case of Long Beach, calls to this number will be forwarded to:

Clean Water Division	24hrs/7days/week	(562) 570-6023
Fire Department	Non-business Hours	(562) 436-8211

The phone numbers will be updated with the County in the event a change occurs.

- Municipal employee
- Public
- Other Agency

Reporting can also be done through a number of different medians:

- Phone **(562) 570-DUMP** (3867)
- Municipal radio
- In person
- Written correspondence
- E-mail through Internet

The procedures to receive incoming reports of illicit discharge/disposal incidents include:

When an incident is reported, the call is routed to the appropriate department within the City for response at which time each Department then follows their policies and procedures.

If there is an immediate threat to receiving waters the Fire Department will be notified at once through the 911 system.

6.3.2 COMMUNICATIONS AND COORDINATION

The City will continue with its current policies and procedures to coordinate activities between Permittees to promptly investigate reports of illicit discharge/disposal.

6.3.3 FOLLOW-UP WITH COMPLAINANT

The suitable City official, at their discretion, will determine if follow-up with the complainant, of actions taken, is appropriate.

6.3.4 RECORD KEEPING AND DOCUMENTATION

Report forms will be submitted annually to the Los Angeles Regional Water Quality Control Board. These report forms are due annually, not later than the 1st of December, to be in compliance with the Municipal Permit.

The City NPDES coordinator will compile the final document with information provided by City departments.

The Permittee shall maintain a database on illicit discharge connections which includes type of connection, location, evidence of illicit discharge, date of initial inspection, enforcement action taken, date of follow-up inspection, and date of removal.

6.4 REPORTING HAZARDOUS SUBSTANCES ENTERING THE STORM DRAIN SYSTEM

The goal of this program is to facilitate appropriate reporting of hazardous substances entering the storm drain system as a result of an illicit discharge.

The baseline objective of the program is:

- Report and document reportable quantities of hazardous substances entering the storm drain system.

6.4.1 DEFINITIONS OF HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES

The Permit defines a hazardous substance as a material defined under 40 Code of Federal Regulations (CFR) § 302. These are categorized as either "listed" or "unlisted" hazardous substances. Listed hazardous substances are certain items of solid waste that exhibit characteristics identified in 40 CFR § 261.2 through 261.24. Examples of hazardous substances include any substance or chemical product for which one or more of the following applies:

- A material safety data sheet (MSDS) is required
- The substance is listed as radioactive by the Nuclear Regulatory Commission
- The substance is listed as hazardous by the U.S. Department of Transportation
- The material is listed in Labor Code § 6382(b)

The above four categories are described in the California Health and Safety Code, Division 20, Chapter 6.95, Hazardous Materials Release Response Plans and Inventory.

The Permit defines a reportable quantity of hazardous substance as the quantity set forth in 40 CFR § 302. For listed hazardous substances, this amount is the quantity listed in the column "Final RQ" on Table 302.4. For unlisted hazardous substances, this amount is generally 100 lbs.

6.4.2 NOTIFICATION PROCEDURES

Procedures to report incidents of "reportable quantity" of hazardous substances entering the storm drain system will continue to be implemented. These procedures include:

- When spill/illicit discharge/disposal materials are suspected to be hazardous, notify the appropriate Administering Agency.
- The Administering Agency will conduct a material investigation.
- If the material is hazardous, the Administering Agency will notify local, state and federal agencies and private contractors as necessary.

- If the material equals or exceeds the reportable quantity in a 24-hour period, the Administering Agency (or designated individual/department) will notify the California Office of Emergency Services (OES) and the National Response Center.

A complete description of procedures for handling releases of hazardous substances is contained in each department's emergency response or procedures manual.

6.4.3 RECORD KEEPING AND DOCUMENTATION

See Section 6.3.4

Other reporting requirements for hazardous substances, unrelated to stormwater quality, are covered in a number of federal and state regulations and are part of Departmental policies and procedures.