

Illicit Connections and Illicit Discharges Elimination Program Manual









Los Angeles County Flood Control District

Table of Contents

Section 1		am Summary and Objectives	
1.1		ckground	
1.2		ture and Types of Illicit Discharges and Illicit Connections	
	1.2.1	Illicit Discharges	
	1.2.2	Illicit Connections	
1.3		ogram Summary	
	1.3.1	Illicit Discharge Source Investigation and Elimination	
	1.3.2	Illicit Discharge and Spill Response Plan	
	1.3.3	Identification and Response to Illicit Connections	
	1.3.4	Public Reporting of Non-Storm Water Discharges and Spills	
	1.3.5	Illicit Connection and Illicit Discharge Education and Training	1-12
	1.3.6	MS4 Mapping	1-13
Section 2		Discharges	
2.1		oduction	
2.2		ogram Implementation Elements	
	2.2.1	Source Investigation and Elimination	2-2
	2.2.2	Spill Response Plan	
	2.2.3	Plastic Pellet Spill	
	2.2.4	Standardized Enforcement Procedures	2-5
	2.2.5	Record Keeping and Documentation	2-7
Section 3	: Illicit	Connections	
3.1	Intr	oduction	3-1
3.2		ogram Implementation Elements	
	3.2.1		
	3.2.2	Illicit Connection Investigation	3-6
	3.2.3	Illicit Connection Termination	
	3.2.4	Standardized Enforcement Procedures	3-7
	3.2.5	Record Keeping and Documentation	3-7
Section 4	: Public	c Reporting	
4.1	Intr	oduction	4-1
4.2	Pro	ogram Implementation Elements	4-1
	4.2.1	Receiving Incoming Calls	4-1
	4.2.2	Communications and Coordination	4-2
	4.2.3	Follow up with Complainant	4-2
	4.2.4	Record Keeping and Documentation	4-2
Section 5	: Educa	ation and Training	
5.1	Intr	oduction	5-1
5.2	Pro	ogram Implementation Elements	5-1
	5.2.1	Education and Training	5-1
Section 6	: MS4 I	Mapping	
6.1		oduction	6-1
6.2	Pro	ogram Implementation Elements	6-2
		Storm Drain Network	6-2

1.1 BACKGROUND

The municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit (Permit) is issued by the Los Angeles Regional Water Quality Control Board (Regional Board) to the County of Los Angeles (County), Los Angeles County Flood Control District (LACFCD), and 84 incorporated cities within the Los Angeles County. The NPDES Permit was adopted by the Regional Board on November 8, 2012, and became effective on December 28, 2012. The Permit requires Permittees to continue implementing an Illicit Connections and Illicit Discharges Elimination Program. This document describes a program that the LACFCD can follow to implement the Illicit Connections and Illicit Discharges Elimination Program in compliance with the Permit.

Part VI.D.4.d of the Permit contains requirements specifically for the identification and elimination of illicit connections and illicit discharges to the municipal separate storm sewer system (MS4), generally referred to in this document as "storm drain system." The Permit requirements are shown in Table 1-1. They are fully enforceable and can be changed via the Watershed Management Plans, Enhanced Watershed Management Plans, and/or action by the Regional Board.

	Table 1-1 Permit Requirements - Illicit Connections and Illicit Discharges			
Permit Section				
VI.D.4.d.i.(1)	Implement an Illicit Connection and Illicit Discharge Elimination (IC/ID) Program to detect, investigate, and eliminate IC/IDs to the MS4.	April 28, 2015 (WMP Approval date)	Lead: EPD, FMD, LDD, SMD Support: WMD, ITD	
VI.D.4.d.ii.(1)(a)	Develop and maintain a map showing the location of outfalls owned and maintained by the LACFCD. Photographs of the major outfalls shall be taken as well.	November 8, 2013	Lead: WMD Support: LDD, FMD, SMPM	
VI.D.4.d.ii.(1)(b)	Develop and maintain a map showing the location and length of open channels and underground storm drain pipes with a diameter of 36 inches or greater that are owned by the LACFCD.	April 28, 2015 (WMP Approval date)	Lead: WMD Support: LDD, FMD, SMPM	
VI.D.4.d.ii.(1)(c)	Develop and maintain a map showing the location and name of all water bodies receiving discharges from MS4 major outfalls identified in VI.D.4.d.ii.(a)	April 28, 2015 (WMP Approval date)	Lead: WMD Support: LDD, FMD, SMPM	

	Table 1-1 Permit Requirements - Illicit Connections and Illicit Discharges			
Permit Section	Requirement	Compliance Date	Divisions	
VI.D.4.d.ii.(1)(d)	Develop and maintain a map showing all dry weather diversions installed within the MS4, including the owner and operator of each diversion.	April 28, 2015 (WMP Approval date)	Lead: WMD Support: LDD, FMD, SMPM	
VI.D.4.d.ii.(1)(e)	Develop and maintain a map showing all known permitted and documented connections to LACFCD's MS4 system.	December 28, 2017 (end of the Permit term)	Lead: WMD Support: LDD, FMD, SMPM	
VI.D.4.d.iii.(1)	Develop written procedures for conducting investigations to prioritize and identify the source of all illicit discharges to MS4, including procedures to eliminate the discharge once the source is located.	April 28, 2015 (WMP Approval date)	Lead: FMD, EPD, SMD Support: WMD	
VI.D.4.d.iii.(2)	Initiate an investigation(s) to identify and locate the source of the illicit discharge.	Within one business day of becoming aware of illicit discharge	Lead: FMD Support: EPD	
VI.D.4.d.iii.(3)(a)	Illicit discharges suspected of being sanitary sewage and/or significantly contaminated shall be investigated first.	Each investigation	Lead: FMD Support: SMD	
VI.D.4.d.iii.(3)(b)	The LACFCD shall track all investigations to document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.	Each investigation	Lead: FMD Support: WMD, EPD	

Table 1-1 Permit Requirements - Illicit Connections and Illicit Discharges			
Permit Section	Requirement	Compliance Date	Divisions
VI.D.4.d.iii.(3)(c)	The LACFCD shall prioritize and investigate the source of all observed illicit discharges to its MS4.	Each investigation	Lead: FMD, EPD Support: WMD
VI.D.4.d.iii.(3)(d)	If source of the illicit discharge is found to be a discharge authorized under an NPDES permit, document the source and report to the Regional Water Board.	Within 30 days of determination	Lead: FMD Support: WMD (WQS) will notify the Regional Board
VI.D.4.d.iii.(3)(e)	If the source of the illicit discharge has been determined to originate from within the jurisdiction of other Permittee(s) with land use authority over the suspected responsible party/parties, the LACFCD shall immediately alert the appropriate Permittee(s) of the problem for further action by the Permittee(s).	Immediately	Lead: FMD Support: WMD, EPD
VI.D.4.d.iii.(4)(a)	If the source of the illicit discharge has been determined or suspected to originate within an upstream jurisdiction(s), notify the upstream jurisdiction immediately, and notify the Regional Water Board.	Within 30 days of determination	Lead: FMD will notify the upstream jurisdiction Support: WMD (WQS) will notify the Regional Board
VI.D.4.d.iii.(4)(b)	Once the upstream Permittee with land use authority over the suspected responsible party/parties has been alerted, the LACFCD may continue to work in cooperation with the upstream Permittee(s).	As needed	Lead: FMD Support: EPD, WMD

Table 1-1 Permit Requirements - Illicit Connections and Illicit Discharges			
Permit Section	Requirement	Compliance Date	Divisions
VI.D.4.d.iii.(4)(c)	If the source of the illicit discharge cannot be traced to a suspected responsible party, the LACFCD, in conjunction with other affected Permittees, shall continue implementing the illicit discharge/spill response plan.	As needed	Lead: FMD Support: EPD, WMD
VI.D.4.d.iii.(5)	If unable to eliminate an ongoing illicit discharge following full execution of legal authority and in accordance with Progressive Enforcement Policy, notify the Regional Water Board and provide available information	Within 30 days of determination	Lead: FMD, EPD Support: WMD (WQS) will notify the Regional Board
VI.D.4.d.iv.(1)	Initiate an investigation of reported suspected illicit connections to the storm drain system.	Within 21 days of receiving a report of a suspected illicit connection.	Lead: LDD, FMD Support: EPD
VI.D.4.d.iv.(2)(a- b)	Ensure the connection is permitted/documented or eliminated.	Within 180 days from confirmation of the illicit nature of the storm drain connection.	Lead: LDD, FMD Support: EPD
VI.D.4.d.iv.(3)	Maintain formal records for all illicit connection investigations and the formal enforcement action taken to eliminate illicit connections.	On a daily basis as necessary	Lead: LDD, FMD Support: EPD
VI.D.4.d.v.(1)	Continue to maintain the 888-CLEAN-LA hotline and corresponding internet site at www.CleanLA.com	On a daily basis as necessary	Lead: EPD, ITD, PRG Support: WMD

	Table 1-1 Permit Requirements - Illicit Connections and Illicit Discharges			
Permit Section	Requirement	Compliance Date	Divisions	
VI.D.4.d.v.(2)	Include information regarding public reporting of illicit discharges or improper disposal on the signage adjacent to open channels.	On a daily basis as necessary	Lead: FMD Support: WMD, OSD	
VI.D.4.d.v.(3)	Develop and maintain written procedures that document how complaint calls and internal submissions are received, documented, and tracked to ensure that all complaints are adequately addressed.	April 28, 2015 (WMP Approval date), and annual evaluation	Lead: EPD, ITD, FMD Support: WMD	
VI.D.4.d.v.(4)	Maintain documentation of the complaint calls and internal submissions and record the location of the reported spill or IC/ID and the actions undertaken, including referrals to other agencies, in response to all IC/ID complaints.	April 28, 2015 (WMP Approval date), and annual evaluation	Lead: EPD, ITD, FMD Support: WMD	
VI.D.4.d.vi.(1)	Implement an ID and spill response plan for all spills that may discharge into Permittee's system. Identify agencies responsible for ID and spill response and cleanup, provide contact information.	April 28, 2015 (WMP Approval date)	Lead: EPD, FMD, SMD Support: WMD	
VI.D.4.d.vii	Implement a training program for all targeted employees and contractors who are responsible for the identification, investigation, termination, cleanup, and reporting of illicit connections and illicit discharges. Create and maintain a list of applicable positions.	Twice per Permit term.	Lead: WMD Support: EPD, FMD, LDD:	

The requirement to implement an Illicit Connection/Illicit Discharge Elimination Program is based on one of the two primary objectives set forth in the Federal Clean Water Act amendments of 1987 that established the framework for regulating stormwater discharges from municipal, industrial and construction activities under the NPDES system:

- Effectively prohibit non-stormwater discharges.
- Reduce the discharge of pollutants to the maximum extent practicable (MEP).

To meet this statutory objective, the federal regulatory requirements for municipal Permittees include implementing a comprehensive program and best management practices (BMPs) to *detect and remove illicit discharges and improper disposal into the storm drain system*.

1.2 NATURE AND TYPES OF ILLICIT DISCHARGES AND ILLICIT CONNECTIONS

1.2.1 Illicit Discharges

The Permit has established definitions of illicit discharge and illicit disposal as follows:

"Illicit Discharge: Any discharge into the MS4 or from the MS4 into a receiving water that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term illicit discharge includes any non-storm water discharge, except authorized non-storm water discharges; conditionally exempt non-storm water discharges; and non-storm water discharges resulting from natural flows specifically identified in Part III.A.1.d."

"Illicit Disposal: Any disposal, either intentionally or unintentionally, of material(s) or waste(s) that can pollute storm water."

Categories of non-stormwater discharges that are not prohibited under the Permit are listed in Table 1-2. The context of illicit discharges and illicit disposal used in this model program includes 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., area wash down from an industrial site).
- Continuous or intermittent non-stormwater discharges through an illicit connection (see Section 1.2.2).

Table 1-2

Exempt Discharges

- Authorized non-storm water discharges separately regulated by an individual or general NPDES permit;
- Temporary non-storm water discharges authorized by USEPA¹ pursuant to sections 104(a) or 104(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that either: (i) will comply with water quality standards as applicable or relevant and appropriate requirements ("ARARs") under section 121(d)(2) of CERCLA; or (ii) are subject to either (a) a written waiver of ARARs by USEPA pursuant to section 121(d)(4) of CERCLA or (b) a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation pursuant to 40 CFR. section 300.415(j);
- Authorized non-storm water discharges from emergency firefighting activities (i.e., flows necessary for the protection of life or property)²;
- Natural flows:
 - · Natural springs and rising ground water;
 - Flows from riparian habitats or wetlands;
 - Diverted stream flows, authorized by the State or Regional Water Board;
 - Uncontaminated ground water infiltration; and
 - Rising ground waters, where ground water seepage is not otherwise covered by a NPDES permit³

Conditionally Exempt Discharges

- Discharges from essential non-emergency⁴ firefighting activities
- Discharges from drinking water supplier distribution systems;
- Landscape irrigation;
- Dechlorinated/debrominated swimming pool/spa discharges⁵;
- Dewatering of lakes⁶ and decorative fountains⁷;
- Non-commercial car washing by residents or by non-profit organizations; and
- Street/sidewalk wash water⁸

Conditionally Exempt Discharges within an ASBS

- Discharges associated with emergency firefighting activities;
- Foundation and footing drains:
- Water from crawl space or basement pumps;
- Hillside dewatering;
- Naturally occurring ground water seepage via a MS4; and
- Non-anthropogenic flows from a naturally occurring stream via a culvert or MS4, as long as there are no contributions of anthropogenic runoff
- (1) These typically include short-term, high volume discharges resulting from the development of groundwater extraction wells or USEPA or State-required compliance testing of potable water treatment plants, as part of a USEPA authorized groundwater remediation action under CERCLA.



- (2) Discharges from vehicle washing, building fire suppression system maintenance and testing (e.g., sprinkler line flushing), fire hydrant maintenance and testing, and other routine maintenance activities are not considered emergency firefighting activities.
- (3) A NPDES permit for discharges associated with ground water dewatering is required within the Los Angeles Region.
- (4) This includes firefighting training activities, which simulate emergency responses, and routine maintenance and testing activities necessary for the protection of life and property, including building fire suppression system maintenance and testing (e.g. sprinkler line flushing) and fire hydrant testing and maintenance. Discharges from vehicle washing are not considered essential and as such are not conditionally exempt from the non-storm water discharge prohibition.
- (5) Conditionally exempt dechlorinated/debrominated swimming pool/spa discharges do not include swimming pool/spa filter backwash or swimming pool/spa water containing bacteria, detergents, wastes, or algaecides, or any other chemicals including salts from pools commonly referred to as "salt water pools" in excess of applicable water quality objectives.
- (6) Dewatering of lakes does not include dewatering of drinking water reservoirs. Dewatering of drinking water reservoirs is addressed in Part III.A.2.a.ii of the 2012 Los Angeles MS4 Permit.
- (7) Conditionally exempt discharges from dewatering of decorative fountains do not include fountain water containing bacteria, detergents, wastes, or algaecides, or any other chemicals in excess of applicable water quality objectives.
- (8) Conditionally exempt non-storm water discharges of street/sidewalk wash water only include those discharges resulting from use of high pressure, low volume spray washing using only potable water with no cleaning agents at an average usage of 0.006 gallons per square feet of sidewalk area in accordance with Regional Water Board Resolution No. 98-08. Conditionally exempt non-storm water discharges of street/sidewalk wash water do not include hosing of any sidewalk or street with a garden hose with a pressure nozzle.

1.2.2 Illicit Connections

The Permit defines illicit connection as:

"Illicit Connection: Any man-made conveyance that is connected to the storm drain system without a permit, 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."

An illicit connection can also be a permitted connection to the storm drain system through which prohibited non-stormwater flows are discharged. This includes channels, pipelines, conduits, inlets or outlets that are connected directly to the storm drain system. Roof drains, area drains, and other similar connections which are intended to convey only stormwater runoff are excluded, unless they are also used to convey an illicit discharge.

1.3 PROGRAM SUMMARY

Each Permittee will continue implementation of an illicit connection/illicit discharge elimination program that includes the following components:

- Illicit Discharge Source Investigation and Elimination
- Illicit Discharge and Spill Response Plan Identification and Response to Illicit Connections
- Public Reporting of Non-Storm Water Discharges and Spills
- Illicit Connection and Illicit Discharge Education and Training

MS4 Mapping

A brief summary of the baseline objectives of each component relative to the nature and type of illicit discharges and illicit connections follows.

1.3.1 Illicit Discharge Source Investigation and Elimination

The goal of this component is to prioritize, detect and eliminate illicit discharges from entering the storm drain system to reduce pollutants from such discharge. The baseline objectives are:

- Incidental spills, or disposal (including sanitary sewer leaks or overflows) reported by the public or other agencies or observed by Permittee field staff during the course of their normal daily activities will be investigated, contained and cleaned up.
- Prohibited non-stormwater discharges to the storm drain system reported by the
 public or other agencies or observed by Permittee field staff during the course of
 their normal daily activities (such as surface runoff associated with washdown
 from an industrial site) will be eliminated through voluntary termination or
 enforcement action.
- Suspected prohibited non-storm discharges in the storm drain system reported by the public or other agencies or observed by Permittee 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.

Appropriate staff shall investigate and respond with activities to eliminate and clean up illicit discharges, in accordance with the timeframe and the methods defined in this manual.

Implementation requirements for this component of the program are contained in Section 2.

1.3.2 Illicit Discharge and Spill Response Plan

The goal of this component is to implement an illicit discharge and spill response plan for all spills that may discharge into the LACFCD's system. The requirements are shown in Table 1-3

Table 1-3				
	Permit Requirements – Illicit Discharge and Spill Response Plan			
Report Section	Requirement	Permit Section	Division	



Table 1-3			
	Permit Requirements – Illicit Discharge and Spill	Response Plan	
Report Section	Requirement	Permit Section	Division
2.2	Implement an ID and spill response plan for all spills that may discharge into Permittee's system. Identify agencies responsible for ID and spill response and cleanup, provide contact information.	VI.D.4.d.vi.(1)	Lead: FMD, SMD Support: WMD
2.2.2	Coordinate with spill response teams throughout all appropriate divisions, departments, programs and agencies so that maximum water quality protection is provided	VI.D.4.d.vi.(1)(a)	Lead: FMD, SMD Support: WMD
2.2.3	Initiate an investigation of all complaints within one business day of receiving the complaint to assess validity	VI.D.4.d.vi.(1)(b)	Lead: FMD Support: EPD
2.2.3	Respond to IDs and spills within 4 hours of becoming aware of the ID or spill, except where such IDs or spills occur on private property, in which case the response should be within 2 hours of gaining legal access to property	VI.D.4.d.vi.(1)(c)	Lead: FMD, SMD Support: WMD
2.2.3	Report IDs or spills that may endanger health or the environment to appropriate public health agencies and the Office of Emergency Services (OES)	VI.D.4.d.vi.(1)(d)	Lead: FMD, SMD Support: WMD

Implementation requirements for this component of the program are contained in Section 2.

1.3.3 Identification and Response to Illicit Connections

The goal of this component is to detect and eliminate illicit connections to reduce pollutants discharged through such connections. The baseline objectives are:

- A screen of the storm drain system will be conducted by maintenance personnel for illicit connections.
- 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 while field screening the storm drain system in accordance with requirements set forth in Part VI.D.4.d.iv and IX (page 23, Attachment E) of the Permit, or detected by field staff during the course of their normal daily activities.

- Once the illicit connection/discharge has been investigated as described in Section 2, one of the following actions must occur:
 - If the discharge is determined to consist only of exempted non-stormwater, the connection will be allowed to remain and will no longer be considered an illicit connection. The LACFCD may elect to issue a permit for the connection or allow the connection to remain if information on the connection is recorded as described in the model program; or
 - The discharge will be permitted through a separate NPDES permit; or
 - The connection will be terminated through voluntary action or enforcement proceedings.

The LACFCD shall investigate and terminate illicit connections in accordance with the time and the methods defined in this model program.

Implementation requirements for this component of the program are contained in Section 3.

1.3.4 Public Reporting of Non-Storm Water Discharges and Spills

The goal of this component is to promote, publicize and facilitate public reporting of illicit discharges and illicit disposal practices. The baseline objective is:

• The LACFCD has implemented a program 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, and maintain documentation.

Implementation requirements for this component of the program are contained in Section 4.

1.3.5. Illicit Connection and Illicit Discharge Education and Training

The goal of this component is to ensure that all staff and contractors whose job duties are related to implementing the IC/ID elimination program are adequately trained. The baseline objective is:

 The LACFCD provides employees with the IC/ID refresher training at least twice during the term of the Permit and new staff must be trained within 180 days of starting employment.

Implementation requirements for this component of the program are contained in Section 5.

1.3.6 MS4 Mapping

The 2012 NPDES permit requires the LACFCD to maintain an up-to-date and accurate electronic map of its MS4. The goal of the MS4 Mapping requirements is to develop and maintain maps showing:

- The location of outfalls owned and maintained by LACFCD;
- The location and lengths of open channels;
- The location and lengths of underground storm drain pipes with a diameter of 36" or greater that are owned by the LACFCD;
- The location and name of all water bodies receiving discharges from MS4 major outfalls;
- All dry weather diversions;
- All known permitted and documented connections to LACFCD's MS4 system.

The LADFCD uses Global Positioning System (GPS) and Geographic Information System (GIS) technology for mapping of its MS4 system.

GIS provides a tool to not only track and manage the mapping requirements for the IC/ID program, but also to effectively utilize system with other Stormwater Management Program components.

Implementation requirements for this component of the program are contained in Section 6.

2.1 INTRODUCTION

The goal of the illicit discharge elimination program is to prioritize, detect and eliminate non-stormwater discharges (except those exempt discharges listed in Table 1-2) from entering the storm drain system to reduce pollutants from such discharge to the maximum extent practicable. Each Permittee's program must meet the requirements of the Los Angeles County municipal stormwater permit (Permit), as shown in Table 2-1.

Table 2-1				
	Permit Requirements - Illicit Discharge Elimination			
Report Section	Requirement	Permit Section	Division	
2.2.1	Develop written procedures for conducting investigations to prioritize and identify the source of all suspected illicit discharges, including procedures to eliminate the discharge once the source is located	VI.D.4.d.iii.(1)	Lead: FMD, EPD, SMD Support: WMD	
2.2.2	Continue implementing the illicit discharge/spill response plan, if the source of the illicit discharge cannot be traced to a suspected responsible party.	VI.D.4.d.iii.(4)(c)	Lead: FMD, SMD Support: WMD	
2.2.3	Notify the Regional Board within 24 hours of becoming aware of a plastic pellet spill.	Santa Monica Bay Nearshore and Offshore Debris TMDL	Lead: FMD Support: WMD (WQS) will notify the Regional Board	
2.2.4	Continue to implement enforcement procedures to eliminate illicit discharges.	VI.D.4.d.iii.(4)	Lead: FMD, EPD Support: WMD	
2.2.5	Continue to implement a record keeping system to document illicit discharges.	VI.D.4.d.iii.(3)(b)	Lead: FMD, EPD	

The baseline objectives of the program are:

- Incidental spills, or disposal reported by the public or other agencies or observed by Permittee field staff during the course of their normal daily activities will be investigated, contained and cleaned up. Illicit discharges suspected of being sewer leaks/overflows and/or significantly contaminated need to be investigated first.
- Prohibited non-stormwater discharges to the storm drain system reported by the public or other agencies or observed by Permittee field staff during the course of

their normal daily activities (such as surface runoff associated with washdown from an industrial site) will be eliminated through voluntary termination or enforcement action.

Suspected prohibited non-storm discharges in the storm drain system reported by the public or other agencies or observed by 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. If the LACFCD is unable to eliminate an ongoing illicit discharge following full execution of its legal authority it will notify the Regional Water Board.

2.2 PROGRAM IMPLEMENTATION ELEMENTS

2.2.1 Source Investigation and Elimination

Standardized procedures will be implemented to conduct investigations to identify the source of and ultimately eliminate illicit discharges.

Potential Illicit Discharges to LACFCD's MS4

Illicit Discharge Investigations

At a minimum, the LACFCD shall *initiate an investigation within one business day* of becoming aware of the illicit discharge. When conducting investigations, the LACFCD shall:

- Investigate sanitary sewage and/or significantly contaminated discharges first.
- Track all investigations, using MMS, eDAPTs, and any other LACFCD-approved system, to document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.
- Prioritize and investigate the source of all observed illicit discharges to its MS4.
- If the source of the illicit discharge is found to be a discharge authorized under the NPDES permit, the LACFCD shall document the source and report to the Regional Board within the 30 days of determination.
- If the source of the illicit discharge has been determined to originate from within the jurisdiction of other Permittee(s) with land use authority over the suspected responsible party/parties, the LACFCD shall immediately alert the appropriate Permittee(s) of the problem for further action by the Permittee(s).

SECTIONTWO Illicit Discharges

Illicit Discharge Elimination

When taking corrective action to eliminate illicit discharges, the LACFCD shall comply with the following:

- If the source of the illicit discharge has been determined or suspected by the LACFCD to originate within an upstream jurisdiction(s), the LACFCD shall immediately notify the upstream jurisdiction(s), and notify the Regional Water Board within 30 days.
- Once the Permittee with land use authority over the suspected responsible party/parties has been alerted, the LACFCD may continue to work in cooperation with other Permittee(s) to notify the responsible party/parties of the problem, and require the responsible party/parties to immediately initiate corrective actions to eliminate the illicit discharge.
- Upon being notified that the illicit discharge has been eliminated, the LACFCD, in collaboration with other pertinent Permittee(s), may conduct a follow-up investigation and seek all pertinent recovery costs.
- If the source of the illicit discharge cannot be identified, the LACFCD, in conjunction with other pertinent Permittee(s), shall continue to implement its illicit discharge/spill response plan.
- If the LACFCD is unable to eliminate an ongoing illicit discharge following full execution of its legal authority and Progressive Enforcement Policy, it shall notify the Regional Water Board within 30 days.

Potential Illicit Discharge that first occurs on a City or County street

City or County Staff identifies a potential Illicit Discharge

If City or County staff identifies an illicit discharge on a City or County street, the LACFCD expects that the City or County staff will contain the illicit discharge before it enters the flood control system and notify the LACFCD immediately if they are unable to do so and need assistance.

LACFCD staff identifies a potential Illicit Discharge on a City or County Street

If LACFCD staff identifies a potential illicit discharge on a City or County street, it shall notify pertinent City or County staff for containment. The LACFCD expects that the City

or County staff will contain the illicit discharge before it reaches the flood control system and notify the LACFCD if they are unable to do so and need assistance.

If LACFCD staff identifies a potential illicit discharge that originated on a City or County street, and has already reached the flood control system, it shall implement its spill response plan described in the next section.

2.2.2 Spill Response Plan

The best way to contend with spills is to prevent them from occurring (guidance is included in Appendix B). However, if a spill does occur, standardized procedures will be implemented to investigate, contain and clean up that spill. These must include procedures to ensure that sewage treated with disinfection agents will not be discharged into the storm drain system to the extent practicable. The standard procedures include (Guidance is included in Appendix G and Figure 2-1):

- Receive call on spill (public calls CLEANLA Hotline or field staff/other agencies identify a spill during work activities). See Section 4, Public Reporting, for more details.
- Dispatch appropriate FMD personnel to perform material investigation and cleanup. Standard procedures will be implemented to respond within 4 hours of discovery or a report of a suspected illicit discharge or spill, with activities to abate, contain, and clean up all illicit discharges and spills. For private property the response will be within 2 hours of gaining legal access to the property. Initiation of investigation of all illicit discharge and spill complaints will be carried out within one business day of receiving the complaint to assess validity. If the spill is not within LACFCD's jurisdiction, dispatch will refer it to the appropriate Permittee.
- If the spill is hazardous, FMD shall notify HAZMAT to address the situation.
- If the spill is not hazardous, FMD shall contain the spill/material and minimize its release to the storm drain system or receiving waters (may work with a contractor). In addition, FMD shall determine the source of the illicit discharge and contact EPD to conduct an investigation and communicate with the responsible party.
- FMD staff and/or a contractor shall eliminate and cleanup the illicit discharge. If a
 responsible party is identified, EPD shall seek recovery costs for cleanup and all
 other pertinent services. In addition, EPD shall perform follow-up inspections if
 needed.
- Perform field tests as necessary to determine type and source of spill.

• If the call was received through the LACDPW Hotline, notify the LACDPW dispatcher upon incident closure.

Within agency responding divisions or sections, responsible staff, and level of support provided to lead emergency response agencies, will be identified. Within agency, spill response training, spill response equipment and activities to improve spill response procedures will be identified. Guidance is included in Appendices A-C.

Division-specific spill response plans are included in:

Appendix A Flood Maintenance Division - Illicit Discharge Emergency Response Plan;

Appendix B Environmental Programs Division - Illicit Discharge Response Procedures;

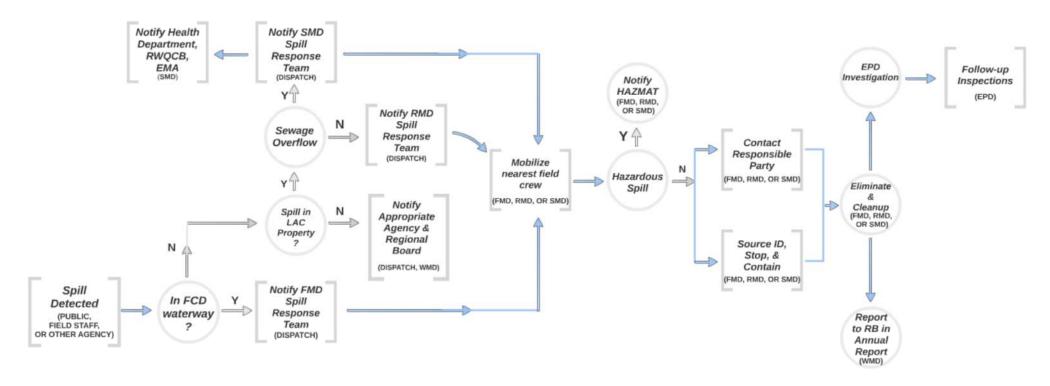
Appendix C Sewer Maintenance Division - Sanitary Sewer Overflow Response Instruction Manual.

2.2.3 Plastic Pellet Spill

- The Santa Monica Bay Nearshore and Offshore Debris TMDL requires notification to the Regional Board within 24 hours of becoming aware of a plastic pellet spill. Notifications can be made by telephone to the Regional Board at (213) 576-6600. Inform the front desk staff that the call is regarding the Santa Monica Bay Debris TMDL and you will be transferred to appropriate staff. If during off hours, leave a message that includes time, date, that it is regarding the Santa Monica Bay Debris TMDL, responsible jurisdiction, details of spill, and contact information.
- Alternatively, notifications can be made by email to <u>losangeles@waterboards.ca.gov</u>. The subject line should be "Santa Monica Bay Debris TMDL". Include in the body of the e-mail the time, date, that it is regarding the Santa Monica Bay Debris TMDL, responsible jurisdiction, details of spill, and contact info.

2.2.4 Standardized Enforcement Procedures

Enforcement procedures will be implemented to eliminate illicit disposal or discharges. The procedures will be followed when the source and nature of the discharge is known. Enforcement procedures will be consistent with LACFCD's legal authority. The enforcement process includes:



Illicit Discharge Procedures/Spill Response Divisions: FMD, RMD, SMD, EPD, ITD

Figure 2-1

- Verbal or written warnings for minor violations
- Formal notice of violation or non-compliance with specific actions and time frames for compliance
- Cease and desist or similar order to comply
- Specific remedies such as civil penalties (e.g., infraction), non-voluntary termination with cost recovery, or referral for criminal penalties or further legal action

Enforcement activity will begin at the appropriate level as determined by the LACFCD's authorized representative. It need not necessarily be imposed sequentially. For incidents that are more severe or threatening at the outset, enforcement will start at an increased level. Enforcement steps will be accelerated if there is evidence of a clear failure to act, or an increasing severity of the discharge. A sample enforcement strategy and guidance are included in Appendix J.

2.2.5 Record Keeping and Documentation

The Maintenance Management System (MMS) has been implemented to document illicit discharges detected within the local jurisdiction. The standard elements are:

- Record the following minimum information on all detected illicit discharges:
 - Date/time of the incident
 - Location
 - Type of material
 - Source, if determined
 - Action taken
 - Date incident was closed
- Forward the information to a designated individual/department.
- The LACFCD will document the source of the illicit discharge and report to the Regional Water Board within 30 days of determination, if the source is found to be a discharge authorized under an NPDES permit.

3.1 INTRODUCTION

As defined in the MS4 Permit, an illicit connection is any man-made conveyance that is connected to the storm drain system without a permit, 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. The goal of the illicit connection elimination program is to eliminate these connections to the maximum extent practicable. Each Permittee's program must meet the requirements of the Los Angeles County municipal stormwater permit (Permit), as shown in Table 3-1.

	Table 3-1				
Report	Permit Requirements - Illicit Connection Elimination Report Permit Perm				
Section	Requirement	Section	Division		
3.2.2	Continue to implement illicit connection investigation procedures, which includes initiating an investigation within 21 days, to determine source of the connection, nature and volume of discharge, and responsible party.an investigation	VI.D.4.d.iv(1)	Lead: FMD, LDD Support: EPD, WMD, ITD		
3.2.3	Continue to implement illicit connection termination procedures, which include terminating a confirmed illicit connection within 180 days.	VI.D.4.d.iv(2)	Lead: FMD, LDD Support: EPD		
3.2.4	Continue to implement enforcement procedures to eliminate illicit connections.	VI.D.4.d.iv(2)	Lead: FMD, LDD Support: EPD		
3.2.5	Continue to implement a record keeping system to document illicit connections.	VI.D.4.d.iv(3)	Lead: FMD, LDD		

The baseline objectives of the program are:

- A screening of the storm drain system will be conducted by maintenance personnel for illicit connections following the schedule presented in Section 3.2.1.
- 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 screening of the storm drain system or during the course of their normal daily activities.
- Once the illicit discharge has been investigated as described in Section 2, one of the following actions must occur:

- If the discharge is determined to consist only of exempted non-stormwater, the connection will be allowed to remain if it is already permitted or the LACFCD subsequently is able to issue a permit; or
- If the discharge may be permitted through a separate NPDES permit, the connection will be allowed to remain if it is already permitted or the LACFCD subsequently is able to issue a permit; or
- The connection will be terminated through voluntary action or enforcement proceedings.

This strategy is summarized in Figure 3-1. For additional guidance, refer to Appendix D (Land Development Division IC/ID Procedures).

Lastly, Figure 3-2 illustrates procedures for scenarios in which there may not be a physical connection to the storm drain or channel.

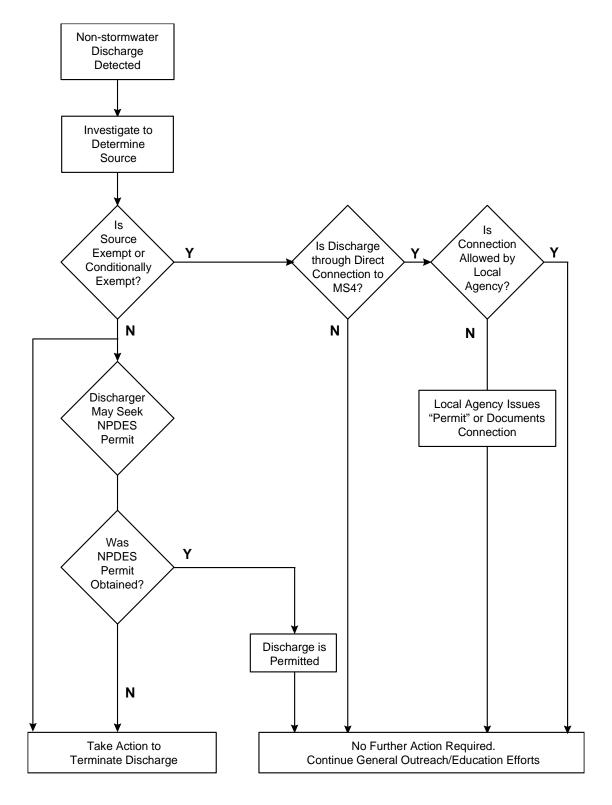


Figure 3-1
Illicit Discharge/Illicit Connection Elimination Strategy

Scenarios and Procedures for Potential IC/IDs

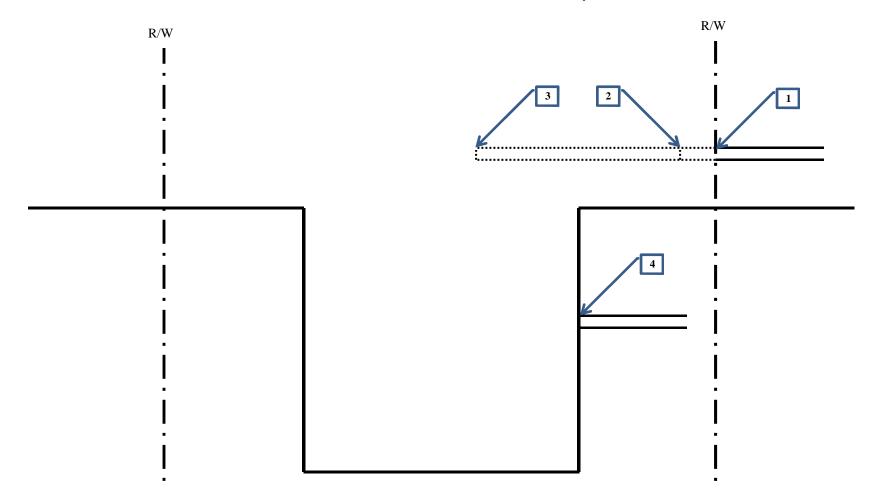


Figure 3-2: LAFCD Channel Cross Section

Pipe



Scenario 1 – Private Drain ends at FCD R/W and does not physically connect to the storm drain system

- **a.** If FMD observes a stain and/or active discharge, it will then contact EPD, who will open an investigation and contact the necessary agencies.
- **b.** If conditions are dry and there is no visible evidence that a discharge has taken place, no further action is necessary. However, FMD may inventory the drain for its own internal records.

Scenario 2 – Private drain crosses over FCD R/W but does not physically connect to the storm drain system

- **a.** If FMD observes a stain and/or active discharge, it will then contact EPD, who will open an investigation and contact the necessary agencies. In addition, FMD will also send the property owner an encroachment letter.
- **b.** If conditions are dry and there is no visible evidence that a discharge has taken place, FMD will only address the encroachment issue and send the property owner an encroachment letter. In addition, FMD may inventory the drain for its own internal records.

Scenario 3 – Private Drain crosses over the channel but does not physically connect to the storm drain system

a. If the drain is classified as an illicit connection, see Scenario 4 below. If the drain is not classified as an illicit connection, see Scenario 2 above.

Scenario 4 – Private Drain connects to the storm drain system

- **a.** If FMD suspects it is an illicit connection, it will complete a gray sheet and send it to LDD for investigation.
- **b.** If FMD observes a stain and/or active discharge, it will then contact EPD to investigate, who then may contact Building and Safety at its discretion.

3.2 PROGRAM IMPLEMENTATION ELEMENTS

3.2.1 Storm Drain System Inspection

Although no longer a MS4 Permit requirement, standardized procedures for storm drain inspection for illicit connections will be implemented. The procedures include:

Annual inspection of open channels.

SECTIONTHREE

 A set of routines scheduled on a 1, 3, and 6 year cycle: 1 year cycle for drains with high probability of illicit connection, 3 year cycle for drains within industrial and commercial areas where illicit connection is most likely, and 6 year cycles for residential areas where illicit connection is least likely.

3.2.2 Illicit Connection Investigation

Standardized procedures for identification of illicit connections will be implemented. The procedures include:

- During routine site inspections (e.g., Industrial Waste, Hazardous Materials, construction), or storm drain system inspection activities as outlined in Section 3.2.1, look for connections that exhibit evidence of suspected illicit discharges.
- If evidence of an illicit discharge is detected, as discussed in Section 2, and the source does not appear to be evident or above ground, investigate to determine if the discharge is being conveyed through an illicit connection. Methods to locate illicit connections include:
 - Document research (e.g., storm drain system maps, prior investigation documents, permit files)
 - Physical inspections of catch basins, manholes, and lines large enough for safe entry
 - Dye test
 - Smoke tests
 - T.V. inspections
- Permittees will initiate an investigation within 21 days from the discovery or upon receiving a report of a suspected illicit connection.

Guidance for the selection and use of appropriate field screening techniques is included in Appendix L.

3.2.3 Illicit Connection Termination

Once a suspected illicit connection has been located and the nature and source of the discharge has been identified, follow-up action will be initiated in one of the following ways:

 If the discharge is determined to be exempt or conditionally exempt, the connection may be left intact. The connection must either be permitted or a record of the connection investigation will be kept on file as described in Section 3.2.5.

- If the discharger applies for and receives a separate NPDES permit, the connection may be left intact.
- If the connection is the source of continuous or intermittent illicit discharges, either the discharge must be terminated as discussed in Section 2 and a record of the connection kept on file, or the connection must be terminated, either voluntarily or through additional enforcement.

Upon confirmation of the illicit nature of a storm drain connection, the illicit connection will be terminated within 180 days.

Appropriate staff, such as inspectors and field crews, should be educated about how to conduct illicit connection investigations. Guidance for conducting an educational program is included in Appendix H.

3.2.4 Standardized Enforcement Procedures

Enforcement procedures will be implemented when terminating illicit connections. Enforcement procedures will be consistent with LACFCD's legal authority and include:

- Verbal or written warnings for minor violations
- Formal notice of violation or non-compliance with specific actions and time frames for compliance
- Cease and desist or similar order to comply
- Specific remedies such as civil penalties (e.g., infraction), non-voluntary termination with cost recovery, or referral for criminal penalties or further legal action

Enforcement activity will begin at the appropriate level as determined by the authorized representative. It need not necessarily be imposed sequentially. For incidents that are more severe or threatening at the outset, enforcement will start at an increased level. Enforcement steps will be accelerated if there is evidence of a clear failure to act, or an increasing severity of the discharge. An example of enforcement strategy and guidance is included in Appendix J.

3.2.5 Record Keeping and Documentation

A standardized record keeping system will be implemented to document illicit connections detected within the LACFCD. The standards elements are:

SECTIONTHREE

- Record the following minimum information on all suspected illicit connections:
 - Type of connection
 - Location
 - Evidence of illicit discharge
 - Action taken
 - Date incident was closed
- Forward the information to LDD.

A form that can be used to collect this information, *Illicit Discharge/Connection Reporting and Response*, is included in Appendix K.



4.1 INTRODUCTION

The goal of the public reporting program is to promote, publicize, and facilitate public reporting of illicit discharges and illicit disposal incidents. Each Permittee's program must meet the requirements of the Los Angeles County municipal stormwater permit (Permit), as shown in Table 4-1.

	Table 4-1			
Donort	Permit Requirements - Public Reporting			
Report Section	Requirement	Permit Section	Division	
4.2.1	The LACFCD shall continue to maintain the 888-CLEAN-LA hotline and corresponding internet site at www.CleanLA.com to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s.	VI.D.4.d.v.(1)	Lead: EPD, ITD, PRG Support: WMD	
4.2.1	Include information regarding public reporting of IDs or improper disposal on the signage adjacent to open channels	VI.D.9.h.vi.(4) VI.D.4.d.v.(2)	Lead: FMD Support: WMD, OSD	
4.2.2 4.2.3	Develop and maintain written procedures that document how complaints calls and internet submissions are received, documented, and tracked to ensure that all complaints are adequately addressed. Evaluate the procedure annually to ensure that it accurately documents the methods employed by the LACFCD.	VI.D.4.d.v.(3)	Lead: EPD, ITD, FMD Support: WMD	
4.2.4	Maintain documentation of the complaints calls and internet submissions and record the location of the reported spill or IC/ID and the actions undertaken, including referrals to other agencies, in response to all IC/ID complaints.	VI.D.4.d.v.(4)	Lead: EPD, ITD, FMD Support: WMD	

Guidance for conducting all public reporting activities is included in Appendix M.

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, and maintain documentation.

4.2 PROGRAM IMPLEMENTATION ELEMENTS

4.2.1 Receiving Incoming Calls

Procedures will be implemented to receive incoming reports of illicit discharge/disposal incidents. The procedures include:

- Use the countywide 888-CLEAN-LA hotline reporting system maintained by LACDPW.
- Receive calls and collect relevant information about the discharge/disposal.
- Promote and publicize the appropriate hotline number to the public.
- Include information regarding public reporting of illicit discharges or improper disposal on the signage adjacent to open channels (see Appendix M for the latest signage).

4.2.2 Communications and Coordination

Procedures will be implemented to communicate with and coordinate activities between Permittees to promptly investigate reports of illicit discharge/disposal. The procedures include:

- Determine jurisdiction of the reported illicit discharge/disposal incident.
- If within LACFCD facility, dispatch appropriate personnel to perform material investigation and cleanup, in accordance with procedures described in Section 2, Illicit Discharge Elimination.
- If incident is under another jurisdiction, call and/or fax known information about the discharge/disposal to the appropriate agency.
- If the call was received through the LACDPW Hotline, notify the LACDPW dispatcher upon incident closure.

4.2.3 Follow up with Complainant

Procedures will be implemented to notify the complainant of any action taken, if appropriate. The elements are:

- Determine which reports of illicit discharge/disposal were received from individuals who gave a name and address or phone number.
- Periodically notify the individual of the status of the incident, including a final notification upon incident closure.

4.2.4 Record Keeping and Documentation

As discussed in Section 2, Illicit Discharge Elimination, MMS has been implemented to document illicit discharges detected within the LACFCD. Staff involved with receiving public reports of illicit discharge/disposal will forward all



necessary information to a designated individual/department for incorporation into illicit discharge records.

5.1 INTRODUCTION

The goal of the Education and Training program is to ensure that all staff whose job duties are related to implementing the IC/ID elimination program is adequately trained. Each Permittee's program must meet the requirements of the Los Angeles County municipal stormwater permit (Permit), as shown in Table 5-1.

	Table 5-1			
	Permit Requirements – Education and Training			
Report Section	Requirement	Permit Section	Division	
5.2.1	Continue to implement a training program regarding the identification of IC/IDs for all field staff, who, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge or connection to it MS4.	VI.D.4.d.vii.(1)	Lead: WMD Support: EPD, FMD, LDD	
5.2.1	The training program should address, at a minimum, the following: IC/ID identification, investigation, elimination, cleanup, reporting, and documentation.	VI.D.4.d.vii.(2)	Lead: WMD Support: EPD, FMD, LDD	
5.2.1	LACFCD shall train all applicable staff at least twice during the 2012 LA MS4 Permit term and maintain documentation of the training activities.	VI.D.4.d.vii.(3)	Lead: WMD Support: EPD, FMD, LDD	
5.2.1	LACFCD shall train new staff within 180 days of starting employment.	VI.D.4.d.vii.(4)	Lead: WMD, EPD, FMD, LDD	
5.2.1	LACFCD shall require its contractors to train their employees in targeted positions.	VI.D.4.d.vii.(5)	Lead: WMD, EPD, FMD, LDD	

5.2 PROGRAM IMPLEMENTATION ELEMENTS

5.2.1 Education and Training

LACFCD staff has been required to implement the baseline objectives of identifying, reporting, investigating and eliminating illicit discharges to the storm drain system.

The LACFCD must maintain documentation of training activities.



Standardized procedures will be implemented to educate storm drain inspectors, maintenance workers, and other field staff to notice illicit discharges during the course of their daily activities and report them. The standard procedures include:

- Compile and/or prepare training materials, such as handouts and posters.
 Topics will include:
 - Stormwater quality requirements
 - Types of illicit discharges/disposal
 - Reporting forms
- Identify staff/positions that conduct field activities and others who may benefit from training.
- Create a list of applicable positions which require IC/ID training.
- Present information on illicit discharges during regular safety and tailgate meetings.
- Discuss how to report illicit discharges:
 - Call in report to request investigation and cleanup.
 - Fill out illicit discharge reporting forms.

Guidance for conducting the staff educational program for noticing and reporting illicit discharges is included in Appendix H.

Refresher training for all targeted employees who are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges will be conducted at least twice during the term of the Permit. New LACFCD employees will be provided with IC/ID training within 180 days of starting employment.

The education program will also help appropriate Permittee staff to determine the appropriate follow-up activity when evidence of illicit discharges is observed. This includes:

- If the nature and source of the discharge is known or readily apparent, enforcement procedures will be initiated as discussed in Section 2.2.5.
- If the nature and source of the discharge is not known, additional investigation techniques will be used to determine the nature of the material and investigate the source. Guidance is included in Appendix I.



• If the illicit discharge is suspected to be through an illicit connection, procedures described in Section 3, Illicit Connection Elimination, will also be followed.

The LACFCD must also require contractors performing municipal services (infrastructure inspection and repair) to be trained to observe and report suspected illicit discharge or connection to the MS4.

The standard procedures for the LACFCD include:

- Include contractual requirements for contractors for IC/ID observation and reporting
- Provide topics and materials for contractor training. Topics will include:
 - Stormwater quality requirements
 - Types of illicit discharges/disposal
 - Reporting

The standard procedures for contractors include:

- Compile and/or prepare training materials, such as presentation handouts and posters. Topics will include:
 - Stormwater quality requirements
 - Types of illicit discharges/disposal
 - Reporting
- Identify staff/positions requiring training.
- Present information on illicit discharges to staff prior to providing contractual services.
- Discuss how to report illicit discharges:
 - Call in 888-CLEANLA hotline report suspected illicit discharges.



6.1 INTRODUCTION

The 2012 NPDES permit requires the LACFCD to maintain an up-to-date and accurate electronic map of its MS4. The mapping requirements are shown in Table 6-1.

Table 6-1 Permit Requirements – MS4 Mapping			
Report Section	Requirement	Permit Section	Division
6.2.1	Develop and maintain a map showing the location of outfalls owned and maintained by the LACFCD. Photographs of the major outfalls shall be taken as well.	VI.D.4.d.ii.(1)(a)	Lead: WMD Support: LDD, FMD, SMPM
6.2.1	Develop and maintain a map showing the location and length of open channels and underground storm drain pipes with a diameter of 36 inches or greater that are owned by the LACFCD.	VI.D.4.d.ii.(1)(b)	Lead: WMD Support: LDD, FMD, SMPM
6.2.1	Develop and maintain a map showing the location and name of all waterbodies receiving discharges from MS4 major outfalls identified in VI.D.4.d.ii.(a)	VI.D.4.d.ii.(1)(c)	Lead: WMD Support: LDD, FMD, SMPM
6.2.2	Develop and maintain a map showing all dry weather diversions installed within the MS4, including the owner and operator of each diversion.	VI.D.4.d.ii.(1)(d)	Lead: WMD Support: LDD, FMD, SMPM
6.2.1	Develop and maintain a map showing all known permitted and documented connections to LACFCD's MS4 system.	VI.D.4.d.ii.(1)(e)	Lead: WMD Support: LDD, FMD, SMPM

The baseline objective of the program is:

 Identifying the locations of its storm drain system components including storm drains, outfalls and channels, in relation to surrounding water bodies in order to help in planning, maintenance, and source investigation of illicit discharges.



6.2 PROGRAM IMPLEMENTATION ELEMENTS

6.2.1 Storm Drain Network

The Storm Drain Network is a web-based geographic information system to view Los Angeles County Flood Control District-owned or maintained infrastructure. It includes approximately 3,800 miles of storm drains, 500 miles of open channels, and 80,000 catch basins. The Network contains facility information that includes the location, design specifications, maintenance responsibility, ownership, flow rate, and flow direction.

The LACFCD has mapped the open channels, underground storm drains 36 inches and greater, waterbodies, low-flow diversions, and outfalls. The storm drain system is viewable online at: http://dpw.lacounty.gov/fcd/stormdrain/index.cfm. For additional information, contact the Watershed Management Division, Flood Analysis section.