



**Los Angeles County Municipal Storm Water Permit (Order 01-182)
2010-2011 Individual Annual Report Form for the City of Palos Verdes Estates
Attachment U-4**

City Training

The following pages contain Training Records for the City of Palos Verdes Estates' Annual Training.

Annual Stormwater Compliance Training for

Palos Verdes Estates

June 16, 2011

Training Agenda

- Development Planning Program
 - Review of Common Priority Projects
 - Regulatory Update
- Construction Inspection Program
 - Inspection Requirements
 - New Construction Permit
 - Enforcement
- Public Agency Activity Program
 - Municipal Programs
- Illicit Connection/Illicit Discharge Program
 - Background
 - Illicit Connections
 - Illicit Discharges



Key Terms

- **NPDES- National Pollution Discharge and Elimination System** - the national program for issuing, modifying, revoking and reissuing , terminating, monitoring and enforcing permits under the Clean Water Act.
- **MS4 – Municipal Separate Storm Sewer System**
- **Standard Urban Stormwater Mitigation Plan (SUSMP)**
 - a plan that addresses conditions and requirements for new development and redevelopment projects.
- **Best Management Practices (BMPs)**
 - any of various practices to prevent/reduce pollution entering the storm drain system.

Development/Planning Program



Four Categories of Development/Construction Projects

1. Planning Priority Projects Subject to Standard Urban Stormwater Mitigation Plan (SUSMP)
2. Project Features Subject to Site Specific Mitigation
3. Projects Greater Than One Acre
4. All Other Development/Construction Projects

SUSMP Projects

- Single-family hillside homes
- Restaurants over 5000 sq/ft
- Parking lots greater than 25 parking stalls
- Redevelopment projects meeting redevelopment thresholds
- Retail gasoline outlets
- Automotive services facilities
- Industrial/commercial development \geq 1 acre
- Home subdivisions of ten or more housing units
- **Projects located in, adjacent to or discharging to an Environmental Sensitive area (ESA). (The City has designated the coastline and the part of the canyon as an ESA)**

Single Family Hillside Development



SUSMP Project Design Standards

- Single Family Hillside Development
 - Conserve natural areas
 - Protect slopes and channels
 - Divert roof run-off to vegetated areas where possible
 - Direct surface flow to vegetated areas before discharge unless the diversion would result in instability

SUSMP Project Design Standards

- Projects located within an ESA
 - Conserve Natural Areas
 - Limit clearing and grading of native vegetation
 - Maximize trees and other vegetation
 - Preserve riparian areas and wetlands

What is LID?

- **Low Impact Development (LID)** is planning and engineering design approach to managing storm water runoff through the use of:
 - infiltration
 - filtration
 - storing
 - evaporation
 - detaining runoff close to its source

Chapter 12.84 (LA County Code)



- Purpose:
 - Require the use of low impact development (“LID”) standards in new and redevelopment projects.
 - Encourage site sustainability and smart growth.
 - Preserve the characteristics of the County's watersheds, drainage paths, water supplies, and natural resources.

LID- Development Tools

- **Preserved Native Vegetation:**
 - Enhances the aesthetic quality of the community
 - Improves evapo-transpiration rate.



- **Grassy Swale:** Slows water runoff, promotes infiltration, traps sediment, and helps treat pollution.



Low Impact Development (LID) in Action



LID Benefits

- **Habitat Protection**
 - Preserves stream & riparian habitats
 - Preserves regional trees & vegetation
 - Reduces eroded sediment loading into streams and lakes.
- **Community Value**
 - Increase aesthetics and recreational opportunities in the community.
 - Increases land value by having a cleaner environment.



Construction Inspection Program



Types of Construction Inspections

- There are 3 general types of construction site inspections:
 1. Small Projects (i.e., Residential Remodel)
 2. SUSMP Projects (specific requirements per plans)
 3. Projects ≥ 1 acre (Large Scale Projects)

Site Controls for all Projects

All sites, even small projects, must have:

1. Sediment Controls (silt fences, etc.)
2. Slope/Erosion Protections (soil stabilization)
3. Materials Management (i.e., gas/oil leaks)
4. Non-Storm Water Run-off Controls

Construction Projects Greater Than One Acre

- Projects one acre or more of disturbed soil are subject to the General Construction Permit, and Model Program requirements:
 - Applicant must file a Notice of Intent (NOI)
 - Preparation of the Storm Water Pollution Prevention Plan (SWPPP)
 - Conduct site inspections before and after each rain event and at 24-hour intervals during extended rainfall events
 - Prepare a Wet Weather Erosion Control Plan (WWECP) if project will disturb soil during the rainy season (October 1 - April 15)

General Construction Permit

Adopted September 2, 2009

Effective July 1, 2010

- Classifies construction projects using a four-tiered risk based system for permitting storm water discharges.
- The higher the risk the more stringent the monitoring requirements are.
- The risk levels have different requirements for site monitoring and different minimum BMP's.

Grandfathering:

- Existing projects will be granted Risk Level 1 status.
 - May 1st letters to existing dischargers with re-certification instructions
- Grandfathered Projects must be completed by 2 years after permit adoption.
(September 2, 2011)

Construction Permit (Continued)

- The General Permit requires numeric effluent limits (NELs) and numeric action levels (NALs).
- These new limits on pollutants at construction sites will require:
 - Monitoring (construction site monitoring program)
 - Testing (turbidity and pH)
 - Reporting

Construction Permit (Continued)

- Development and implementation of a Construction Site Monitoring Program (CSMP):
 - Demonstrate, through sampling, that the site is in compliance (e.g. Discharge Prohibitions, NALs, NELs etc.).
 - Determine if corrective actions, additional BMP implementation, or SWPPP revisions are necessary.
 - Equipment, materials, and workers available for rapid response to failures and emergencies.

Construction Permit (Continued)

- Rain Event Action Plan (REAP):
 - Must be designed to protect all exposed portions of the site within 48 hours prior to any likely (50 % or greater chance) precipitation event.

Construction Permit (Continued)

- All projects must provide photographs of their sites at least once quarterly if there are rain events causing a discharge.
- Annual Certification for projects that are active for more than a three-month period.

Construction Permit (Continued)

- **Certification**
 - Key personnel (e.g., SWPPP preparers, inspectors, etc.) must have training and certification.



What Must Inspectors Look For Onsite?







City of Palos Verdes Estates - MS4
Stormwater Training





City Inspections

- Conduct **at least one** inspection of **ALL** active construction projects with one acre and greater of disturbed soil during the rainy season (Oct 1- April 15).
- Use an Inspection Checklists to verify adequate implementation BMPs.
- Inspector may request Developer Self-Inspection.
- Checklist and Inspection Log for review.

CONSTRUCTION SITE MANAGEMENT AGREEMENT (CON.)

- No person shall within the city operate or cause the operation of, or suffer or permit the operation upon any premises owned, occupied, or controlled by such a person, any tool, machine, or other thing designated or used for the manufacture of goods, wares, building or structure, or for any commercial purpose, the noise from which be heard at any point on any other premises during prohibited hours. "Prohibited hours" as used in this section are: At all times on Sunday, at any time on the first day of January, the last Monday in May, the fourth day of July, the first Monday in September, the 25th day of December, and Thanksgiving; after the hour of 7pm of any day; after the hour of 5:30pm on any Friday or Saturday, before the hour of 7am of any day; and, before the hour of 8am on Saturday. City Code Section 8.28.020.
- The Building Official may revoke any permit granted under this division for the violation of any City construction site management regulations after two warnings. City Code Section 1.16
- All construction projects must comply with the Federal, State and Local NPDES (National Pollution Discharge Elimination Systems) standards commencing on July 30, 1999 and must be maintained through the duration of the construction project. (Example: Erosion Control, construction run-off into storm drains, etc.) Ord. 096-606.
 - Eroded sediments and other pollutants must be retained on site and may not be transported from the site via sheetflow, swales, area drains, natural drainage courses or wind.
 - Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water.
 - Fuels, oils, solvents and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
 - Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained at the project site.
 - Excess or waste concrete may not be washed into the public way or any other drainage system. Provisions shall be made to retain concrete wastes on site until they can be disposed of as solid waste.
 - Trash and construction related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
 - Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being tracked into the public way. Accidental depositors must be swept up immediately and may not be washed down by rain or other means.
 - Any slope with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.
- All portable toilets are to be placed on private property only! Construction trailers should also be stored on private property, if possible, if not then the Director of Public Works will issue an encroachment permit.
- Construction fences must be a minimum of 4' back from the curb.
- It is unlawful for any person to post, stick, tack or otherwise affix any poster, sign, advertisement, in or upon any street right-of-way. City Code Section 8.20.050

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Corrective and Enforcement Actions

Use of progressive enforcement approach:

- Verbal Warnings
- Written Warnings
- Stop Work Orders
- Fines



Municipal Programs



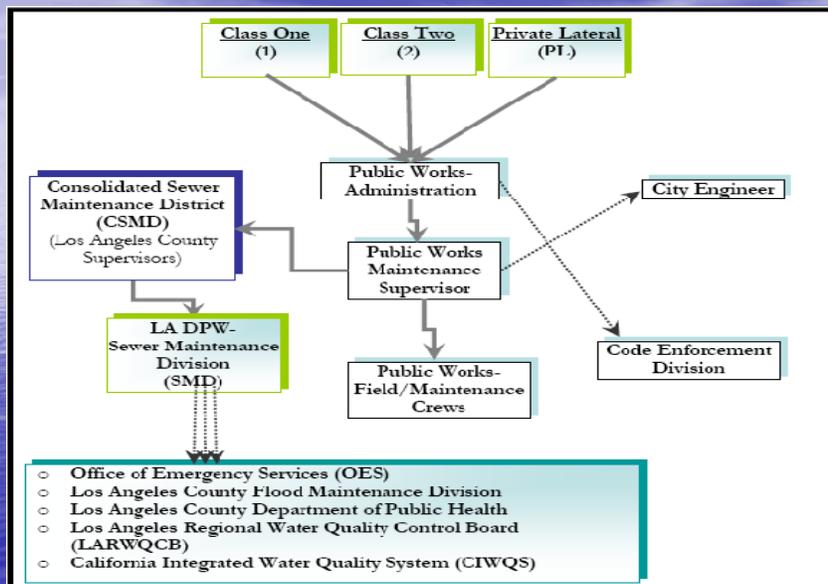
- Sewage System Maintenance, Overflow, & Spill Prevention (SSO)
- Storm Drain Operation and Maintenance
- Street and Road Maintenance

Sewer System Management, Overflow & Spill Prevention

- Spill/leak/overflow response and containment
- Public health agency notification
- Preventive and corrective maintenance



Chain of Command in the event of an SSO



Class One (1) SSO

- All discharges of sewage resulting from a failure in the sanitary sewer that:
 - Equals or exceeds *1,000 gallons*, or
 - Discharges into a surface water and/or drainage channel, or
 - Discharge of sewage into a storm drain-pipe which was not fully captured and returned to the sanitary sewer system.



Sewage spill closes Lunada Bay

From staff reports

Posted: 02/09/2010 08:02:50 AM PST
PALOS VERDES ESTATES

Sewage spill closes bay: An estimated 100,000 gallons of sewage entered an intersection in Palos Verdes Estates, shutting down access to Lunada Bay on Monday, public health officials said.

Closure signs have been posted at entry points to the popular coastal spot, and the beach shutdown is expected to remain in effect for 72 hours, according to the county Department of Public Health.

A collapsed sewage pipe near the intersection of Via Rivera and Paseo Lunado apparently caused the spill, which sent effluent into the ocean.

The Sanitation Districts of Los Angeles County had stopped the flow and were cleaning up the site on Monday afternoon, health officials said.

The closure will be lifted when health officials determine that bacterial levels have returned to normal. Information on beach conditions is available at www.publichealth.lacounty.gov/beach.

Class Two (2) SSO

- All other discharges (that do not meet the criteria for a Category 1 SSO) of sewage resulting from a failure in the sanitary sewer system.



Private Lateral Sewage Discharge

- Discharges caused by privately owned lateral.



Storm Drain Operation and Maintenance

- Catch basins –cleaned out and inspected by LACODPW on an annual basis.
 - Verify that stencils are legible



Streets and Road Maintenance

- Paving operations should only be conducted during dry weather
- Employ proper staging techniques
- Limit the amount of fresh concrete maintained on-site
- Perform street cleaning during dry weather whenever possible

Illicit Connection/Illicit Discharge Program



Background

- Imposes requirements on Cities for preventing pollution in MS4 discharges
- Prohibits certain discharges to the MS4
- Requires action to correct illicit discharges



Illicit Connection...

- Defined as any man-made conveyance that is connected to the storm drain system without a permit
- Examples include:
 - Pipelines
 - Conduits
 - Inlets/Outlets
 - Channels/swales



Illicit Discharge

- Defined as any discharge from public or private property to the MS4 that is not entirely composed of storm water or is not a "conditionally allowed" discharge



Sources of IC/IDs

- Neighborhoods
- City streets
- Parking lots
- Construction sites
- Agricultural areas
- Auto repair facilities
- Restaurants



Inspector's Responsibilities



- **What does an Inspector do?**
 - The inspector is assigned to investigate compliance with and detect incidence that may occur in the city either by accident or chronic violators of the permit.
 - He/she is trained to recognize and appropriately respond to situations and enforce the city's policies and procedures may they be routine in nature or serious.

What to do...

- Responding to **illicit connection**
 - Initiate investigation within 21 days to determine the source of connection
 - Ensure termination of the connection within 180 days



What to do...

- Responding to **illicit discharge**
 - The City must respond within **one (1) business day** of discovery or report of a suspected illicit discharge
 - The City must investigate illicit discharges as soon as practicable



Conditionally Allowed Discharges

- Covered by a separate individual or general NPDES permit for non-storm water discharges.
- Fall within one of categories below
 - **Category A – Natural Flow**
 - Natural springs and rising ground water
 - Flows from riparian habitats or wetlands
 - Stream diversions, permitted by State Board
 - Uncontaminated ground water infiltration

Conditionally Allowed Discharges

(continued)

- **Category B – Flows from emergency fire fighting activity**
 - Drains for fountains, footings, and crawl spaces
- **Category C – Flows incidental to urban activities**
 - Reclaimed and potable landscape irrigation runoff
 - Regional Board is imposing an NPDES permit for potable water supply discharges
 - Air conditioning condensate

Record Keeping and Reporting

- Document each potential/actual IC/ID incident
- IC/ID Map –Annually submit a summary of IC/ID incidents to the County for GIS mapping



Questions?

What's Wrong With This?



What is the problem here?



What is the problem?

