

SECTION C-9

EXISTING DEVELOPMENT

PROGRAM EFFECTIVENESS ASSESSMENT





SECTION C-9, Existing Development

C-9.0 EXISTING DEVELOPMENT

C-9.1 Introduction

The existing development component of this report is composed of the following elements:

Section C-9.2, Industrial Program

Section C-9.3, Commercial Program

Section C-9.4, Residential Program

Section C-9.5, Common Interest Area/Homeowner Association (CIA/HOA) Program

C-9.2 Industrial Program (LIP Section A-9.1)

C-9.2.1 Organization Chart

The County has identified which Departments are responsible for the implementation of this stormwater program element through the submittal of an organization chart (**Figure A-9.1** of the LIP). The organization chart is unchanged from the version submitted to the San Diego Regional Board on February 13, 2003.

C-9.2.2 Inventory

The County has developed a watershed based inventory of the identified industrial facilities within the County's jurisdiction. Summaries of the industrial inventory are provided below.

2002/03 Summary of Industrial Facilities by Watershed San Diego Region

Watershed	San Juan Creek	San Clemente Coastal Streams	Totals
Industrial Facilities With General Industrial Permits	6	1	7
Industrial Facilities Without General Industrial Permits	3	1	4
Totals	9	2	11



Santa Ana Region

Watershed	San Gabriel River/Coyote Creek	Huntington Harbor	Santa Ana River	Newport Bay	Totals
Industrial Facilities With General Industrial Permits	0	2	1	3	6
Industrial Facilities Without General Industrial Permits	2	3	1	3	9
Totals	2	5	2	6	15

The County’s industrial facility inventory is updated on an ongoing basis and provided to the Regional Boards on an annual basis.

C-9.2.3 Prioritization

The County prioritized industrial facilities in its inventory as high, medium or low based on their respective threat to water quality. Summaries of the prioritizations are provided below.

2002/03 Summary of Industrial Facility Prioritization

Industrial Facility Prioritizations	Total Number of Facilities
Facilities subject to General Industrial Permit	13
Section 313 Title III Sara	0
Facilities with a high potential for or history of non-stormwater discharges	0
Facilities tributary to and within 500 feet of an ASBS	0
Tributary to 303(d) water body where site generates the pollutant	0
Facilities within, directly adjacent to or discharging directly to an ESA	0
Number of mandatory high priority facilities	13
Number of “other” high priority facilities	0



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Number of medium priority facilities	13
Number of low priority facilities	0
Total Number of Facilities	26

2002/03 Summary of Industrial Facility Prioritization by Watershed

San Diego Region

Watershed	San Juan Creek	San Clemente Coastal Streams	Totals
Number of high priority facilities	6	1	7
Number of medium priority facilities	3	1	4
Totals	9	2	11

Santa Ana Region

Watershed	San Gabriel River/Coyote Creek	Huntington Harbor	Santa Ana River	Newport Bay	Totals
Number of high priority facilities	0	2	1	3	6
Number of medium priority facilities	2	3	1	3	9
Totals	2	5	2	6	15



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C-9.2.4 Monitoring

As described in **Exhibit A-9.IV** of the County's LIP, an industrial monitoring program is being implemented at high priority industrial facilities under the County's jurisdiction within the San Diego Region. Monitoring activities for the first full year of implementation will be reported in the PEA for 2003-2004.

C-9.2.5 BMP Fact Sheets

BMP fact sheets have been developed and are included as a part of the Existing Development program. The fact sheets include a description of specific BMPs for common industrial activities that may cause the discharge of pollutants and provide a focus on pollution prevention measures that the facility should implement. The activity-based Industrial/Commercial fact sheets are numbered IC1 – IC22 and are included as **Exhibit A-9.II** of the County's LIP.

C-9.2.6 Inspections

The County inspects industrial facilities within its jurisdiction at the frequency determined by the priority ranking assigned to each facility as identified in **Section A-9.1.6** of its LIP. The inspections generally include a review of the material and waste handling practices, BMP implementation and any visual evidence of past or present unauthorized non-stormwater discharges.

Commercial Site/Source Inspection Frequency

Priority	Santa Ana Region	San Diego Region
High	Annually	Annually or Biennially
Medium	Biennially (Once every 2 years)	As-needed
Low	Once Per Permit Cycle (5 years)	As-needed

The County completed inspections of all high priority industrial facilities under its jurisdiction in the Santa Ana Region prior to November 15, 2003. These and all other industrial facility inspections conducted by the County occurred outside of the reporting period of this PEA (July 1, 2002-June 30, 2003), therefore, these activities will be reported in the County's 2003-2004 PEA.



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C-9.2.7 BMP Implementation

As part of industrial facility inspections the County inspectors determine the level of BMP implementation and also assess the effectiveness of the implemented BMPs. For each of the facility's areas of activity, the inspector observes whether BMPs are in place and effective. The inspector may encounter situations where BMPs are in place but are not effectively applied. The inspectors are trained to use their best professional judgment and decide how much time to allow the owner/operator to correct the problem.

C-9.2.8 Enforcement

The County's Authorized Inspectors (Identified in **Section C-10** of this PEA) undertake enforcement activities against industrial facilities according to the County's adopted Water Quality Ordinance and the countywide accompanying Enforcement Consistency Guide (**DAMP Section 4.0**). The enforcement mechanisms available are summarized in this section and detailed in the County's LIP.

Enforcement may be handled administratively or in more serious instances, be prepared for prosecution. As provided for in the Enforcement Consistency Guide, when selecting enforcement options, the County's Inspectors ensure that violations of a similar nature are subjected to similar types of enforcement remedies. More severe enforcement options may be selected when a violator has either a history of noncompliance or has failed to take good faith actions to eliminate continuing violations or to meet a previously imposed compliance schedule.

During the reporting period, the County took no enforcement actions against the industrial facilities in its inventory.

C-9.2.9 Reporting

For non-compliant facilities that pose a threat to human health or the environment, the County provides oral or e-mail notification to the Regional Board within 24 hours. Following oral notification, the County sends a written report within 5 days detailing the nature of the non-compliance and any corrective action taken.

During the reporting period, the County identified no incidence of non-compliance at industrial facilities within its inventory that required notification of the Regional Boards.

C-9.2.10 Training

Since the training and outreach for the industrial program is done concurrently with the commercial program, the training efforts are summarized in **Section C-9.3.9**.



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C-9.3 Commercial Program (LIP Section A-9.2)

C-9.3.1 Organization Chart

The County identified which Departments were responsible for the implementation of this stormwater program element through the submittal of an organization chart (**Figure A-9.2** of the LIP). The organization chart is unchanged from the version submitted to the San Diego Regional Board on February 13, 2003.

C-9.3.2 Inventory

The County has developed a watershed based inventory of specific commercial sites/sources within its jurisdiction as required by the Third Term Permits. Summaries of the commercial inventory are provided below in the following tables:

2002/03 Commercial Site/Source Inventory Summary

Commercial Site/Source	Santa Ana Region				San Diego Region			
	San Gabriel River/Coyote Creek	Huntington Harbor	Santa Ana River	Newport Bay	Aliso Creek	San Juan Creek	Dana Point Coastal Streams	Totals
Automobile mechanical repair, maintenance, fueling, or cleaning	2	25	1	2	0	2	0	32
Airplane mechanical repair, maintenance, fueling, or cleaning					0	0	0	0
Boat mechanical repair, maintenance, fueling, or cleaning					0	0	4	4
Equipment repair, maintenance, fueling, or cleaning					0	0	0	0
Automobile and other vehicle body repair or painting	0	4	0	0	0	0	0	4
Mobile automobile or other vehicle washing	0	4	1	0	0	0	0	5
Automobile (or other vehicle) parking lots and storage facilities					0	0	0	0
Retail or Wholesale Fueling					0	1	0	1
Pest control services					0	0	0	0



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Eating or drinking establishments					1	12	18	31
Mobile carpet, drape or furniture cleaning	0	0	0	0	0	0	0	0
Cement mixing or cutting					0	0	0	0
Mobile high pressure or steam cleaning	0	0	0	0	0	0	0	0
Masonry					0	0	0	0
Painting and coating	0	2	0	0	0	0	0	2
Botanical or zoological gardens and exhibits					0	0	0	0
Landscaping (and hardscape installations)	2	0	0	0	0	1	0	3
Nurseries and greenhouses	1	0	0	1	0	6	0	8
Golf courses, parks and other recreational areas/facilities					0	2	0	2
Cemeteries					0	0	0	0
Pool, lake and fountain cleaning	0	0	0	0	0	0	0	0
Marinas					0	0	4	4
Port-a-Potty servicing					0	0	0	0
Other commercial sites/sources determined to be significant contributors	0	0	1	0	0	0	0	1
Facilities tributary to 303(d) water body for pollutant generated on site					0	0	0	0
Facilities within/directly adjacent or discharging directly to ESA					0	0	46	46
Site tributary to and within 500 feet of ASBS	0	0	0	0	0	0	0	0
Total for all categories	5	35	3	3	1	24	72	143

NOTE: Grey shaded areas indicate inventory categories that were not requirements within that region.

The County's inventory of commercial sites/sources is updated on an ongoing basis within the LIP and provided to the Regional Boards on an annual basis.



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C-9.3.3 Prioritization

Within the Santa Ana Region, the County prioritized commercial sites/sources as high, medium or low based on their respective threat to water quality. Within the San Diego Region, the County maintains an inventory of commercial sites/sources predetermined as high threat to water quality according to Section F.3.c.(2) of the San Diego Permit. A summary of the County's commercial site/source prioritization by watershed is provided in the following table:

2002/03 Summary of Commercial Site/Source Prioritization by Watershed

Commercial Site/Source Prioritizations	Santa Ana Region				San Diego Region			
	San Gabriel River/Coyote Creek	Huntington Harbor	Santa Ana River	Newport Bay	Aliso Creek	San Juan Creek	Dana Point Coastal Streams	Totals
Number of high priority facilities	0	0	0	0	1	24	72	97
Number of medium priority facilities	5	35	3	3	0	0	0	46
Number of low priority facilities	0	0	0	0	0	0	0	0
Total Number of facilities	5	35	3	3	1	24	72	143

C-9.3.4 BMP Fact Sheets

BMP fact sheets have been developed and are included as a part of the Existing Development program. The fact sheets include a description of specific BMPs for common commercial activities that may cause the discharge of pollutants and provide a focus on the Pollution Prevention measures that the facility should implement. The activity-based Industrial/Commercial fact sheets are numbered IC1 – IC22 and are included as **Exhibit A-9.II** of the County's LIP.

C-9.3.5 Inspections

The County inspects commercial sites/sources in its inventory at the frequency shown in the following table:

**Commercial Inspection Frequency**

Priority	Santa Ana Region	San Diego Region
High	Once per permit cycle (5 years) ¹	As-Needed ²
Medium	As needed	N/A
Low	As needed	N/A

1. All high priority facilities must be inspected at least once by July 1, 2004
2. At least once per permit cycle (5 years)

Inspection Summary

Within the Santa Ana Region of the County, commercial site/source inspections were not required during the 2002/03 reporting period. Implementation of the program began on July 1, 2003, and inspection activities will be reported in the 2003/04 PEA.

Within the San Diego Region of the County, high priority commercial sites/sources are inspected on an as needed basis. The number of inspections completed during the 2002/03 reporting period are presented in the following tables:

2002/03 Summary of Commercial Site/Source Inspections

Commercial Site/Source	Number of Sites/Sources Inspected	Total Number Since Third Permit Adoption
Automobile mechanical repair, maintenance, fueling, or cleaning	1	1
Boat mechanical repair, maintenance, fueling, or cleaning	1	1
Total for all categories for current reporting year	2	2

2002/03 Summary of Compliance by Watershed

Watershed	Number of Facilities Out of Compliance	Number of Facilities Re-inspected Due to Non-Compliance
San Juan Creek	0 of 1 inspected	0
Dana Point Coastal Streams	1 of 1 inspected	1



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C-9.3.6 BMP Implementation

As part of commercial facility inspections the County inspectors determine the level of BMP implementation and also assess the effectiveness of the implemented BMPs. For each of the facility's areas of activity, the inspector observes whether BMPs are in place and effective. The inspector may encounter situations where BMPs are in place but are not effectively applied. The inspectors are trained to use their best professional judgment and decide how much time to allow the owner/operator to correct the problem. A summary of BMP implementation based on inspections conducted during the current reporting period is provided below.

2002/03 Summary of BMP Implementation

Watershed	Number of Facilities with BMPs Fully Implemented	Number of Facilities with BMPs Partially Implemented	Number of Facilities With No BMPs or BMPs Not Fully Implemented,	Number of Facilities Required to Implement or Upgrade/Modify BMPs
San Juan Creek	1 of 1 inspected	N/A	N/A	N/A
Dana Point Coastal Streams	1 of 1 inspected	N/A	N/A	N/A

Of the two commercial sites inspected, neither was found to be out of compliance with the Third Term Permit requirements and/or the County's Water Quality Ordinance.

C-9.3.7 Enforcement

The County's Authorized Inspectors (Identified in Section C-10 of this PEA) undertake enforcement activities according to the County's adopted Water Quality Ordinance and the accompanying Enforcement Consistency Guide. The enforcement mechanisms available are summarized in this section and detailed in Section A-9.2 of the County's LIP.

Water pollution enforcement may be handled administratively or in more serious instances, be prepared for criminal prosecution. As provided for in the Enforcement Consistency Guide, when selecting enforcement options, the County's Authorized Inspectors ensure that violations of a similar nature are subjected to similar types of enforcement remedies. More severe enforcement options may be selected when a violator has either a history of noncompliance or has failed to take good faith actions to eliminate continuing violations or to meet a previously imposed compliance schedule.

During the 2002/03 reporting period, the County issued one notice of non-compliance to one commercial site within its inventory.



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C-9.3.8 Reporting

For non-compliant facilities that pose a threat to human health or the environment, the County provides oral or e-mail notification to the Regional Board within 24 hours. Following oral notification, the County sends a written report within 5 days detailing the nature of the non-compliance and any corrective action taken. During the 2002/03 reporting period, the County identified no incidents of non-compliance at any commercial site/source within its inventory that required notification of the Regional Boards.

C-9.3.9 Training and Outreach

Training

The County as Principal Permittee sponsored training to assist municipal staff in understanding the industrial and commercial components of the Existing Development Program. The training conducted during the reporting period is summarized in the following table:

2002/03 Summary of Training

Department	Department Subcategory	Training Module	Training Dates	Names of Attendees
Training Conducted by County and Attended by County Personnel				
PFRD	Public Works	DAMP Appendix B, Exhibit B-9.I , Existing Development Program Management	April 8, 2003	Ken R. Smith
	Watershed & Coastal Resources			Grant Sharp
	Watershed & Coastal Resources	DAMP Appendix B, Exhibit B-9.II , Field Implementation of Existing Development Program	April 9, 2003	Nora Jans
	Operations & Maintenance			Duc Nguyen
				Grant Sharp
	Watershed & Coastal Resources	DAMP Appendix B, Exhibit B-9.VI , Existing Development Program: Industrial Stormwater Monitoring	April 9, 2003	Jerry Beaudoin
	Operations & Maintenance			Nora Jans
				Duc Nguyen
			Grant Sharp	
			Jerry Beaudoin	



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Outreach

The County outreached to the industrial and commercial businesses within its jurisdiction to inform them of their responsibilities under this program. During the 2002/03 reporting period, this outreach effort included:

- Presentations to various groups (details in table below)
- Distribution of brochures, posters and the industrial/commercial BMP fact sheets through the website, field inspectors, at public facilities and counters, etc.
- Posting information on the County's webpage, etc.
- A mailer in March of 2003 was sent to industrial facilities within its jurisdiction, encouraging them to send representatives to the CASQA Workshops on the 2002 Industrial BMP Handbooks held in April of 2003.

2002/03 Summary of Presentations

Group	Subject	Date
National Council of Pool Plasterers	Orange County Existing Development - Industrial/Commercial Program	October 8, 2002
Orange County Community Awareness & Emergency Response (OC CAER)	Orange County Existing Development - Industrial/Commercial Program	October 22, 2002
California Automotive Service Councils	Automotive Repair Business Training Module	June 12, 2003
Cal State Fullerton Environmental Compliance Course	Stormwater/NPDES/DAMP/LIP Overview	May 21, 2003



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C-9.4 Residential Program (LIP Section A-9.3)

C-9.4.1 Organization Chart

The County has identified which Departments were responsible for the implementation of this stormwater program element through the submittal of an organization chart (**Figure A-9.3** of the LIP). The organization chart is unchanged from the version submitted to the San Diego Regional Board on February 13, 2003.

C-9.4.2 Inventory

The County has developed a watershed-based map of residential areas within its jurisdiction in the San Diego Region. The residential areas that discharge directly to an ESA may be targeted for enhanced implementation of BMPs based on the activities of concern that are identified. The residential map is updated on an ongoing basis within the LIP and is provided to the San Diego Regional Board on an annual basis.

C-9.4.3 BMP Fact Sheets

BMP fact sheets have been developed and included as a part of the Existing Development program. The fact sheets include a description of specific BMPs for high threat residential activities that may cause the discharge of pollutants and provide a focus on the Pollution Prevention measures that the facility should implement. The activity-based Residential fact sheets are numbered R1 – R8 and are included as **Exhibit A-9.II** of the County's LIP.

C-9.4.4 Enhanced Implementation

The County identified one residential area within the San Diego Region area of its jurisdiction (Emerald Bay, located in the Los Trancos/Muddy Creek Watershed, north of Laguna Beach) as adjacent or discharging directly to an ESA. This area has been targeted for enhanced implementation of the residential program. The steps to be taken by the County to minimize the impact of this residential area are outlined in **Section A-9.3** of the LIP. These activities will be reported in the 2003/04 PEA.

C-9.4.5 Water Pollution Complaints/Incidents

The residential program relies upon observations by municipal employees working in or assigned to residential areas and on complaints received from residents through the water pollution problem reporting hotline and website.

The County tracks water pollution complaints under the ID/IC program and provides a summary of the number of complaints received and the source area associated with the complaint (e.g. commercial business, resident, etc.) as a part of **Section C-10** of this PEA.



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C-9.4.6 Enforcement Actions

Enforcement actions taken by the County throughout its jurisdiction, including those against individual residents, are summarized in **Section C-10** of this PEA.

C-9.4.7 Outreach and Training

Outreach

Education and outreach targeted towards residents is a major component of the residential program. The County encourages the implementation of a set of designated BMPs for residents. The BMPs are presented in a series of fact sheets specific to high threat residential activities. The County has developed outreach efforts to encourage the use of the designated BMPs. This outreach has included efforts such as mailings, holding workshops, development and distribution of brochures, posters, fact sheets, posting information on the County's webpage, etc. Information on specific outreach efforts can be referenced in **Section C-6**.

Training

The successful implementation of the residential program relies on education of municipal employees that conduct activities in residential areas. For the County, it is primarily PFRD Operations & Maintenance field program crews who are entering into residential areas on a routine basis to maintain the public infrastructure. Training efforts during the 2002/03 reporting period covering municipal activities are discussed in **Section C-5** of this PEA. While many of the field programs conducted by the County, such as street sweeping and drainage facility cleaning, are pollution prevention practices in of themselves, the field program crews are trained to notify the County's Authorized Inspectors (identified in **Section C-10**) of any issues impacting or having the potential to impact runoff from residential areas.

The County conducted and participated in training to assist responsible municipal staff in understanding the CIA/HOA components of the Existing Development Program. The training conducted during the reporting period is summarized below.

2002/03 Summary of Training

Department	Department Subcategory	Training Module	Training Date	Number of Attendees
PFRD	Stormwater Program	Exhibit B-9.I, Existing Development Program Management (Including Residential Program)	April 8, 2003	2
Total				2



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C-9.5 CIA/HOA Program (LIP Section A-9.4)

C-9.5.1 Organization Chart

The County utilizes the same organization chart discussed in **Section C-9.4.1** to implement its CIA/HOA Program.

C-9.5.2 Inventory

The County has developed a watershed-based map of residential areas within its jurisdiction in the San Diego Region. The residential areas that discharge directly to an ESA may be targeted for enhanced implementation of BMPs based on the activities of concern that are identified. The residential map is updated on an ongoing basis within the LIP and is provided to the San Diego Regional Board on an annual basis.

C-9.5.3 BMP Fact Sheets

BMP fact sheets have been developed and included as a part of the Existing Development program. The fact sheets include a description of specific BMPs for high threat CIA/HOA activities that may discharge pollutants and provide a focus on the Pollution Prevention measures that the facility should implement. The activity based fact sheets that were developed are included in **Exhibit A-9.II** of the County's LIP.

C-9.5.4 Enhanced Implementation

As discussed in Section C-9.4.4, the County identified one residential area (Emerald Bay, located in the Los Trancos/Muddy Creek Watershed, north of Laguna Beach) as adjacent or discharging directly to an ESA. This area has been targeted for enhanced implementation of the residential program. The steps to be taken by the County to minimize the impact of this residential area are outlined in **Section A-9.3** of the LIP. These activities will be reported in the 2003/04 PEA.

C-9.5.5 Enforcement Actions

Enforcement actions conducted by the County throughout its jurisdiction, including CIA/HOA areas, are summarized in **Section C-10** of this PEA.

C-9.5.6 Outreach and Training

Outreach

Education and outreach targeted towards homeowners associations is a major component of the County's CIA/HOA program. In addition to the residential outreach methods described in **Section C-9.4.7** of this PEA, the County began to target HOA governing boards during the 2002/03 reporting period. Through a partnership with the Santa Margarita Water District, the County has participated in special HOA "water quality" forums designed to combine the



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pollution prevention programs of the 2003 DAMP with the water conservation programs promoted by water districts. The table below represents the outreach accomplishments during the reporting period.

2002/03 Summary of Outreach

Outreach	Group	Date
Presentation of the County's CIA/HOA program and distribution of brochures and BMP Fact Sheets	Coto de Caza Master Board of Directors	March 25, 2003
Presentation of the County's CIA/HOA program and distribution of brochures and BMP Fact Sheets	Coto de Caza Homeowners Association, regular meeting	April 8, 2003

Training

The successful implementation of the CIA/HOA program relies on education of municipal employees that conduct activities in these areas. For the County, it is primarily PFRD Operations & Maintenance field program crews who are entering into CIA/HOA areas on a routine basis to maintain the public infrastructure. Training efforts during the 2002/03 reporting period covering municipal activities are discussed in **Section C-5** of this PEA. While many of the field programs conducted by the County, such as street sweeping and drainage facility cleaning, are pollution prevention practices in of themselves, the field program crews are trained to notify the County's Authorized Inspectors (identified in **Section C-10**) of any issues impacting or having the potential to impact runoff from CIA/HOA areas.

The County conducted and participated in training to assist responsible municipal staff in understanding the CIA/HOA components of the Existing Development Program. The training conducted during the reporting period is summarized below.

2002/03 Summary of Training

Department	Department Subcategory	Training Module	Training Date	Number of Attendees
PFRD	Stormwater Program	Exhibit B-9.V, Existing Development Program Training: Common Interest Areas/Homeowner Associations	June 26, 2003	6
Total				6



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C-9.6 Existing Development Program Modifications

As the last step in the PEA, the County has evaluated the results of the assessment to determine if any program modifications are necessary in order to comply with the Third Term Permits.

The following modifications have been made to the LIP submitted to the San Diego Regional Board on February 13, 2003 and are included in the submittal to the Santa Ana Regional Board:

- Updates to the existing development inventories on an ongoing basis (**Exhibit A-9.I** of LIP)
- Clarification of the existing development program minimum BMP requirements (**Section A-9** of LIP)
- Additional controls clarified for sites/facilities/areas tributary to 303(d) waterbodies or within, adjacent to or discharging directly to an Environmentally Sensitive Area (ESA) (**Section A-9** of the LIP)
- Addition of Fire Sprinkler Testing/Maintenance BMP Fact Sheet IC.23 to **Exhibit A-9.II** of the LIP
- Revisions to the existing development BMP Fact Sheets (**Exhibit A-9.II** of the LIP)