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9.0 EXISTING DEVELOPMENT

9.1 Program Summary

9.1.1 Program Overview

Stormwater runoff naturally contains numerous constituents; however, urbanization and urban activities (including industrial and commercial activities and general public activities in residential areas typically increase constituent concentrations to levels that may impact water quality. Pollutants associated with stormwater include sediment, nutrients, bacteria and viruses, oil and grease, metals, organics, pesticides, and gross pollutants (floatables).

The Existing Development Program addresses implementation of BMPs to manage discharges from industrial facilities, selected commercial businesses, restaurants and food facilities, residential development, and common interest areas/homeowner associations (CIA/HOA). To address the five distinct sectors of existing development the program consists of five separate components: Industrial, Commercial, Food Facility, Residential, and CIA/HOA Model Programs, although due to sufficient similarities the industrial and commercial programs have been combined together for the description of program elements in this section.

The objectives of the Model Existing Development Program are to provide the following:

- A program framework for reducing the adverse impact that industrial/commercial sites and residential areas may have on water quality;
- An iterative process to promote effective monitoring and response to problems as they are discovered, and
- Methodologies to meet specific NPDES Permit requirements.

The Program is intended to be implemented as described in **Section A-9** of each Permittee's Local Implementation Plan. Use of the procedures in the Model Program are intended to promote countywide consistency among the Permittees, which provides for uniform receiving water quality protection and program effectiveness assessment.

9.1.2 Program Commitments

Program commitments can be summarized under two distinct program areas commercial/industrial (including food facilities) and residential and CIA/HOAs, as follow:

Commercial/Industrial Facilities:

- **Inventory:** An inventory of specified categories commercial/industrial sites must be established and maintained. The inventory must include site characteristic, permitting, and watershed information and be updated annually.
- **Prioritization:** Commercial/industrial facilities must be prioritized as High, Medium, or Low threat to water quality. There are mandatory High priority industrial (SAR and SDR) and commercial (SDR only) sites based upon site activity and proximity

to environmentally sensitive areas. Sites that are more distant from sensitive receiving waters are determined to be High, Medium, or Low priority based upon a consideration of size, activities, and likelihood of a pollutant discharge.

- **BMP Requirements:** BMP requirements emphasize Pollution Prevention and Source Control BMPs. BMP fact sheets have been compiled and are recommended for particular industrial and commercial activities.
- **Inspection:** Inspection of commercial/industrial facilities must be performed to verify that BMPs are being implemented and maintained to protect water quality. Specified inspection frequencies are determined by the type of activity (industrial or commercial) and the prioritization of the site.
- **Enforcement:** Compliance with ordinances must be enforced. Any enforcement action must be consistent with the Enforcement Consistency Guide (i.e. involve consideration of water quality threat and harm, event duration and frequency and a site manager's intent and cooperation).

Residential and CIA/HOA, San Diego Region:

- **Inventory:** A map-based inventory of residential and CIA/HOA areas, incorporating drainage and receiving water information, must be established and maintained.
- **Prioritization:** There are mandatory High priority areas based upon certain activities and proximity to environmentally sensitive areas.
- **BMP Requirements:** Minimum BMP requirements emphasize pollution prevention. BMP fact sheets have been compiled and are recommended for particular residential activities. An enhanced level of implementation and outreach is required in High priority areas.
- **Implementation:** Baseline implementation involves jurisdiction-wide education and outreach. Enhanced Implementation involves geographically targeted outreach.
- **Enforcement:** Compliance with ordinances must be enforced. Any enforcement action must be consistent with the Enforcement Consistency Guide (i.e. involve consideration of water quality threat and harm, event duration and frequency and a site manager's intent and cooperation).

9.1.3 Regulatory Requirements

Regulatory Framework for the Model Industrial/Commercial Program

The Commercial/Industrial Model Program was developed in order to fulfill the Commercial/Industrial activity commitments and requirements of:

- Sections IX and X of the Santa Ana Regional Water Quality Control Board Municipal NPDES Stormwater permit, **Order No. R8-2002-0010**
- Sections F.3.b and F.3.c of the San Diego Regional Water Quality Control Board Municipal NPDES Stormwater permit, **Order No. R9-2002-0001**

The implementation of industrial storm water pollution reduction programs takes place at the Federal, State and local level. Code of Federal Regulations Part 40 Section 122.26(a) (4) requires industrial stormwater dischargers to notify operators of municipal storm drain systems receiving industrial stormwater discharges. Although the Regional Boards administer and enforce the Industrial and Construction Permit, in many cases, discharges in violation of the Industrial and Construction Permit may also be a violation of the Permittees' Water Quality Ordinance. When this occurs, the Permittees coordinate enforcement under their Water Quality Ordinance with the Regional Board.

Regulatory Framework for the Model Food Facility Inspection Program

The *Food Facility Inspection Program* was developed to fulfill the commitments and requirements of:

- Section VI-7 of the Santa Ana Regional Water Quality Control Board Municipal NPDES Stormwater permit, **Order No. R8-2002-0010**.
- Section F.3.c of the San Diego Regional Water Quality Control Board Municipal NPDES Stormwater Permit (SD Permit), **Order No. R9-2002-0001**.

The program described in this section is intended to respond to the specific requirement within Santa Ana Order No. R8-2002-0010 referenced above, but at the same time attempts to bridge compliance requirements with those in San Diego Order No. 9-2002-0001. While the San Diego Order contains no specific requirement for a separate food facility inspection program, Permittees are required by Section F.3.c to inventory all eating establishments within their jurisdiction as high priority commercial sites/sources and inspect them on an "as needed" frequency.

Regulatory Framework for the Model Residential Program

The Residential Model Program fulfills the residential activity and related commitments and requirements of:

- Section F.3.d of the San Diego Regional Water Quality Control Board Municipal NPDES Stormwater Permit (SD Permit), **Order No. R9-2002-0001**.

These permits include requirements for either public education and outreach, or a specific residential component. The San Diego permit explicitly outlines a residential component; the Santa Ana permit is more general about residential requirements.

Regulatory Framework for the Model Common Interest Area and Homeowners Association Activities Program

The *Common Interest Areas/Homeowners Associations (CIA/HOA) Activities Program* was developed to fulfill the existing CIA/HOA activity commitments and requirements of:

- Section F.6 of the San Diego Regional Water Quality Control Board Municipal NPDES stormwater Permit (SD Permit), **Order No. R9-2002-0001**.

New developments containing CIA/HOA areas are also required to develop Water Quality Management Plans (WQMPs) in order to ensure that permanent post-construction BMPs are incorporated into the development. Nevertheless, applicable portions of this program will also

apply to newly constructed developments once those developments are complete and are in the operation phase.

9.1.4 Program Evaluation and Assessment

In order to determine the effectiveness of the program element, every year the Permittees prepare an Annual Report providing a comprehensive description of all of the activities they have conducted to meet the requirements of each component of the DAMP. Permittees will be required to provide quantitative information and qualitative information (narrative) for the implementation of key elements of their Existing Development programs. Collection and reporting of the key elements will allow for the identification of trends that can be evaluated to identify where modifications may be necessary to improve effectiveness.

Key elements for reporting and assessment effectiveness include:

- Number of BMPs implemented
- Prioritization of facilities
- Number and level of enforcement actions

Once the determination is made that modifications are necessary to a program, a schedule for implementation of changes will need to be determined. Once the modifications are in place, effectiveness assessment will continue as outlined in this section, and the iterative evaluation and improvement cycle will continue.

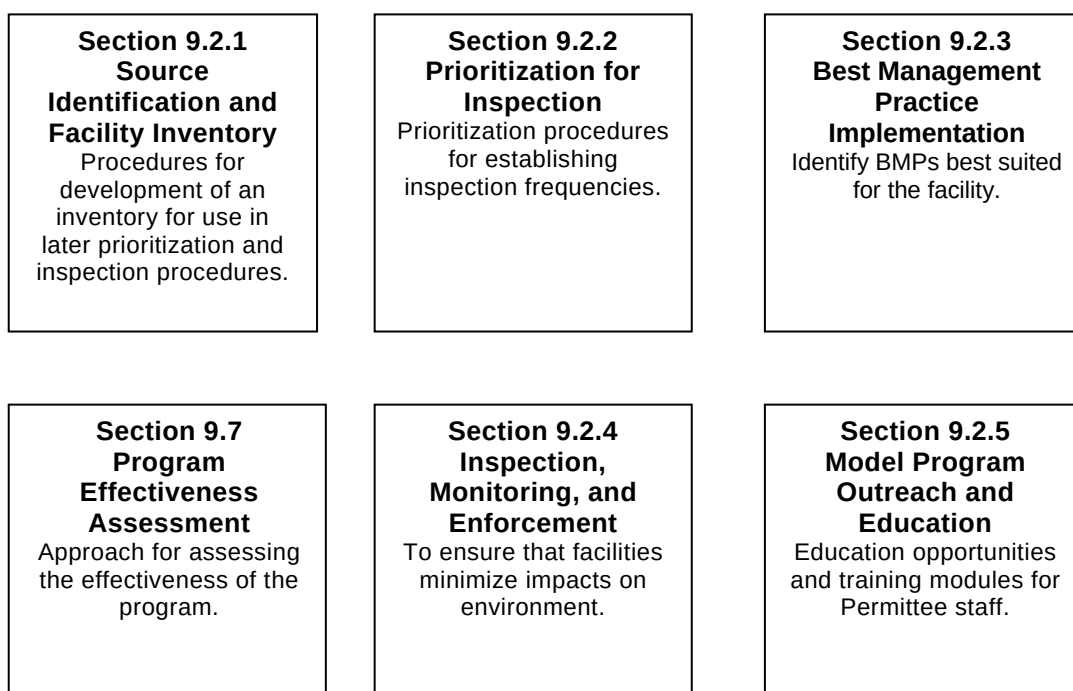
Questionnaires have been developed to assist the Permittees in compiling their Annual Reports for each of the program elements. Specific details are summarized in each of the model program sections, questionnaires and detailed instructions are provided in **Appendix A-9**.

9.2 Model Industrial/Commercial Program Details

Implementation of this Program promotes countywide consistency among the Permittees and provides for uniform receiving water quality protection and program effectiveness assessment. This Program also provides each Permittee with the tools to develop jurisdictional implementation plans (see **Appendices A-9.1 and A-9.2**).

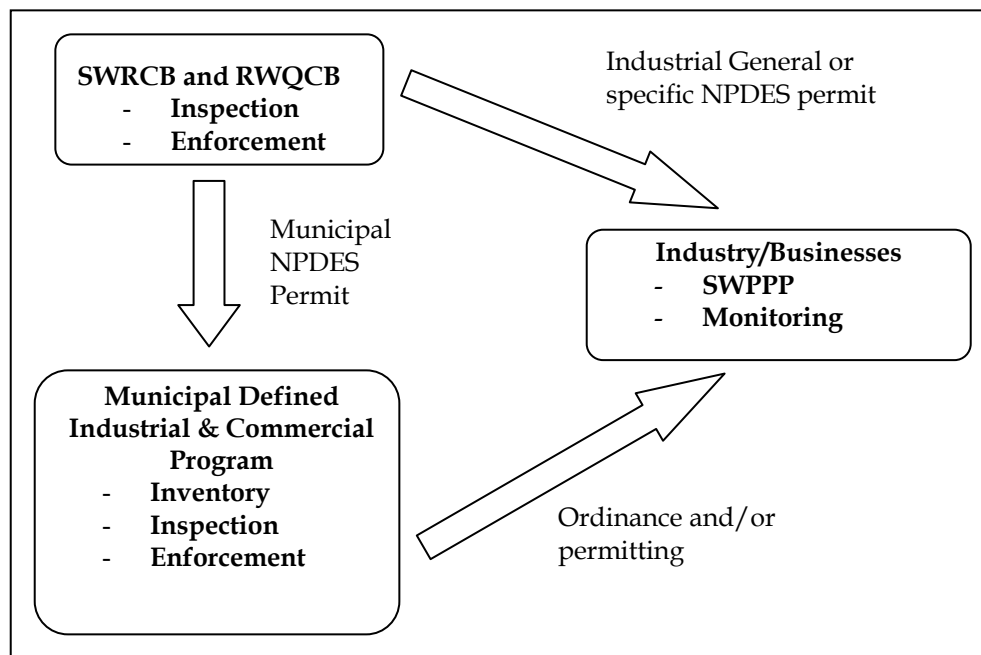
The Program consists of six components as depicted in **Figure 9-1**, which represents the relationship of each component to the others and to the program as a whole. Information gathered for each section of the Model Program supports subsequent sections.

Figure 9-1 Commercial/Industrial Model Program Structure



The implementation of industrial storm water pollution reduction program is unique in that it takes place at the Federal, State and local level as illustrated in **Figure 9-2**. Storm water regulations associated with the Federal Clean Water Act (CWA) require specific categories of industrial facilities, which discharge storm water associated with industrial activity (industrial storm water), to obtain an NPDES permit. Those facilities which discharge industrial storm water either directly to surface waters or indirectly, through municipal separate storm drains, must be covered by a permit.

Figure 9-2 Regulatory Framework Associated with Industrial Stormwater



In California, the SWRCB through the nine RWQCB administers the NPDES stormwater permitting program. For industrial facilities the SWRCB elected to issue a statewide general permit that applies to all storm water discharges requiring a NPDES permit.

Parallel to the State Industrial General Permit is individual NPDES permits issued by the Regional Boards to the municipal separate storm sewer system (MS4). Two such permits have been issued to Orange County and the corresponding municipalities, one for the south County issued by the San Diego RWQCB and one for the north County issued by the Santa Ana RWQCB. Common to both permits is the requirement to prepare an Industrial/ Commercial program, which requires the municipality to address industries covered by the State Industrial General Permit.

9.2.1 Source Identification and Facility Inventory

9.2.1.1 Commercial/Industrial Facility Inventory Procedure

This section describes procedures that are used to generate and maintain comprehensive inventories of commercial/industrial facilities operating within a Permittee's jurisdiction. The list of commercial/industrial facilities should be updated annually.

The inventories serve as the basis for the prioritization, inspection, enforcement, and reporting elements of the program, and assist a Permittee in identifying which best management practices or controls should be implemented in order to reduce potential pollutant discharges to the storm drain system. The steps involved in compiling necessary inventory information for commercial/industrial program are listed below. The first three steps of the inventory process are the same for all Permittees, however the fourth step varies for San Diego and Santa Ana Permittees.

- Identify the commercial/industrial facilities within the jurisdiction (using the regional and local information sources listed below)
- Identify watershed where commercial/industrial facilities are located
- Identify potential pollutants and activities with the potential to discharge pollutants
- Identify any commercial/industrial that:
 - (San Diego Permittees) discharges into or is adjacent to an ESA. Facilities that do discharge into or is adjacent to an ESA will also have to determine if the facility discharge includes pollutants of concern
 - (Santa Ana Permittees) are tributary to and within 500 feet of an ASBS

STEP 1- Identify Commercial/Industrial Facilities within Jurisdiction

Industrial Facilities to be Included in the Inventory

Industrial facilities within a Permittee's jurisdiction must be inventoried. This requirement is applicable to all types of industrial sites regardless of whether the industrial site is subject to the State General NPDES permit or other individual NPDES permit. To properly identify which facilities should be included in the industrial inventory follow these procedures:

- Review the complete list of Standard Industrial Classification (SIC) codes (<http://www.swrcb.ca.gov/stormwtr/industrial.html>) and assign each facility an SIC code.
- Once SIC codes are assigned, consult United States Environmental Protection Agency (USEPA) guidance on specific categories of storm water discharges associated with industrial facilities. The USEPA provides eleven categories of industrial facilities which may produce "storm water discharges associated with industrial activity": (<http://www.epa.gov/npdes/pubs/list.pdf>) These are listed in **Table 9-1** at the end of this step.

- Consult **Appendix A-9** for the specific SIC codes included in each of the categories outlined by USEPA.

Commercial Facilities to be Included in the Inventory

The range of facilities to be inventoried varies between the San Diego RWQCB and Santa Ana RWQCB jurisdictions:

- Permittees in the San Diego RWQCB jurisdiction are only required to inventory those sites/sources shown in **Table 9-2**.
- Permittees in the Santa Ana RWQCB jurisdiction are required to inventory only those commercial sites/sources shown in **Table 9-3**.

If any commercial site/source listed in **Table 9-2** or **Table 9-3** is inventoried as an industrial site, it is not necessary to also inventory it as a commercial site/source.

Information to be Collected

Baseline information about the facility must be collected and entered into the Commercial/Industrial inventory spreadsheet (See **Appendix A-9**). The baseline information includes:

- Business name
- Physical address
- Mailing address
- Contact information (names and phone numbers of key personnel)
- SIC code (for industrial facilities) and narrative description of services/products provided
- General industrial WDID number (if applicable)

Refer to **Section 9.2.2.3**, Inventory Database Protocols and Maintenance, for a full accounting of additional information to be entered into the spreadsheet. As much of this information as possible should be entered into the spreadsheet during the initial inventory and should be verified during inspections. Following inspections the inventory should be revised to include corrected or additional information.

Sources of Inventory Information

Several regional and local information sources have been identified by the County to provide the Permittees with existing data to populate the inventory spreadsheet. The information sources are divided into two separate categories, Regional and Local.

- The County of Orange will assist the Permittees by obtaining and distributing the data from the Regional sources.
- Each Permittee will be responsible individually for obtaining the data from the Local sources.

- Each Permittee is ultimately responsible for populating its inventory spreadsheets with data from both sources. Permittees should review databases, business listings, and other available sources to identify facilities currently operating within the Permittee's jurisdiction. Examples of regional and local sources include:

Regional – to be obtained from the County

- Orange County Fire Authority
- Orange County Health Care Agency

Local – to be obtained by each Permittee

- SWRCB Regional Databases of Statewide General Industrial Permitted Facilities (<http://www.swrcb.ca.gov/stormwtr/indpmt.html>)
- City Fire Departments
- City Business Licensing and Permitting Offices
- Chambers of Commerce
- Local solid waste haulers
- Commercially available business listing (e.g., Yellow Pages, Dun and Bradstreet database, etc.)

Table 9-1 USEPA Categories of Industrial Facilities

Category One (i): Facilities with Storm Water Effluent Limitations or Toxic Effluent Standards
Category Two (ii): Manufacturing Facilities
Category Three (iii): Active or Inactive Mineral, Metal, Oil and Gas Mining or Extraction Facilities
Category Four (iv): Hazardous Waste, Treatment or Disposal Facilities
Category Five (v): Landfills
Category Six (vi): Recycling Facilities
Category Seven (vii): Steam Electric Plants
Category Eight (viii): Transportation Facilities
Category Nine (ix): Treatment Works
Category Ten (x): Construction Activity*
Category Eleven (xi): Light Industrial Activity
*Although Category Ten (x), Construction Activity is included in the definition of "storm water discharges associated with industrial activity", construction activities require construction storm water permits, not industrial storm water permits, under the NPDES Storm Water Program. Refer to the Construction Model Program (Section 8.0) for further guidance.

Table 9-2 San Diego RWQCB Jurisdiction High Priority Commercial Sites/Sources to be Inventoried^{1,2}

Automobile mechanical repair, maintenance, fueling, or cleaning
Airplane mechanical repair, maintenance, fueling, or cleaning
Boat mechanical repair, maintenance, fueling, or cleaning
Equipment repair, maintenance, fueling, or cleaning
Automobile and other vehicle body repair or painting
Mobile automobile or other vehicle washing
Automobile (or other vehicle) parking lots and storage facilities
Retail or wholesale fueling
Pest control services ³
Eating or drinking establishments ⁴
Mobile carpet, drape or furniture cleaning ³
Cement mixing or cutting
Masonry
Painting and coating
Botanical or zoological gardens and exhibits
Landscaping
Nurseries and greenhouses
Golf courses, parks and other recreational areas/facilities
Cemeteries
Pool and fountain cleaning
Marinas
Port-a-Potty servicing

1. SDRWQCB Permittees are also responsible for identifying and inventorying other high priority commercial sites/sources that may contribute a significant pollutant load to the MS4, are tributary to a 303(d) impaired water body, where the site or source generates pollutants for which the water body is impaired, and are within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an environmentally sensitive area (ESA).
2. For the purposes of this program, sources/activities are considered to be associated with businesses that provide services related to the particular source/activity. For example, landscaping may include landscaping businesses such as retailers, installers, and maintenance. Automobile parking lots and storage facilities may include car dealerships, car rental companies, RV storage lots, and facilities or businesses (e.g. shopping malls) with large parking areas.
3. Businesses that may operate within several cities but are housed/have offices in another city are assumed to be formally inventoried within the home city.
4. Note that although eating and drinking establishments are explicitly covered in the Commercial component section of the San Diego RWQCB permit, Permittees in this jurisdiction are NOT required to conduct inventory and inspection procedures for these facilities. These responsibilities will be undertaken by the County Health Care Agency which is required to implement the Existing Development – Restaurant Inspection Program within this jurisdiction. This program involves at a minimum an annual inventory of these facilities and inspection on an annual basis.

Table 9-3 Santa Ana RWQCB Jurisdiction Commercial Sites/Sources to be Inventoried^{1, 2}

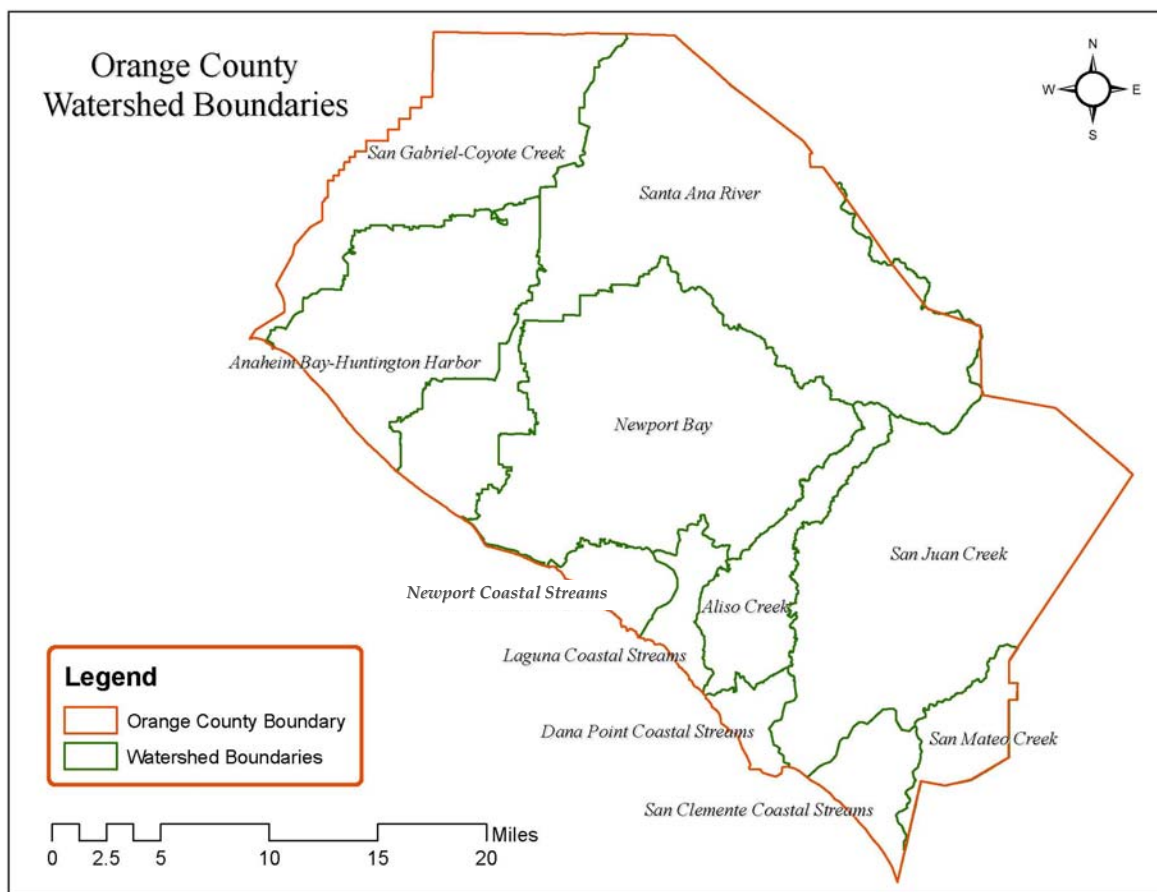
Automobile mechanical repair, maintenance, fueling, or cleaning
Automobile and other vehicle body repair or painting
Mobile automobile or other vehicle washing ³
Mobile carpet, drape or furniture cleaning ³
Mobile high pressure or steam cleaning ³
Painting and coating
Nurseries and greenhouses
Landscape and hardscape installations
Pool, lake and fountain cleaning ³
Eating and drinking establishments ⁴
1. SARWQCB Permittees are also responsible for identifying and inventorying other commercial sites/sources that may contribute a significant pollutant load to the MS4, are tributary to and within 500 feet of an area defined by the Ocean Plan as an Area of Special Biological Significance. 2. For the purposes of this program, sources/activities are considered to be associated with businesses that provide services related to the particular source/activity. For example, landscaping may include landscaping businesses such as retailers, installers, and maintenance. Automobile parking lots and storage facilities may include car dealerships, car rental companies, RV storage lots, and facilities or businesses (e.g. shopping malls) with large parking areas. 3. Businesses that may operate within several cities but are housed/have offices in another city are assumed to be formally inventoried within the home city. 4. Note that eating and drinking establishments in the Santa Ana RWQCB jurisdiction are not explicitly covered in the Commercial component section of the permit. However, Santa Ana Permittees are required to implement the Existing Development – Restaurant Inspection Program required by Section VI (Legal Authority/Enforcement) of the Santa Ana permit. This program involves at a minimum an annual inventory of these facilities and inspection as determined by the prioritization process outlined in Section 9.4.3. Based on these requirements, eating and drinking establishments should be incorporated into this program along with the other listed commercial sites/sources.

STEP 2- Identify Watershed to which Commercial/Industrial Facility Discharges are Tributary

For each commercial/industrial facility identified, the watershed(s) in which the facility is located must be determined and included in the inventory.

Orange County contains thirteen watersheds, which are summarized in **Table 9-4** and illustrated in **Figure 9-3**. It should also be noted that ocean sections along the shore of a watershed are still considered a part of that watershed.

Table 9-4 Orange County Watersheds	
Region	Watershed
Santa Ana RWQCB (Region 8)	San Gabriel/Coyote Creek
	Anaheim Bay/Huntington Harbour
	Santa Ana River
	Newport Bay
	Newport Coastal Streams
San Diego RWQCB (Region 9)	Laguna Coastal Streams
	Aliso Creek
	Dana Point Coastal Streams
	San Juan Creek
	San Clemente Coastal Streams
	San Mateo Creek

Figure 9-3 Watershed Boundary Map for Orange County**STEP 3- Identify Potential Pollutants and all Activities with the Potential to Discharge Pollutants**

The potential pollutant generating activities and/or potential pollutants for each commercial/industrial facility will be identified and included in the inventory. A list of commercial/industrial activities that have the potential to generate pollutants and their corresponding pollutants are presented in **Table 9- 5**.

Table 9-5 Potential Pollutants Generated by Commercial/Industrial Activities

Activity	Potential Pollutants								
	Sediments	Nutrients	Metals	Organics & Toxicants ¹	Floatable Materials	Oxygen-Demanding Substances	Oil & Grease	Bacteria	Pesticides
Automobile mechanical repair, maintenance, fueling, or cleaning	X	X	X	X		X	X		
Airplane mechanical repair, maintenance, fueling, or cleaning	X	X	X	X		X	X		
Boat mechanical repair, maintenance, fueling, or cleaning	X	X	X	X		X	X		
Equipment repair, maintenance, fueling, or cleaning	X	X	X	X		X	X		
Automobile and other vehicle body repair or painting			X	X			X		
Mobile automobile or other vehicle washing	X	X	X			X	X		
Automobile (or other vehicle) parking lots and storage facilities			X		X		X		
Retail or wholesale fueling			X	X	X		X		
Pest control services									X
Eating or drinking establishments		X		X	X	X	X	X	X
Mobile carpet, drape or furniture cleaning	X			X					
Cement mixing or cutting	X								
Masonry	X								
Painting and coating			X	X			X		
Botanical or zoological gardens and exhibits	X	X			X	X		X	X
Landscaping and hardscape installations	X	X			X	X		X	X
Nurseries and greenhouses	X	X			X	X		X	X
Golf courses, parks and other recreational areas/facilities	X	X			X	X		X	X
Cemeteries	X	X			X	X		X	X
Pool, fountain, and lake cleaning		X	X	X	X	X		X	
Marinas			X	X	X	X	X	X	
Port-a-Potty servicing		X			X	X		X	
¹ This includes all toxic materials other than pesticides.									

STEP 4- Identify any Commercial/Industrial Facilities Located Adjacent to and/or Discharging to an Environmentally Sensitive Water Body or Area of Special Biological Significance

Determine if commercial/industrial facilities may potentially impact a water body considered to be environmentally sensitive water body (ESA) or Area of Special Biological Significance (ASBS). The extent of this determination depends on whether the Permittee is in the San Diego RWQCB or Santa Ana RWQCB jurisdiction. Specific guidance is presented below.

San Diego RWQCB Jurisdiction

In the San Diego area the Permittees must determine whether the facility is adjacent to and/or discharging to an ESA, and if that ESA is a 303(d) listed water body, is the does the facility have the potential to discharge pollutants of concern.

ESA Identification

An ESA exists if any of the following designations have been applied to the water body of concern:

- Clean Water Act 303(d) listed impaired water body (see **Table 9-6**)
- Areas designated as Areas of Special biological Significance (ASBS) by the SWRCB
- Water bodies designated with the RARE beneficial use by the SWRCB
- Water bodies located within areas designated as preserves or equivalent under the Natural Community Conservation Planning Program
- Areas designated as Critical Aquatic Resources
- Any other equivalent ESAs that contain water bodies which have been identified to be of local concern.

The map provided by the County (**see Appendix A-9**) may be used to assist in the identification and classification of commercial/industrial facilities to determine if they potentially impact an ESA.

Directly Adjacent Definition

A facility is considered “directly adjacent” when located within **200 feet** of an Environmentally Sensitive Area (ESA). A facility is “discharging directly to” an ESA when discharge from a drainage system that is composed entirely of flows from the subject facility or activity enters an ESA. Alternatively, discharge from an urban area that co-mingles with downstream flows prior to an ESA is not subject to this requirement.

Pollutants of Concern Identification

In order to complete the inventory of commercial/industrial facilities, it must be determined whether any facility activities have the potential for discharging pollutants of concern to a 303(d) listed water body *for which the water body is impaired*. For example, does the activity discharge heavy metals into a heavy metal impaired water body?

The Permittee must combine the information collected in Step 3 (identification of pollutants from the commercial/industrial business) and cross-reference it with the information from **Table 9-6** regarding impaired water bodies and associated pollutants of concern to determine if the business is discharging the pollutant of concern.

Santa Ana RWQCB Jurisdiction

In the Santa Ana region the Permittees must determine whether the facility is adjacent to and/or discharging to an ASBS.

An ASBS is a designation applied by the SWRCB. The map provided by the County (**see Appendix A-9**) may be used to assist in the identification and classification of commercial/industrial facilities to determine if they potentially impact an ASBS.

A facility is considered "directly adjacent" when located within **500 feet** of an ASBS. A facility is discharging directly to an ASBS when discharge from a drainage system that is composed entirely of flows from the subject facility or activity enters an ASBS. Alternatively, discharge from an urban area that co-mingles with downstream flows prior to an ASBS is not subject to this requirement.

Table 9-6 Waterbody Pollutants of Concern

Region	Orange County Water Body	Watershed								
			Bacteria Indicators/ Pathogens	Metals	Nutrients	Pesticides	Toxicity	Trash	Salinity/TD S/Chlorides	Turbidity
Region 8 Santa Ana	Anaheim Bay	C		X		X				
	Bolsa Chica			X						
	Buck Gully Creek	H	X							
	Huntington Beach State Park	C	X							
	Huntington Harbour	D	X	X		X				
	Los Trancos Creek (Crystal Cove Creek)	H	X							
	Newport Bay, Lower	G		X		X				
	Newport Bay, Upper (Ecological Reserve)	G		X		X				
	Santiago Creek Reach 4	E								
	San Diego Creek, Reach 1	F	X			X				
	San Diego Creek, Reach 2	F		X			X			
	Seal Beach	A	X							
	Silverado Creek	E	X						X	
Region 9 San Diego	Aliso Creek (Mouth)	J	X							
	Aliso Creek (20 miles)	J	X		X		X			
	Dana Point Harbor	K	X							
	Pacific Ocean Shoreline, Aliso Beach HAS	J	X							
	Pacific Ocean Shoreline, Dana Point HAS	K	X							
	Pacific Ocean Shoreline, Laguna Beach and San Joaquin Hills HSAs	I	X							
	Pacific Ocean Shoreline, Lowe San Juan HAS	L	X							
	Pacific Ocean Shoreline, San Clemente HAS	M	X							
	Prima Deshecha Creek	M			X					X
	San Juan Creek (lower one mile)	L	X							
	San Juan Creek (Mouth)	L	X							
	Segunda Deshecha Creek	M			X					X

Intentionally Blank

9.2.1.3 Inventory Database Protocols and Maintenance

The Permittee will be inspecting commercial/industrial facilities at the frequencies specified in **Section 9.2.4** of this Model Program. The inspections provide current information on commercial/industrial facilities that is used to annually update the inventory database and map of commercial/industrial facilities. Information that should be collected during the inspection and included in the inventory database includes:

<u>Characteristic or Criteria</u>	<u>Information Collected or Verified</u>
<i>Business Name</i>	Business Name
<i>Physical Address Information</i>	Street Number, Street Direction, Street Name, Street Suffix, City or Unincorporated Area, Zip Code, Business Phone Number, Business Fax Number, email address, APN.
<i>Mailing Address Information</i>	Street Number, Direction, Street Name, Street Suffix, Suite Number/Letter, City or Unincorporated Area, Zip.
<i>Business Contact Name</i>	Full Name of Owner, Operator, Manager, etc.
<i>Emergency Contact</i>	24 hour Emergency Contact Phone Number
<i>Lot Size</i>	Total Square Feet of Lot (or if Multi-Tenant Lot: Enter Total Square Feet of Business).
<i>SIC Code</i>	SIC Code 1 and Other Pertinent SIC Codes if Applicable.
<i>Industrial-Specific Info</i>	WDID Number (Statewide Industrial Permit), Is Facility Subject to SARA Sect. 313, Title III?
<i>Commercial-Specific Info</i>	Description of Commercial Activity
<i>Watershed</i>	The hydrologic unit within the Permittee's jurisdiction where the facility resides, Longitude and Latitude.
<i>GIS Information (optional)</i>	Latitude, Longitude, etc.
<i>Local Licensing/Permits</i>	Business License Number, Special Permits, etc.
<i>Potential pollutants</i>	Outcome of Step 3
<i>Adjacent to and/or Discharge to ESA/ASBS</i>	Outcome of Step 4
<i>Pollutants of concern into an ESA</i>	Outcome of Step 4 (SDRWQCB only)
<i>Comments/Notes</i>	

9.2.2 Prioritization for Inspection

9.2.2.1 Introduction

This section outlines the procedures for prioritizing commercial/industrial facilities for inspection frequency, based on the threat to water quality. Potential threats to water quality at each commercial/industrial facility can be determined by evaluating a variety of site-specific factors according to the criteria outlined below. Priorities may be high, medium or low.

The prioritization processes for commercial and industrial facilities are discussed separately in this section. Although the processes are similar, specific permit requirements necessitate that commercial and industrial facilities be prioritized separately.

9.2.2.2 Prioritization of Industrial Facilities

Prioritization involves two phases:

- Initially classifying a facility as being a high, medium or low priority for inspection based on site information; and
- Subsequently confirming or reclassifying the facility based on inspections, field observations and additional information.

The first phase can be accomplished administratively using the data provided in the inventory of industrial facilities. The latter phase is completed following the initial inspection of each industrial facility.

Initial Prioritization

The following industrial facilities are mandatory high priority facilities:

San Diego RWQCB Jurisdiction

- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).
- Facilities which are tributary to a Clean Water Act Section 303(d) impaired water body, where the facility generates pollutants for which the water body is impaired.
- Facilities within or directly adjacent to (i.e. within 200 feet) or discharging directly to a receiving water within an Environmentally Sensitive Area (ESA).
- Facilities subject to the state Industrial General Permit (excluding those facilities that have been approved for a No Exposure Certification).
- All other facilities that the Permittee determines are contributing significant pollutant loading to its MS4, regardless of whether such facilities are covered under the statewide General Industrial Permit or other NPDES permits.

Santa Ana RWQCB Jurisdiction

- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).
- Facilities which are tributary to or directly adjacent to (i.e. within 500 feet) an area defined by the Ocean Plan as an Area of Special Biological Significance (ASBS).
- Facilities subject to the state Industrial General Permit.
- Facilities with a high potential for, or history of, unauthorized, non-storm water discharges.

In addition to the industrial facilities noted above, the Permittee should review other facilities to determine whether they should be high priority sites. In some cases, the Permittees may not have all the required information necessary to properly evaluate a facility for prioritization. In this case, a preliminary site visit may be warranted such that the Permittee can collect the needed information and verify the prioritization.

A ranking system using the following criteria is used to prioritize the sites:

- Type of activity (SIC code)
- Materials used in the industrial process
- Type(s) and quantities of waste products generated
- Potential for discharge of pollutants
- Non-stormwater discharges
- Size of the facility (% impervious surface)
- Proximity to a receiving water bodies

The ranking criteria and scores have been provided in **Table 9-7** below. The recommended prioritization may be adjusted within a LIP to fit the needs of individual Permittees. The sum from each line item is the total ranking for a specific Industrial Facility. If the total ranking is equal to or greater than 25, then a high priority is assigned. If the total ranking is less than 25 but equal to or greater than 15, then a medium priority is assigned. If the total ranking is less than 15, then a low priority is assigned. Each prioritized facility should be inspected at a minimum in accordance with the inspection schedule presented below in **Section 9.2.4**.

Field Verification of Prioritization

After initial prioritization, the Permittee should perform facility inspections; subsequently, each site is re-evaluated to determine whether the initial prioritization was adequate. Facilities possessing a No Exposure Certification (NEC) may be eligible for a lesser priority classification. Permittees should contact the RWQCB to obtain information regarding which facilities have NECs.

SECTION 9, EXISTING DEVELOPMENT

Table 9-7 Ranking System for Prioritization of Industrial Facilities							
Category	0	1	2	3	4	5	Score
Area/Activity	Pollutant Generation Unlikely - 0% activities outdoors	Pollutant Generation Possible - 0-25% activities outdoors	Pollutant Generation Likely - 25-75% activities outdoors	Pollutant Generation Highly Likely - >75% activities outdoors			
Raw Materials Used	No raw materials used or no ability to generate pollutants (e.g., all materials kept indoors or properly stored outdoors)	Minimal used, likely to generate pollutants (e.g., nearly all materials kept indoors or properly stored outdoors)	Some used or stored at this facility, possible to generate pollutants ((e.g., some materials not fully covered during storage or some material may occasionally be left uncovered outside))	Materials are routinely stored or handled outdoors and discharge may carry pollutants to storm drains (e.g., routine outdoor storage of uncovered raw materials)			
Wastes Generated (Pollutants of Concern)	Pollutants of concern not generated or are properly disposed			Pollutants of concern are generated and improperly disposed			
Pollutant Discharge Potential	All identified BMPs are fully implemented		All identified BMPs are partially implemented	None of the identified BMPs are implemented, or unknown			
Non-Stormwater Discharges	No known non-stormwater discharges, all programs implemented		Suspected non-stormwater discharges may be occurring, but not observed	Non-stormwater discharges have been observed and/or verified			
Size of Facility		Small (<5,000 square feet)	Medium (>5,000 - <100,000 square feet)	Large (>100,000 square feet)			
Proximity to ESA Water Body (San Diego Permit ONLY)		Low (>1 mile from ESA)	Medium (> 200 feet, < 1 mile from ESA)	*High (direct discharge or adjacent – within 200 feet)			
Proximity to ASBS (Santa Ana Permit ONLY)		Low (>1 mile from ASBS)	Medium (> 500 feet, < 1 mile from ASBS)	*High (direct discharge or adjacent – within 500 feet)			
* Facilities with a high proximity to and ESA or ASBS are automatically considered to be high priority facilities. If the total ranking is equal to or greater than 25, then a high priority is assigned. If the total ranking is less than 25 but equal to or greater than 15, then a medium priority is assigned. If the total ranking is less than 15, then a low priority is assigned.							

9.2.2.3 Prioritization of Commercial Facilities

San Diego RWQCB Jurisdiction

Permittees within the San Diego RWQCB jurisdiction are **NOT** required to prioritize commercial facilities. However, they are required to inventory a set of pre-determined high priority commercial facilities/activities. See **Table 9-2** for a list of those commercial facilities/activities that are automatically considered “high priority” within the San Diego RWQCB jurisdiction. However, if field observations, monitoring data or complaints indicate that another commercial site/source may contribute a significant pollutant load, the site should be inspected and ranked in accordance with the prioritization scheme outlined below, or as adjusted within an individual LIP.

Santa Ana RWQCB Jurisdiction

Permittees within the Santa Ana RWQCB jurisdiction are required to prioritize commercial facilities. See **Table 9-3** for a list of those commercial facilities/activities that must be inventoried and prioritized within the Santa Ana RWQCB jurisdiction. However, these are NOT automatically considered “high priority”.

Prioritization for commercial facilities in the Santa Ana RWQCB jurisdiction involves two phases:

- Initially classifying a facility as being a high, medium or low priority for inspection based on site information; and
- Subsequently confirming or reclassifying the facility based on inspections, field observations and additional information.

Initial Prioritization

The first phase can be accomplished administratively using the data provided in the inventory of commercial/industrial facilities. The latter phase will be completed following the initial inspection of each commercial/industrial facility.

Santa Ana RWQCB Permittees must consider the following site attributes to evaluate the potential threat to water quality and subsequent inspection priority for commercial facilities:

- Type of Commercial Activity
- Magnitude of Commercial Activity
- Location of Commercial Activity
- Potential for Discharge of Pollutants to the MS4
- History of Un-Authorized Stormwater Discharges

The ranking criteria and scores have been provided in **Table 9-8** below. The recommended prioritization may be adjusted within a LIP to fit the needs of individual Permittees. The sum from each line item is the total ranking for a specific Commercial

facility. If the total ranking is equal to or greater than 20, then a high priority is assigned. If the total ranking is less than 20 but equal to or greater than 10, then a medium priority is assigned. If the total ranking is less than 10, then a low priority is assigned. Each prioritized facility should be inspected at a minimum in accordance with the inspection schedule presented below in **Section 9.2.4.1**.

Field Verification of Prioritization

Initially, the Permittees may not have all the required information necessary to properly evaluate a facility for prioritization. In this case, a preliminary site visit may be warranted such that the Permittee can collect the needed information and verify the prioritization. Facilities possessing a No Exposure Certification (NEC) may be eligible for a lesser priority classification. An NEC designation must be accomplished through the jurisdictional regional board and is awarded if the facility meets the No Exposure criterion.

SECTION 9, EXISTING DEVELOPMENT

Table 9-8 Ranking System for Prioritization of Commercial Facilities							
Category	0	1	2	3	4	5	Score
Area/Activity	Pollutant Generation Unlikely - 0% activities outdoors	Pollutant Generation Possible - 0-25% activities outdoors	Pollutant Generation Likely - 25-75% activities outdoors		Pollutant Generation Highly Likely - >75% activities outdoors		
Pollutant Discharge Potential	All identified BMPs are fully implemented		All identified BMPs are partially implemented		None of the identified BMPs are implemented, or unknown		
Non-Stormwater Discharges	No known non-stormwater discharges, all programs implemented		Suspected non-stormwater discharges may be occurring, but not observed		Non-stormwater discharges have been observed and/or verified		
Size of Facility	Small (<5,000 square feet)		Medium (>5,000 - <100,000 square feet)		Large (>100,000 square feet)		
Proximity to ASBS	Low (>1 mile from ASBS)		Medium (> 500 feet, < 1 miles from ASBS)		*High (direct discharge or adjacent – within 500 feet)		
* Facilities with a high proximity to and ASAB are automatically considered to be a high priority facilities If the total ranking is equal to or greater than 20, then a high priority is assigned. If the total ranking is less than 20 but equal to or greater than 10, then a medium priority is assigned. If the total ranking is less than 10, then a low priority is assigned.							

9.2.3 Best Management Practice (BMP) Implementation

The purpose of this section is to identify those BMPs best suited for deployment at a commercial/industrial facility based upon the type of facility and activities that are conducted on-site.

9.2.3.1 BMP Implementation

BMPs are crucial to the success of storm water pollution control. In order to be effective, BMPs must be appropriate to the application and properly implemented. If the desired result is not being achieved, the BMPs should be assessed and modified or, if necessary, changed. The change could mean utilizing a new BMP technology or use of an existing BMP technology. BMPs must be selected that are appropriate to prevent or mitigate pollution generated from the specific activities at the site, and should be selected based on the information gained from facility inspections.

Each Permittee should require the implementation of any number of the designated BMPs at each commercial/industrial facility based on site-specific conditions in order to limit that facility's impact upon receiving water quality. If particular BMPs are infeasible at any specific site, other equivalent BMPs should be implemented. Permittees may find it necessary to develop a schedule for implementation of the BMPs. In addition, each Permittee may require implementation of additional controls for commercial/ industrial facilities tributary to 303(d) impaired water bodies (where a site generates pollutants for which the water body is impaired) or discharging directly to coastal lagoons or other receiving water bodies within environmentally sensitive areas. Where applicable, additional controls are identified in the fact sheets as optional.

Pollution prevention controls will be used as the first line of defense and include measures such as staff training and public education. For the purposes of this Model Program, pollution prevention is defined as any practice that reduces or eliminates the creation of pollutants. Reducing the amount of wastes generated by training employees to create as little waste as possible while performing daily activities is an example of pollution prevention. Source controls will be implemented to further reduce the amount of water and pollutants released into the environment resulting from commercial/industrial activities.

9.2.3.2 BMP Activity Fact Sheets

Model BMP fact sheets have been compiled and include a description of specific minimum source control BMPs for common industrial and commercial activities that may discharge pollutants (see **Appendix A-9**). Specific BMP recommendations may be adjusted within an individual LIP. Where applicable, optional controls have been identified that should be considered for implementation at high priority facilities.

Typically each fact sheet contains the following sections:

- Pollution Prevention
- Suggested Best Management Practices

- Training
- References and Resources

Common Commercial/Industrial activities/sources and their corresponding BMP fact sheets are presented in **Table 9-9**.

Table 9-9 Commercial/Industrial Activities/Sources and Corresponding Fact Sheets	
Activities/Sources¹	Fact Sheets
Automobile mechanical repair, maintenance, fueling, or cleaning	IC18. VEHICLE AND EQUIPMENT FUELING IC19. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
Airplane mechanical repair, maintenance, fueling, or cleaning	IC1. AIRPLANE MAINTENANCE AND REPAIR IC18. VEHICLE AND EQUIPMENT FUELING IC19. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
Boat mechanical repair, maintenance, fueling, or cleaning	IC13. OVER WATER ACTIVITIES IC18. VEHICLE AND EQUIPMENT FUELING IC19. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
Equipment repair, maintenance, fueling, or cleaning	IC18. VEHICLE AND EQUIPMENT FUELING IC19. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
Automobile and other vehicle body repair or painting	IC14. PAINTING, FINISHING, AND COATINGS OF VEHICLES, BOATS, BUILDINGS, AND EQUIPMENT IC19. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR
Mobile automobile or other vehicle washing	IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
Automobile (or other vehicle) parking lots and storage facilities	IC15. PARKING AND STORAGE AREA MAINTENANCE
Retail or wholesale fueling	IC18. VEHICLE AND EQUIPMENT FUELING
Pest control services	IC7. LANDSCAPE MAINTENANCE IC21. WASTE HANDLING AND DISPOSAL
Eating or drinking establishments	IC22. EATING AND DRINKING ESTABLISHMENTS
Mobile carpet, drape or furniture cleaning	IC4. CARPET CLEANING
Cement mixing or cutting	IC5. CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING
Masonry	IC5. CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING

Table 9-9 Commercial/Industrial Activities/Sources and Corresponding Fact Sheets	
Building Maintenance and Light Construction	IC3. BUILDING MAINTENANCE IC5. CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING IC6. CONTAMINATED OR ERODIBLE SURFACES AREAS
Outdoor Activities	IC6. CONTAMINATED OR ERODIBLE SURFACES AREAS IC9. OUTDOOR DRAINAGE FROM INDOOR AREAS IC10. OUTDOOR LOADING/UNLOADING OF MATERIALS IC11. OUTDOOR PROCESS EQUIPMENT OPERATIONS AND MAINTENANCE IC12. OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND CONTAINERS
Painting and coating	IC14. PAINTING, FINISHING, AND COATINGS OF VEHICLES, BOATS, BUILDINGS, AND EQUIPMENT
Botanical or zoological gardens and exhibits	IC2. ANIMAL HANDLING AREAS IC7. LANDSCAPE MAINTENANCE IC8. NURSERIES AND GREENHOUSES
Landscaping and hardscape cleaning	IC7. LANDSCAPE MAINTENANCE
Nurseries and greenhouses	IC8. NURSERIES AND GREENHOUSES
Golf courses, parks and other recreational areas/facilities	IC6. CONTAMINATED OR ERODIBLE SURFACES AREAS IC7. LANDSCAPE MAINTENANCE
Cemeteries	IC7. LANDSCAPE MAINTENANCE
Pool and fountain cleaning	IC16. POOL AND FOUNTAIN CLEANING
Marinas	IC13. OVER WATER ACTIVITIES
Port-a-Potty servicing	IC21. WASTE HANDLING AND DISPOSAL
1. All activities should refer to IC 17 SPILL PREVENTION AND CLEANUP	

9.2.4 Inspection, Monitoring, and Enforcement

The inspection and monitoring program will help to ensure that commercial and industrial facilities are minimizing their impacts on the environment. This chapter describes procedures for the inspection and monitoring of commercial and industrial facilities operating within a Permittee's jurisdiction. The first part of this chapter addresses the inspection requirements that a Permittee should address in its Commercial/ Industrial Jurisdictional Urban Runoff Management Program. The second part provides information on the monitoring program for use by San Diego RWQCB jurisdiction Permittees. In addition, notification and enforcement procedures for facilities found to be out of compliance are discussed.

9.2.4.1 Inspection

Both the Santa Ana RWQCB permit and the San Diego RWQCB permit require the inspection of commercial and industrial facilities identified in the inventory and prioritization procedures described in **Sections 9.4.2 and 9.4.3**. The Permittee will generally conduct one of two types of inspections: compliance inspections and follow-up inspections.

Compliance Inspections

- Initial compliance inspections should be announced so that the inspector can meet with responsible facility official(s) (e.g., owner, superintendent, compliance

manager, engineering consultant, etc.) in order to provide more efficient communication of the storm water requirements and inspection goals. The inspection will focus on current facility operations and activities, BMPs currently in use, and the effectiveness of those BMPs. This inspection will also focus on verifying inventory spreadsheet information and, whenever possible, provide out reach education to facility staff. All re-occurring compliance inspections will cover the same information as an initial compliance inspection, but will typically be unannounced in order to verify compliance and that BMPs are being effectively implemented.

Follow-up Inspections

- Generally, these inspections will be similar to an initial compliance inspection except that a) they will focus primarily on areas where a facility was deemed to be non-compliant, and b) the inspections may be announced or unannounced, depending on which course of action the Permittee deems will be most conducive to continued facility compliance.

Compliance Inspection Frequency

The language regarding frequency of inspections differs somewhat between the two permits; 9-10 outlines these differences and the subsequent sections give practical guidance on inspection frequency for Permittees to follow.

Table 9-10 Compliance Inspection Frequencies for Commercial/Industrial Facilities			
	Priority	Santa Ana RWQCB	San Diego RWQCB
Industrial	High	Annually	Annually or biannually ¹
	Medium	Biannually	As-needed ²
	Low	Once per permit cycle	As-needed ²
Commercial	High	Once per permit cycle	As-needed ²
	Medium	As-needed ²	N/A
	Low	As-needed ²	N/A
1. See explanation below 2. At least once per permit cycle (every 5 years) is recommended			

Both the San Diego RWQCB and the Santa Ana RWQCB permits require that high priority industrial facilities be inspected, at a minimum:

- Annually,
- OR (for those Permittees covered under the San Diego RWQCB permit)
 - Bi-annually (once every two years) for any site that the Permittee certifies all of the following in a written statement to the RWQCB:
 - Permittee has record of the industrial facility's Waste Discharge Identification Number (WDID#) documenting facility's coverage under the statewide General Industrial Permit; and
 - Permittee has reviewed the Industrial facility's Storm Water Pollution Prevention Plan (SWPPP); and
 - Permittee finds SWPPP to be in compliance with all local ordinances, permits, and plans; and
 - Permittee finds that the SWPPP is being properly implemented on site.

In addition to the information provided in above in **Table 9-10**, Permittees should note:

- As a practical matter, "as needed" should be understood to mean at least once per permit cycle, so that the requirements of both permits are essentially the same.
- If the San Diego RWQCB has conducted an inspection of a site during a particular year, the requirement for the responsible Permittee to inspect this site during the same year is satisfied. Permittees in the San Diego RWQCB jurisdiction should contact the RWQCB to determine which facilities have been inspected.
- In addition to the inspection frequencies described above, the Permittee must also investigate all complaints of illegal discharges from a Commercial/Industrial facility made by the public or by another agency or those violations arising from the results of dry-weather field screening or analytical monitoring program.
- Inspections of "restaurants" and "eating and drinking establishments" will be conducted by the County Health Care Agency as part of its Restaurant Inspection Program.

Follow-up Inspection Frequency

In accordance with the Santa Ana permit, for those industrial facilities deemed to be non-compliant in the Santa Ana RWQCB jurisdiction, the Permittee will perform compliance inspections once a month until said industrial facilities are shown to be compliant, and then once every four months for a full calendar year after the facility achieves compliance. The Santa Ana Permit does not specify a follow-up inspection frequency for commercial facilities. The San Diego Permit does not specify a follow-up inspection frequency for either industrial or commercial facilities. The rating system below can be used by an inspector to quantify the level of non-compliance and a recommended re-inspection frequency to assure compliance (**Tables 9-11 and 9-12**).

1 Rating - There are no significant deficiencies that require correction.

2 Rating - The project has minor deficiencies and do not present a likely threat of non-compliant discharge. The inspector will list each of the minor deficiencies and can include corrective actions. Minor deficiencies include the following:

- Any non-stormwater or waste management BMPs improperly maintained.
- Evidence of active wind erosion on unstabilized slopes/stock piles.

3 Rating - Major deficiencies that result in or present a potential threat of non-compliant discharge. Any 3 rating may trigger RWQCB notification requirements described below. Major deficiencies are defined as follows:

- Hazardous materials or waste is stored within the facility without implementation of BMPs.
- Approved BMPs not installed or operating correctly.
- Any observed discharge of stormwater or non-stormwater that, in the judgment of the inspector, is generated by facility, and is uncontrolled.

**Table 9-11
Recommended Follow-up Inspection Frequency of Industrial Facilities**

Facility Priority	RWQCB Area	Level of Compliance at each Site		
		1 No significant deficiencies	2 Minor deficiencies	3 Major deficiencies
HIGH	Santa Ana	As needed ¹	Facility self-certification then as needed ¹	Once per Month (minimum) until in Compliance then every Four Months for one Calendar Year
	San Diego	As needed ¹	Facility self-certification As needed ¹	Once per Month until in Compliance then as needed ¹
MEDIUM	Santa Ana	As needed ¹	Facility self-certification As needed ¹	Once per Month until in Compliance then as needed ¹
	San Diego	As needed ¹	Facility self-certification As needed ¹	Once per Month (minimum) until in Compliance then every Four Months for one Calendar Year
LOW	Santa Ana	As needed ¹	Facility self-certification As needed ¹	Once per Month until in Compliance then as needed ¹
	San Diego	As needed ¹	Facility self-certification As needed ¹	Once per Month until in Compliance then as needed ¹
(1) As determined appropriate by inspector to assure compliance				

**Table 9-12
Recommended Follow-up Inspection Frequency of Commercial Facilities**

Facility Priority	RWQCB Area	Level of Compliance at each Site		
		1 No significant deficiencies	2 Minor deficiencies	3 Major deficiencies
HIGH	Santa Ana	As needed ¹	Facility self-certification then as needed ¹	Once per Month (minimum) until in Compliance then as needed ¹
	San Diego	As needed ¹	Facility self-certification or as-needed ¹	Once per Month until in Compliance then as needed ¹
MEDIUM	Santa Ana	As needed ¹	Facility self-certification or as-needed ¹	Once per Month until in Compliance then as needed ¹
	San Diego	N/A	N/A	N/A
LOW	Santa Ana	As needed ¹	Facility self-certification As needed ¹	Once per Month until in Compliance then as needed ¹
	San Diego	N/A	N/A	N/A
(1) As determined appropriate by inspector to assure compliance				

Site Inspection Procedures and Documentation

Each Permittee must conduct site inspections for compliance with its ordinances and permits. Such inspections include review of:

- Material and waste handling and storage practices,
- Pollution control BMP implementation and maintenance, and
- Evidence of past or present unauthorized, non-storm water discharges.

The Permittee must inspect Commercial/ Industrial facilities to determine if the facilities and operations are in compliance with applicable permits and local ordinances, to review BMP implementation, to assess BMP effectiveness and to verify inventory information used for facility prioritization. Equally important, Permittees must document their visits and findings.

The typical site inspection effort consists of four stages:

- Pre-inspection preparation
- Approaching a site
- Facility inspection
- Record-keeping

In order to properly document all inspections and gather the necessary information for the reporting program effectiveness assessment (see **Section 9.1.4**), inspection procedures and inspection forms have been developed (see **Appendix A-9**). The inspection forms provide a series of questions about specific activities taking place at a facility, as well as a list of suggested corrective actions that can be implemented should a problem be found.

For those facilities that require self-certification, Permittee must request the following information in addition to any basic facility information normally collected at an inspection:

- Identification of the reason a follow-up inspection/self-certification was required
- Photographs documenting any corrective measures taken
- Written, dated description of what corrective measures were taken and when those measure went into effect at the facility

Permittees will need to confirm receipt and acceptance of any self certification submittals with facilities in a timely matter.

9.2.4.2 Industrial Analytical Monitoring (San Diego Permit Area)

The basic approach followed for the monitoring program is to ensure compliance with guidelines developed based upon requirements laid out in the Monitoring and Reporting Program No. R9-2002-0001, NPDES No. CAS0108740 (San Diego NPDES permit), issued by the San Diego Regional Water Quality Control Board (Section F.3.b(5)). The San Diego jurisdiction Permittees may either conduct the monitoring themselves or require the industries to conduct the monitoring.

Facilities Required to Monitor

Each high threat industrial facility within the San Diego RWQCB's jurisdiction is required to conduct monitoring of runoff. As discussed previously in this report, industrial facilities are classified as high priority industries based on a number of factors, including type(s) of industrial activity, wastes generated, pollutant discharge potential, and proximity to environmentally sensitive areas.

Specific industrial classifications covered by this monitoring program include:

- Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards
- Manufacturing facilities
- Oil and gas / mining facilities
- Hazardous waste treatment, storage, or disposal facilities
- Landfills, land application sites, and open dumps
- Recycling facilities
- Steam electric power generating facilities
- Transportation facilities
- Sewage or wastewater treatment works
- Manufacturing facilities where industrial materials equipment or activities are exposed to storm water

Monitoring Objectives

Monitoring is focused on characterizing the nature of stormwater discharges from industrial facilities, tracking changes in these characteristics over time, targeting management actions to address any identified problems, and assessing the effectiveness of those management actions implemented. Thus, monitoring is an essential part of a long-term, results-based assessment strategy intended to improve water quality through the reduction of problematic industrial discharges.

Minimum Monitoring Requirements

At a minimum the monitoring program for industrial sites should include data collection from two storm events per year on the following constituents:

- Any pollutant listed in effluent guidelines subcategories where applicable;
- Any pollutant for which an effluent limit has been established in an existing NPDES permit for the facility.
- Oil and grease or total organic carbon (TOC)
- pH

- Total suspended solids (TSS)
- Specific conductance; and
- Toxic chemicals and other pollutants that are likely to be present in storm water discharges.
- Any pollutant that may be used, stored, or generated at the facility, which may be discharged to a water body or a tributary to a 303(d) water body, unless the facility can demonstrate approval of No Exposure Certification.

Monitoring Approach

The specific monitoring approaches used for stormwater monitoring, including information on implementation, design, methods, frequency, documentation, etc. are presented in **Appendix A, Section A-9**.

9.2.4.3 RWQCB Notification and Enforcement

Non-Compliance Notification

Permittees are required to notify the appropriate RWQCB when non-compliance is noted. The following 3-step notification procedure should be followed:

STEP 1: Determine whether an event of non-compliance presents a threat to human or environmental health

The Permittees may use the following criteria to determine whether an event of non-compliance poses a threat to human or environmental health:

- The event poses a significant or imminent threat to the quality of surface or ground waters and/or their beneficial uses.
- The event results in a spill or discharge of hazardous materials in excess of reportable quantities (as listed in 40 CFR Part 117 or 302).
- The event results in a spill or discharge of hazardous materials requiring a hazardous materials emergency response (see **Section 10**).

STEP 2: Identify procedures for notifying the RWQCB

The Permittee must provide oral notification to the RWQCB within 24 hours of the discovery of a non-compliant site meeting the aforementioned criteria. This must be followed by written notification within 5 days of the discovery.

STEP 3: Follow-Up Inspections

Should an inspected site demonstrate non-compliance, the Permittee must adjust the inspection frequency as detailed above in **Section 9.2.4.1**.

Enforcement Procedures

Permittee inspectors with enforcement authority must issue enforcement actions to commercial/ industrial facility owners and operators determined to be out of compliance. The

inspectors must document each observed violation. Depending on the severity of the violation, enforcement actions can range from a verbal warning to civil or criminal court actions with monetary fines.

Because enforcement will be conducted in steps for specific facilities, the Permittees must provide for an inventorying of violations, and where a particular facility is in the enforcement scheme. The enforcement steps include:

- Notice of Non-compliance
- Administrative Compliance Order
- Cease and Desist Orders
- Infractions and Misdemeanors

Enforcement for the Commercial/Industrial Program should follow the Enforcement Consistency Guidelines (see **Section 10**).

9.2.5 Model Program Outreach and Education

In this section additional Permittee business outreach options are presented. In addition to County sponsored training, Permittees may also attend training seminars or workshops related to stormwater management and water quality conducted by other organizations.

Additional outreach efforts for the commercial and industrial program may include the following:

Webpage - The Permittee should consider including a stormwater page on their webpage. The commercial/industrial page could include:

- Links to on-line versions of the Fact Sheets.
- An on-line version of the Permittee's customized version of the Commercial/Industrial Program.
- Links to other pollution prevention sites and regulator sites (USEPA, SWRCB, etc.). A few examples include:

<http://www.epa.gov/>
<http://www.swrcb.ca.gov/>
<http://www.swrcb.ca.gov/stormwtr>
<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/menu.cfm>

- Any other information identified as relevant to post on the commercial/industrial program page.

Mailings - Either general in nature or tailored to specific inventoried businesses. Mailings represent an important business outreach tool and would include information on the State General Permit, tips for protecting water quality, list of training programs or conferences, municipal contacts, etc.

Workshops - Probably one of the most common and effective methods for educating the regulated communities is the workshop. Workshops may be aimed at specific businesses or at

the entire regulated community. Workshops should be no longer than one day (preferably a half day) and be conveniently located close to the audience. Workshops may address the overall stormwater program and the municipality/business responsibilities or be hands on and address a specific subject (e.g. spill prevention).

Business Outreach - Outreach targeting specific businesses can be an effective way to educate owners/operators in the proper implementation of best management practices. Outreach may include distribution of business category fact sheets that provide technical information on implementing pollution prevention for sectors such as automobile service facilities, mobile cleaning, food service facilities, and landscape maintenance. Business specific presentations, workshops, and training may also be conducted.

Brochures and Posters - An important component of an outreach program is the development and distribution of brochures, posters, fact sheets, etc. These materials are usually business specific and provide short and succinct summaries of the issues, BMPs requirements, and follow up information. They can range from multi-color glossy brochures to black and white summary sheets. The following materials have been developed by the Public Education Committee and are available for use by the Permittees:

Brochures

- Mobile Detailing and the Water Quality Act
- Water Quality Guidelines for Exterior Restaurant Cleaning Operations
- Water Quality Guidelines for Carpet Cleaning Activities
- Water Quality Guidelines for Permitted Lot & Pool Drains Pool Maintenance
- Water Quality Guidelines for Horse & Livestock Activities

Posters

- Food/Restaurant Industry
- Auto Repair Industry
- Good Gas Station Operating Practices

9.3 Food Facility Inspection Program Details

The definition of “restaurants” and “eating and drinking facilities” used for the program will be those fixed facilities that process unpackaged food that have been identified by the Orange County Health Care Agency (HCA). The Countywide HCA inventory of food facilities will be reviewed each year and revised to reflect:

- The addition of new or redeveloped food facilities from the prior year
- The removal of food facilities that have no potential to impact the storm drain system

9.3.1 Pollution Prevention Inspections for Wastes, Washwater and Trash Bin Enclosures

Pollution prevention inspections will be conducted a minimum of once per reporting period (July to June) at the food facilities identified in the inventory in order to meet Santa Ana Order No. R8-2002-0010, Section VI -7 a-d requirements. A program goal is to conduct additional inspections up to an optimal level of three times a year based on the experience of HCA in maintaining standards during their food facility inspections. Such additional inspections would be subject to resource availability.

9.3.2 Pollution Prevention Inspections for Grease Traps and Interceptors

Pollution prevention inspections will be conducted a minimum of once per reporting period (July to June) at the food facilities identified in the inventory in order to meet Santa Ana Order No. R8-2002-0010, Section VI -7 e requirements. A program goal is to conduct additional inspections up to an optimal level of three times a year based on the experience of HCA in maintaining standards during their food facility inspections. Such additional inspections would be subject to resource availability.

9.3.3 Enforcement

While education on appropriate practices is a key element of achieving improved water quality at food facilities, enforcement is a component of the pollution prevention inspections. Facilities that are unresponsive to BMP requirements or have a spill that enters the storm drain system as a result of improper maintenance of grease traps/interceptors would be subject to the following enforcement actions:

- Actions taken by HCA under its authority under the Health and Safety Code
- Administrative and criminal remedies available to the Permittees under the Water Quality Ordinance
- Referral to the District Attorney or the Regional Board

Enforcement actions will be reported annually in the Annual Progress Report and spills of sewage that enter the storm drain system will be reported according to existing requirements.

9.4 Model Residential Program Details (San Diego Permit Area)

9.4.1 Program Overview

Residential areas comprise a significant portion of the land area of each Permittee's jurisdiction. The residential program is structured to minimize potential pollutants in runoff from residential areas to the maximum extent practicable. The Permittees are committed to reducing the potential impact of residential activities on water quality.

The baseline implementation of the Residential Program is the countywide promotion of a designated set of pollution prevention and source control BMPs for high threat to water quality residential activities. Based on the proximity to environmentally sensitive areas (ESAs), the implementation will be enhanced through targeted education and outreach activities.

The Model Program is illustrated in **Figure 9-4**. Information gathered for each section of the model program supports subsequent sections. The flow of information eliminates duplication of efforts and improves the efficiency of the overall program.

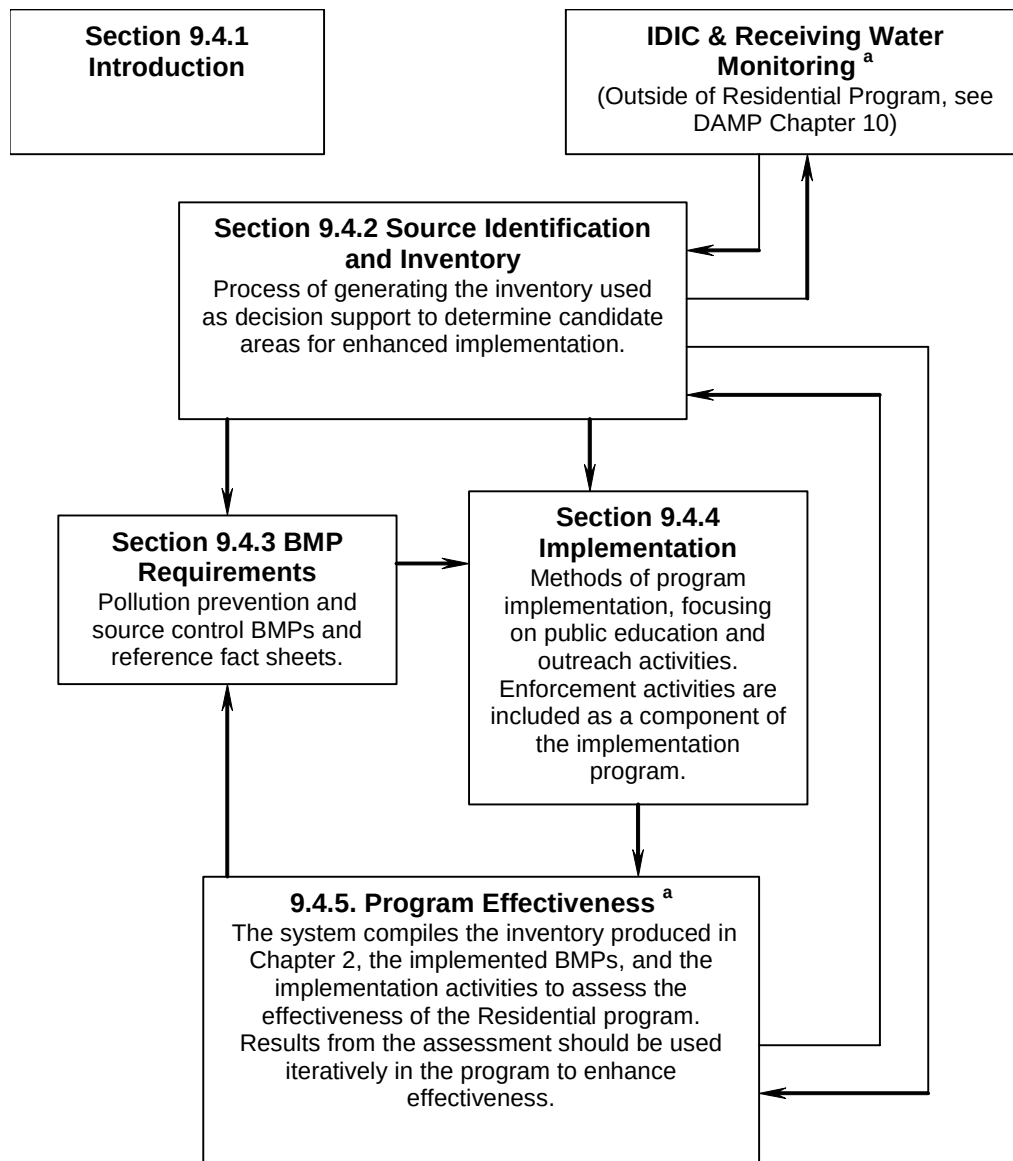
9.4.2 Source Identification and Inventory

The residential program is designed to operate with two levels of implementation, a base level to be implemented for all high threat to water quality residential activities in a consistent manner countywide, and an enhanced level of implementation tailored to address residential areas tributary to environmentally sensitive areas (ESAs) and 303(d) listed waterbodies. The inventory consists of a series of maps, compiled to assist the Permittee in identifying residential areas that should receive enhanced implementation, in effect prioritizing residential areas within a Permittee's jurisdiction.

Pollution prevention controls are used as the first line of defense against water quality degradation. For the purposes of the Residential Model Program, pollution prevention is defined as any practice that reduces or eliminates the creation of pollutants. A resident choosing to use integrated pest management (IPM) practices in their garden instead of organophosphorus pesticides is an example of pollution prevention, because if a resident does not apply the chemicals, the potential for the pesticide to runoff their property and into the storm drain system is eliminated.

Source controls are implemented to further reduce the amount of water and pollutants potentially released into the environment resulting from residential activities. Source controls are practices that prevent pollution by reducing potential pollutants at their source. A resident applying the proper amount of an appropriate pesticide for problem insects is an example of source control, because minimizing the amount of pesticide application minimizes the potential for runoff to the storm drain system.

Figure 9-4 Model Residential Program Flow Diagram



9.4.2.1 Source Identification Procedure

For the purpose of the residential program, all residential areas are assumed to produce uniform amounts and types of pollutants, based on the presumption that the activities of concern are consistent across residential areas. The ESAs and 303(d) listed waterbodies are exceptionally sensitive to runoff containing pollutants of concern (POCs), hence, residential areas adjacent to these areas will be the focus for enhanced implementation.

Source locations and sensitive waterbodies are the two categories of maps in the source identification procedure. Residential areas in or discharging to sensitive receiving waters should be considered for the enhanced implementation (see **Section 9.2** for identification of waterbodies and pollutants of concern). The details of which POCs are being generated in the residential areas will be used to tailor the enhanced program.

Source locations include the combination of residential land use, the pollutants typically generated during residential activities, and the storm drainage system. Maps required for determining the source locations are as follows:

- Residential land use areas (including common interest areas and areas with homeowner associations, i.e. CIA/HOAs).
- Watershed(s) within municipality boundaries
- List of pollutants generated by residential activities
- Drainage facilities

Sensitive waterbodies are ESAs, and include 303(d) listed waterbodies impaired by pollutants potentially generated by residential activities, and areas identified as hot spots by Permittee monitoring activities.

Maps required for determining the sensitive waterbodies within a Permittee's jurisdiction are as follows:

- Environmentally sensitive areas (including 303(d) waterbodies and pollutant(s) causing impairment).
- Monitoring results

The map based inventory is used as the basis for determining level of implementation and enforcement, and reporting elements of the program. The inventory is used to identify which BMPs and strategies should be used in different areas to reduce potential discharge of pollutants to the storm sewer system. Each of these maps/information items is further explained below.

Residential Land Use Area Maps

Residential land use maps may be developed from Permittee zoning maps, tax maps, etc. Because activities are assumed to be homogenous when integrated over local

neighborhoods, coarse-scale land-use maps (i.e. to zone level) are sufficient for the purpose of source identification, and subsequent prioritization components.

Watersheds within Municipality Boundary Maps

Each Permittee should incorporate GIS based overlays of jurisdictional area with watershed boundaries. Locating the Permittee jurisdiction within the watershed boundaries will allow assessment of potential impacts on 303(d) listed waterbodies. **Table 9-4** is a listing of major watersheds within the County of Orange and serves as a legend for the watershed boundary map, previously presented in **Figure 9-3**.

Drainage Facility Maps

To determine how stormwater is directed upon entering the storm drain system, the inventory of drainage facilities developed, as part of the Permittee's municipal program, should be linked with the residential inventories. The drainage facility map detail the storm drain watersheds within the Permittee's jurisdiction.

List of Pollutants Generated by Residential Activities

Residential activities have the potential to produce pollutants that may adversely affect receiving water quality. As part of the prioritization procedures, the list of pollutants generated by residential activities will be cross-referenced against the list of impairments compiled as part of mapping sensitive waterbody activities. Typical pollutants associated with residential activities are listed in **Table 9-13**.

Environmentally Sensitive Areas (ESAs)

Comparison of drainage facility maps with an ESA map allows Permittees to determine locations of high priority residential areas.

Monitoring Results

The residential program does not carry with it monitoring requirements. However, if results are available for residential areas from the Illicit Discharge and Illicit Connection (ICID) Program monitoring or the receiving water monitoring, they may be used to identify hot spots of high pollutant loads from specific residential areas. Follow-up studies and targeted outreach would be initiated for the identified hot spots as part of the enhanced implementation triggered by the high pollutant loadings.

Permittees should ensure the coordination between the various programs and promote data and resource sharing.

9.4.2.2 Mandatory High Threat Areas and Activities

The San Diego Permit Section F.3.d.(2) identifies the minimum high priority residential areas and activities that pose a threat to the water quality of receiving waters, including:

- Automobile repair and maintenance
- Automobile washing

- Automobile parking
- Home and garden care activities
- Disposal of household hazardous waste
- Disposal of pet waste
- Disposal of green waste
- Any other residential source that the Permittee determines may contribute a significant pollutant load to the storm sewer system.
- Any residence tributary to a Clean Water Act Section 303(d) impaired waterbody, where residence generates pollutants for which the water body is impaired.
- Any residence within or directly adjacent to or discharging directly to coastal waters or other receiving waters within an environmentally sensitive area.¹

A list of high priority residential activities and the typical pollutants that may result from the activities is shown in **Table 9-13**. BMPs for the activities listed above are typically pollution prevention and good housekeeping practices. Specific BMPs for these activities are discussed in **Section 9.4.3**. Minimum BMPs have been designated for the identified residential areas and activities.

Table 9-13 Potential Residential Pollutant Generating Activities									
Residential Activity	Potential Pollutants								
	Sediments	Nutrients^a	Bacteria^b	Foaming Agents	Metals	Hydrocarbons^c	Hazardous Materials^d	Pesticides and herbicides	Other^e
Automobile repair and maintenance	X				X	X	X		
Automobile washing	X	X		X	X	X	X		
Automobile parking	X				X	X	X		
Home and garden care	X	X	X	X	X	X	X	X	X
Household Hazardous Waste				X	X	X	X	X	X
Pet waste	X	X	X						
Garden waste	X	X	X				X	X	
Notes a Nitrogen and Phosphorous compounds. b Including fecal and total coliform, E. coli, etc. c Various organic carbon based compounds.									

¹ For the purposes of these procedures, the following terms are defined:

Adjacent – located within 200 feet of the listed waterbody.

Discharging directly to – discharge from a drainage system that is composed entirely of flows from the subject facility or activity (i.e. discharge from an urban area that commingles with downstream flows prior to an ESA is not subject to this requirement).

- | |
|---|
| <p>d Including chlorinated hydrocarbons, paint, etc.
e Including bleach, etc.</p> |
|---|

9.4.2.3 Procedure for Inventory Implementation

The inventory maps should be referenced to determine which residential activities and areas should be subject to enhanced implementation. GIS mapping of residential areas superimposed on 303(d) and environmentally sensitive areas is an invaluable tool for determining which parcels and areas should be considered for enhanced implementation.

The results from the ID/IC and Receiving Water Monitoring programs may be used to determine if any significant pollutant loads might be attributed to any residential areas. If a residential area is found to contribute a significant pollutant load, the area should be subject to enhanced implementation.

Results from dry weather monitoring may also be used in an effort to isolate additional residential activities and areas for follow-up investigation. Any residential activity or area found to cause or contribute to a water quality objective violation should be subject to enhanced implementation.

9.4.2.4 Ongoing Determinations

The monitoring program established in both the Santa Ana and San Diego permits should be consulted periodically to determine if additional residential areas should be classified to receive enhanced implementation. In addition the Permittees should review results from the ID/IC program and dry weather monitoring to identify similar reclassification needs.

9.4.3 Best Management Practice Requirements

This section presents the BMP requirements Permittees must employ for the residential activities. A factsheet has been developed for each high threat residential activity (see **Appendix A-9**) and lists a designated set of BMPs specific to each activity. A set of optional BMPs is also included in each factsheet. All residences countywide will be required to implement the designated set of BMPs for the base implementation of the residential program.

Many of the BMPs advocated for use in residential areas correspond to water conservation methods. An active campaign to conserve water, specifically in regards to lawn irrigation, reduces the quantity of discharges from residential areas to the storm drain system. Ordinances established by the Permittees to limit or prohibit existing residential activities should meet the designated BMP requirements for residential areas.

9.4.3.1 BMPs for Residential Areas and Activities

A set of BMPs has been designated for high threat residential areas and activities. All high priority activities are assumed to occur in all residential areas and that no other

residential activities are known to be a significant threat to receiving water quality. As part of the program assessment, Permittees will review available data to determine if additional activities should be considered high threat, if the designated set of BMPs should be expanded, and whether additional residential areas should be considered for enhanced implementation.

Where residential areas and activities generate pollutants for which the receiving water is 303(d) listed, the Permittees may require the implementation of optional BMP controls as part of their enhanced implementation program (see **Section 9.7**). For residential areas directly adjacent to or directly discharging to ESAs, including coastal waters, the Permittees may also be required to implement additional controls to sufficiently reduce pollutant loads. It is recommended that that Permittees review the residential BMP programs on an annual basis to ensure appropriate BMPs are being implemented and to ensure newly completed developments are included in the Permittee's BMP program.

9.4.3.2 BMP Fact Sheets

BMP factsheets have been prepared for the following residential activities:

- Automobile repair and maintenance
- Automobile washing
- Automobile parking
- Home and garden care
- Disposal of pet wastes
- Disposal of green waste
- Household hazardous waste
- Water conservation

Public education and outreach activities designed to inform residents about BMPs are critical components to the implementation of the residential program. Pollution prevention BMPs for the residential program rely on public education and outreach to affect change in behavior, either in curtailing activities generating pollutants, or to purchase alternative products with lower risk of contaminating runoff. Outreach and education activities can describe the environmental benefits of "going the extra mile" in adhering to source control BMPs. A list of possible education and outreach activities is discussed in **Section 9.4.4.1**.

The bulk of the designated BMPs for residential activities fall into the source control category (which include pollution prevention practices). For example, if fluid is spilled during automobile maintenance, the resident should contain and clean the spill using the appropriate dry cleaning method (e.g. adsorption by "kitty litter", removal by sweeping, and appropriate disposal at a hazardous waste collection station).

Controlling pollutants at the source is an effective means to control pollutant loadings in stormwater discharges.

9.4.3.3 Optional BMPs

High priority residential areas identified in **Section 9.4.2.2** will receive an enhanced level of implementation tailoring education and outreach activities. One possible method of enhanced implementation is to encourage the use of the optional BMPs listed on the factsheets. Initially, residential areas tributary to 303(d) and ESA areas will not be required to implement optional BMPs. However, monitoring and effectiveness assessment may reveal the need for requiring optional BMPs.

The effectiveness assessment outlined in **Section 9.7** will dictate as to whether optional BMPs will be required for residential areas tributary to 303(d) impacted waterbody impaired for a pollutant typically found in runoff from residential areas and ESAs.

9.4.4 Implementation Strategy

The implementation strategy for the residential program is outlined in this section. A multi-tiered strategy is used for the implementation of the residential program. The strategy includes:

- Residential education and outreach program
- Training municipal personnel
- Field Reviews and water pollution complaint follow-up.
- Enforcement.

The residential program is implemented on two levels, the baseline level of implementing designated BMPs countywide, and enhanced implementation tailored to residential areas in or tributary to ESAs.

Baseline Implementation

The baseline implementation relies on education and outreach to notify and require residents to observe the designated sets of BMPs for each of the high threat to water quality residential activities. An example of education efforts for the designated BMPs may include inserting a brochure in a resident's autumn water/utilities bill reminding them to adjust their lawn sprinkling settings to reflect the changing seasons.

Enhanced Implementation

The enhanced implementation rests on targeted education and outreach to specific residential areas in or tributary to ESAs. Because ESAs are environmentally sensitive for a diverse range of reasons, no one implementation strategy is easily devised to address all ESAs in a blanket fashion. The Model Residential Program embodies a toolbox approach wherein the Permittee will evaluate each ESA in its jurisdiction and develop an appropriate enhanced implementation plan using any of the various

methods, to address the needs of each specific ESA. Enhanced implementation may include:

- Door-to-door level of outreach.
- Urging residents to observe optional BMPs.
- Regular field review patrols.

An example of the targeted implementation effort may include door hangers discussing use of IPM to residential areas surrounding a waterbody impaired for pesticides.

9.4.4.1 Residential Education and Outreach

Additional outreach efforts for the residential program may include the following:

Hotline

A hotline should be maintained for residents to call in illicit discharge, or Stormwater Ordinance violations. Enforcement officers trained in Stormwater Ordinances should respond as appropriate to the hotline calls. The County of Orange hotline, (714) 567-6363 is available for reporting illicit behavior and complaints. In emergency situations, residents should be directed to call 911.

Hotline calls should be tallied, summarized, and included in the annual report.

Webpage

The Watershed & Coastal Resources Division at the County of Orange maintains a complete website (www.ocwatersheds.com) containing information from general information on pollution, to specific information on the different aspects of the stormwater program.

The Permittee should consider including a stormwater page on their city webpage or providing a link to the count's website. The residential page could include:

- The Hotline telephone number.
- Links to digitized versions of the Permittee's Fact Sheets.
- A digital version of the Permittee's customized version of the Existing Residential Jurisdictional Urban Runoff Management Program.
- Links to other Pollution Prevention sites (EPA, IPM, etc.).
- Links to proper lawn care practices, including appropriate seasonal levels of irrigation for lawn watering, and fertilizer application rates.
- Listing of hazardous waste collection sites, and dates and times of operation.
- Any other information identified as relevant to post on the residential stormwater pollution prevention page.

Mailings

Mailings may be tailored to specific residential areas for specific water quality problems. Mailings should include specific information, detailing a particular problem, why there is a problem, and how the residents can alleviate the problem.

Media Public Service Announcement

Public Service Announcements (PSAs) are effective means to get one point across via radio, or pick one topic and describe the environmentally friendly method via newspaper article.

Utility Bill Inserts

Opportunity to tie excessive water use to the dollars spent. Informational snippets on how runoff water from over irrigation costs money and may be carrying away fertilizers, requiring more frequent application and more money, and may be carrying away other pollutants of concern.

Informational Packet as part of Building Permit Application

Home and garden care factsheets could be included with building permit applications. Nearly every home improvement project involves some type of excavation, or hazardous materials. Residents should be aware of the consequences to the environment of leaving an uncovered soil on their property, or improper disposal of paint and other materials leading to discharge to the MS4.

Waste Handling Facilities

Many of the residential BMPs are pollution prevention (P2) activities. To ensure an effective P2 program, residents must have access to applicable waste handling facilities. Motor oil may be recycled free of charge at the State Certified Used Oil Collection Centers located in the County of Orange: Each Permittee should list name and address of all certified motor oil collection centers within their jurisdiction for dissemination to the public.

Each Permittee should maintain a waste material handling facility capable of accepting any waste material used to maintain house, garden, or automobile. Dates and time for household hazardous waste drop-off should be publicly available.

9.4.4.2 Field Review and Enforcement

Inspection actions for the residential program should be conducted to advise residents of a suspected violation of a Stormwater ordinance, and the appropriate BMP to mitigate the violation. Enforcement actions are to be carried out against individual residents that refuse to comply with city ordinances.

Field Review

The Residential Model Program does not provide for a formal inspection program. Municipal employees working or assigned to residential areas should receive training to serve as program inspectors. The candidate employees will be trained to look for suspicious activities. As appropriate, the resident will be advised that their activity is

illegal, and of the appropriate BMPs to address the activity; or the appropriate enforcement personnel should be informed for follow-up enforcement action.

Water Pollution Complaint

Besides field review the Permittees may periodically receive water pollution complains. These complaints may come to the Permittee directly or through the county 24 hour water pollution problem reporting hotline. In either case, the Permittees must provide follow-up review to assess the extent of the pollution problem (see **Section 10** for more details).

Follow-up Enforcement

Because enforcement will be conducted in steps for specific residences, the Permittee must provide for an inventorying of violations, and where a particular resident is in the enforcement scheme. The enforcement steps include:

- Notice of Non-compliance
- Administrative Compliance Order
- Cease and Desist Orders
- Infractions and Misdemeanors

Enforcement for the Residential Program should follow the Enforcement Consistency Guidelines (see **Section 10**). In general, authorized field review personnel use their judgment to assess a potential problem situation. The goal of a field review should be educate a resident to appropriate methods of handling situations with the potential to discharge pollutants to the storm sewer system. In extreme situations (e.g. willful dumping of pollutants causing immanent environmental harm) the field review personnel will be required to initiate criminal proceedings against the resident.

The number of administrative and criminal enforcement actions issued to residents should be maintained and reported annually. The residence, the offence, and other pertinent information should be recorded by the Permittee for inclusion in the annual report and for use in the program effectiveness assessment.

9.5 Model Common Interest Area and Homeowners Association Activities Program Details

9.5.1 Program Overview

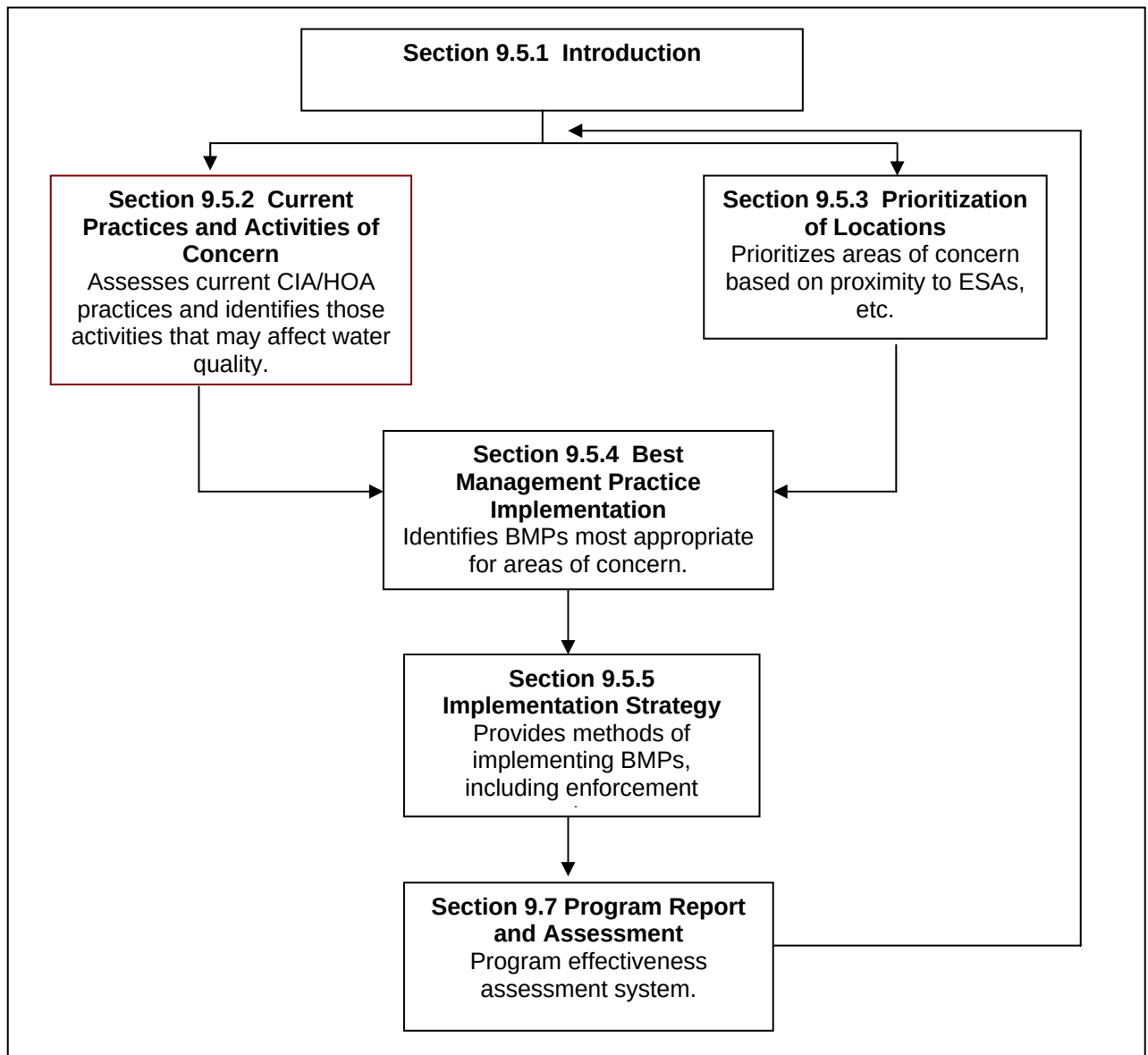
The Davis-Stirling Common Interest Development Act defines “common interest development” as any of the following:

- A community apartment project
- A condominium project (includes townhouses)
- A planned unit development
- A stock cooperative

It should be noted that the San Diego permit explicitly outlines a CIA/HOA stormwater program component whereas the Santa Ana permit is more general about elements that apply to residential areas, including common interest areas and HOAs.

The diagram shown in **Figure 9-5** depicted represents the relationship of each component to the others and to the program as a whole. Information gathered for each section of the Model Program supports subsequent sections. The flow of information eliminates duplication of efforts and improves the efficiency of the overall program. If additional controls are deemed necessary by monitoring results or program assessment, the process may be repeated with the new information. **Section 9.5.2** provides an assessment procedure for current CIA/HOA practices and to identify those activities that may affect water quality. **Section 9.5.3** details the designated pollution prevention and source control BMPs recommended to be adopted, or adapted with individual LIPs for the high priority activities. The designated BMPs should be implemented for all high priority activities within the Permittee’s jurisdiction. Education and outreach should be focused to the identified enhanced implementation areas. **Section 9.5.4** reviews the enforcement mechanisms included in the program implementation strategy.

Figure 9-5 CIA/HOA Program Organization



9.5.2 Current Practices and Activities of Concern

In order to create a working CIA/HOA Activities Program, the current maintenance practices and procedures used by CIA/HOA maintenance associations must be assessed. As stated in **Section 9.5.1**, the CIA/HOA Activities Program will apply to existing developments with common interest areas and/or homeowners associations; new developments will be required to develop and implement a Water Quality Management Plan (WQMP) to ensure NPDES compliance. Nevertheless, applicable portions of this program will also apply to newly constructed developments once those developments are complete and are in the operation phase.

Many maintenance activities within CIA/HOA areas have the potential to produce pollutants that may pose a threat to receiving water quality. Once current practices and procedures have been assessed, these activities of concern can be identified.

9.5.2.1 Review of Current Procedures

Orange County is home to over 3,000 CIAs/HOAs, and common interest developments account for 80% of all new housing in the County. Within Orange County, approximately 90% of incorporated residential areas lie within the purview of the maintenance associations that govern CIAs/HOAs. These maintenance associations establish community guidelines and covenants, conditions and restrictions (CC&Rs) for the maintenance and upkeep of common interest areas within residential developments, pursuant to the Davis-Stirling Common Interest Development Act.

More than half of these maintenance associations oversee fewer than 50 units; however, approximately 1% of CIAs/HOAs consist of over 1,000 separate units. The maintenance procedures used by these maintenance associates are largely similar. The one area in which their activities differ considerably is related to whether or not the streets and storm drains within the CIAs/HOAs are owned by the Permittee or by the Association (Note that for the purposes of the model program, those CIAs/HOAs with public streets and public storm drains are addressed separately from CIAs/HOAs with private streets and private storm drains).

CIAs/HOAs with Publicly-Owned and Maintained Streets and Storm Drains

Common interest developments with publicly-owned and maintained streets and storm drains operate similarly to more traditional residential areas within a Permittee's jurisdiction, in that activities such as street sweeping, refuse removal and drainage and utility operation and maintenance are generally performed by the Permittee (these activities are addressed in **Section 5**). The CIA/HOA maintenance duties may include, but not be limited to, the following activities:

- Automobile parking
- Sidewalk, plaza and entry monument fountain maintenance
- Landscaping and irrigation, of:
 - Planter strips and medians

- o Parks and open spaces
- Community center operation and maintenance, including:
 - o Pools
 - o Clubhouses
- Recreation area operation and maintenance, including:
 - o Tot lots and playgrounds
 - o Riding and walking trails
 - o Golf courses
 - o Stables
- Maintenance yard operation

CIA/HOAs with Privately-Owned and Maintained Streets and Storm Drains

On the other hand, maintenance duties for CIAs/HOAs with privately-owned and maintained streets and storm drains may not fall on the Permittee, but on the maintenance associations, which are responsible for the maintenance of “common” areas within a CIA/HOA, often including infrastructure, such as storm drains (in rare cases, sewer and water systems may also be privately owned and maintained; such instances should be inventoried and the CIA/HOA noted as performing high-priority activities). These maintenance duties include, but are not limited to, the following activities:

- Street sweeping
- Sidewalk, plaza and entry monument, and fountain maintenance
- Landscaping and irrigation, of:
 - o Planter strips and medians
 - o Parks and open spaces
- Community center operation and maintenance, including:
 - o Pools
 - o Clubhouses
- Recreation area operation and maintenance, including:
 - o Tot lots and playgrounds
 - o Riding and walking trails
 - o Golf courses
 - o Stables
- Maintenance yard operation

- Refuse pick-up and removal, including:
 - o Yard waste
 - o Pet waste
 - o Hazardous household materials
- Automobile parking
- Drainage system operation and maintenance
- Roadway maintenance, including water and sewer service lines

Other activities common to CIAs/HOAs, while not prohibited, still pose considerable risk to water quality; these activities must be identified and prioritized in order to effectively address potential impacts to water quality. The following sections described how the Permittee can identify these activities of concern and determine which pose the highest threats to receiving waters.

9.5.2.2 Determination of High Priority Activities

The following high priority activities may pose a threat to the water quality of receiving waters and are of concern to CIAs/HOAs:

- Automobile parking
- Home and garden care activities
- Disposal of pet waste
- Disposal of green waste
- Other areas or activities identified as contributing a significant pollutant load to runoff, such as:
 - o Community centers/pools
 - o Recreation centers
 - o Maintenance yards
 - o Any residence tributary to a Clean Water Act Section 303(d) impaired water body, listed for a pollutant(s) potentially found in residential discharges.
 - o Any residence within or directly adjacent to coastal waters or other environmentally sensitive area (i.e., within 200 feet)
 - o Maintenance of streets and storm drains

Table 9-14 lists high priority CIA/HOA activities and the types of pollutants that may result from these activities. Any other activities that may pose a significant risk to human or environmental health (such as hazardous materials) may also be considered high priority activities, and should be included in the Permittee's high priority list. Specific BMPs for these activities are presented in **Section 9.5.4**.

Table 9-14 Potential Pollutants from CIA/HOA Activities

Activity	Potential Pollutants								
	Sediments	Nutrients ^a	Pathogens/ Coliform ^b	Foaming Agents	Metals	Hydrocarbons	Hazardous Materials ^c	Pesticides and herbicides	Other ^d
Sidewalk, plaza and fountain cleaning	X	X	X	X			X		
Landscape maintenance	X	X	X				X	X	
Home and garden care	X	X	X	X	X		X	X	X
Pet waste	X	X	X						
Garden waste	X	X	X				X	X	
Automobile parking	X				X	X	X		
Community center O&M	X	X	X						X
Recreation area O&M	X	X	X					X	
Maintenance yard operation	X	X	X	X	X	X	X	X	X
^a Nitrogen and Phosphorous compounds. ^b Including fecal and total coliform, E. coli, etc. ^c Including chlorinated hydrocarbons, paint, etc. ^d Including bleach, etc.									

9.5.3 Prioritization of Locations

The focus of the previous section was on the identification of CIA/HOA activities that are considered high priority in terms of BMP implementation and schedule for implementation. This section focuses on the identification of CIA/HOA high priority locations. The prioritization procedure is largely an exercise in overlaying maps of CIA/HOA areas and sensitive receiving waters and is accomplished chiefly through the inventory of residential areas (which includes common interest areas and homeowners associations). The following section summarizes this procedure will highlights those aspects of the prioritization process unique to CIAs/HOAs.

9.5.3.1 Prioritization Procedure for Implementation

The creation of geographic information system (GIS) maps identifying common interest developments characterizes the prioritization procedure for CIAs/HOAs. These maps are used in conjunction with the residential overlays developed as part of the Residential Program (**Section 9.4**). The County has developed GIS maps that identify ESAs and 303(d) listed water bodies.

Each Permittee should incorporate GIS based overlays of CIA/HOA areas with watershed boundaries. Locating the CIA/HOA areas within a particular watershed will allow for assessment of proximity to 303(d) listed water bodies in that watershed. Refer to **Table 9-4** for a listing of major watersheds within the County of Orange and to **Figure 9-3** for the map of these watersheds.

The threat prioritization procedure for CIA/HOA areas can be summarized as follows:

STEP 1: Locate all CIA/HOA areas on a GIS overlay (may be accomplished as part of the Existing Residential Program JURMP) that shows watershed boundaries.

STEP 2: Overlay County-generated GIS maps that identify ESAs and 303(d) listed water bodies.

STEP 3: Identify receiving waters for all CIAs/HOAs.

STEP 4: Determine if a CIA/HOA area is considered high priority through answering the following questions:

- Is the CIA/HOA directly tributary to a 303(d) listed water body? Water bodies in Orange County that are listed on the 2002 303(d) list of impaired water bodies are shown in **Table 9-6**.

If YES, then CIA/HOA is high priority.

- Does the CIA/HOA discharge directly to an ESA? Comparison of drainage facility maps with an ESA map will allow determination of discharge areas.

If YES, then CIA/HOA is high priority.

- Does the CIA/HOA contribute significant pollutant loads to the storm drain system via evaluation of IDIC and receiving water monitoring data?

Significant pollutant load should be interpreted to mean any discharge that causes or contributes to a violation of a receiving water quality standard. The results from the ID/IC and Receiving Water Monitoring programs should be used to determine if significant pollutant loads occur as a result of CIA/HOA activities or discharges from residential areas. Results from dry weather monitoring may be used in an effort to isolate additional CIA/HOA activities and areas for follow-up investigation. Any residential activity or area found to cause or contribute to a water quality objective violation should be categorized as high priority.

If YES, then CIA/HOA is high priority.

- Is the CIA/HOA responsible for street and storm drain maintenance?

If YES, then CIA/HOA is high priority.

STEP 5: Implement best management practices as described in **Section 9.5.4**.

Note that Steps 1 – 4 occur throughout a Permittee’s jurisdiction, whereas Step 5 is reserved for those CIA/HOA areas within that jurisdiction that are considered high priority.

9.5.3.2 Ongoing Determinations

The Receiving Water Monitoring program established in compliance with the San Diego Permit, Attachment B, should be used as one facet of determining the effectiveness of the Common Interest Area/Homeowners Associations Activities JURMP, and if CIA/HOA activities and areas are in compliance with the Permit Orders and DAMP commitments.

Permittees should ensure that the dry weather monitoring program developed as part of Illegal Discharge/Illicit Connection Program (ID/IC), **Section 10**, is of sufficient scope (i.e., with samples taken at outfalls exclusively serving CIAs/HOAs) to aid in assessment of Permittee efforts and actions as part of the CIA/HOA Program. Coordination between the CIA/HOA program and the ID/IC program is necessary to determine permit compliance and the need for further investigation.

9.5.4 Best Management Practices Implementation

This section presents the best management practices and procedures that Permittees can provide to CIAs/HOAs in order to protect receiving water quality.

CIA/HOA areas can be divided in terms of activities of concern based on those common interest developments that have publicly-owned and maintained streets and storm drains and those in which these facilities are owned and maintained by the maintenance association. Likewise, the best management practice programs for publicly-owned and maintained streets and storm drain systems within CIAs/HOAs differ from those used in CIA/HOA areas that have privately owned and maintained streets and storm drain systems.

The following sections describe a minimum set of BMPs appropriate for both types of common interest developments.

CIAs/HOAs with Publicly-owned and Maintained Streets and Storm Drains

CIAs/HOAs with publicly-owned and maintained streets and storm drains operate similarly to more traditional residential areas within a Permittee’s jurisdiction, in that activities such as street sweeping, refuse removal and drainage and utility operation and maintenance are generally performed by the Permittee. Therefore, the BMPs appropriate to these types of CIAs/HOAs will not include practices for such typically Permittee-performed activities as street sweeping. BMP fact sheets, as identified in

Table 9-15 have been developed for the activities expected to occur these types of CIAs/HOAs.

CIAs/HOAs with Privately-owned and Maintained Streets and Storm Drains

Maintenance duties for CIAs/HOAs with privately-owned and maintained streets and storm drains may not fall on the Permittee, but on the maintenance associations, which are responsible for the maintenance of “common” areas within a CIA/HOA, often including infrastructure, such as storm drains and potentially sewer and water (including reclaimed water) systems. Therefore, the BMPs appropriate to these types of CIAs/HOAs will include additional practices for activities normally performed by the Permittee, such as street sweeping. Only those BMPs unique to these types of CIAs/HOAs will be listed in this section. BMP fact sheets, as identified in **Table 9-9** have been developed for the activities expected to occur these types of CIAs/HOAs.

Optional BMPs

If program effectiveness assessment indicates that the required BMPs are inadequate, the Permittee may implement or require implementation of the optional BMPs may be necessary to achieve a satisfactory effectiveness assessment. Permittees should consider developing a schedule for BMP implementation.

CIA/HOA areas tributary to a Clean Water Act section 303(d) impacted water body and/or environmentally sensitive areas

High priority CIA/HOA areas will receive focused implementation of education and outreach, as well as elevated levels of enforcement. Initially, residential areas tributary to 303(d) and ESA areas will not be required to implement additional BMPs. Monitoring and effectiveness assessment may reveal the need for additional BMPs, including implementation of source control measures.

The effectiveness assessment outlined in **Section 9.7** will dictate as to whether additional BMPs will be required for CIA/HOA areas tributary to a 303(d) impacted water body or ESA impaired for a pollutant typically found in runoff from CIA/HOA.

Table 9-15 BMPs for CIAs/HOAs with Publicly-Owned and Maintained Streets and Storm Drains		
ACTIVITY	BMP	Fact Sheet
Parking vehicles on residential streets, in driveways, or in common area parking lots	Automobile parking BMPs	R-3
Washing vehicles in residential driveways or street	Automobile washing BMPs	R-2
Disposal of household hazardous wastes such as paint, bleach, etc.	Household Hazardous waste BMPs	R-7
Cleaning of CIA/HOA sidewalks, plaza, and entry monuments and fountains	Sidewalk, plaza, and entry monument and fountain maintenance BMPs	FP-4
Landscape maintenance including irrigation and fertilization	Landscape maintenance BMPs	FP-2
Operation and maintenance of community pools	Pool cleaning BMPs	IC-16

Table 9-15 BMPs for CIAs/HOAs with Publicly-Owned and Maintained Streets and Storm Drains

ACTIVITY	BMP	Fact Sheet
Operations and maintenance of recreation areas such as stables, golf courses, and parks	Disposal of Pet Waste BMPs	R-5
	Landscape Maintenance BMPs	FP-2
	Disposal of Green Waste BMPs	R-6
Maintenance Yard BMPs		
Activity	BMP	Fact Sheet
Vehicle maintenance and repair	Equipment maintenance and repair BMPs	FF-3
Vehicle fueling	Vehicle fueling BMPs	FF-4
Storage of vehicles and equipment	Vehicle and equipment storage BMPs	FF-12
Cleaning of vehicles and equipment	Vehicle and equipment cleaning BMPs	FF-11
Storage, handling, and disposal of various materials such as cleaners	Material storage, handling, and disposal BMPs	FF-13
Loading and unloading of materials	Material loading and unloading BMPs	FF-6

Table 9-15 BMPs for CIAs/HOAs with Privately-Owned and Maintained Streets and Storm Drains¹

ACTIVITY	BMP	Fact Sheet
Street sweeping	Street sweeping BMPs	FP-3
Trash collection, recycling, and disposal	Solid waste handling BMPs	FF-13
Inspection and cleaning of storm drains	Drainage system operation and maintenance BMPs	DF-1
Operation and maintenance of water and sewer lined (not controlled by utility company)	Water and sewer utility operation and maintenance BMPs	FP-6

9.5.5 Implementation Strategy

Implementation efforts will vary depending on whether or not a CIA/HOA area is performing high priority activities. Overall implementation requirements include the following:

- Permittees are required to develop public education materials to encourage the public to report illegal dumping and unauthorized, non-storm water discharges from residential sites (which would include CIAs/HOAs) into public streets, storm drains and other water bodies.
- Additionally, each Permittee must perform educational and outreach programs to aid maintenance associations in implementing the CIA/HOA BMPs. Education and outreach programs are covered in detail in **Section 6**. Below are a few methods that may be particularly effective for reaching CIA/HOA managers and residents.
- Enforcement efforts should follow in response to hotline reports and focus on high priority areas.

9.5.5.1 Implementation Requirements for Non-High Priority Areas

For areas not performing high priority activities, the following implementation efforts are required:

- Mail letter explaining CIA/HOA program to maintenance association governing board
- Mail BMP fact sheets to maintenance association governing board
- Mail questionnaire to all residents based on BMPs appropriate for that CIA/HOA (for example, CIAs/HOAs where automobile washing is allowed, the questionnaire should contain questions such as:
 - o “How many times per month do you wash your vehicle at home?”
 - o “What materials do you use to wash your vehicle (e.g., soap, detergent, etc.)?”
 - o “Do you wash you vehicle over a pervious surface?”

9.5.5.2 Implementation Requirements for High Priority Areas

If a CIA/HOA discharges to 303(d) listed water body, directly to an ESA, has discharges that include significant pollutant loads, then the Permittees should consider a field inspection and additional outreach efforts. Inspection efforts should be targeted to those areas identified as being high priority that engage in commercial activities (i.e., those that operate maintenance yards, etc.). For larger common interest developments (i.e., those comprised of 50 or more units), it may be assumed that such high priority activities do occur, without the need for specific inspection.

9.5.5.3 Association Education and Outreach Methods

Association Employee Education

Training workshops, posters, memos, etc. should be available for association employees to develop an eye for inappropriate activities in CIA/HOA areas.

Hotline

A hotline should be maintained for residents to report illicit discharges or Stormwater Ordinance violations within their CIA/HOA. Enforcement officers trained in Stormwater Ordinances and the knowledgeable about the CIA/HOA program should respond as appropriate to the hotline calls.

The County 24-Hour Water Pollution Problem Reporting Hotline is 714-567-6363. For chemical spill emergencies, call 911.

Hotline calls should be tracked and included in the annual report.

Webpage

If applicable, the Permittee should include a CIA/HOA page in the stormwater section of their webpage, which should provide:

- The hotline telephone number
- Links to digitized versions of the BMP factsheets included in **Appendix C**.
- A digital version of the Permittee's customized version of the CIA/HOA Jurisdictional Urban Runoff Management Plan
- Links to other Pollution Prevention sites (EPA, IPM, etc.)
- Links to proper lawn care practices, including appropriate seasonal levels of irrigation for lawn watering, and fertilizer application rates
- Listing of hazardous waste collection sites, and dates and times of operation
- Any other information identified as relevant to post on the CIA/HOA stormwater pollution prevention page.

The County stormwater webpage is located at www.ocwatershed.com.

Mailings

For CIAs/HOAs in non high-priority areas, a letter of introduction explaining the CIA/HOA program should be forwarded to the maintenance associations. The letter should indicate where the Permittee's CIA/HOA program is located on the Internet and should provide a mechanism for requesting a copy of the CIA/HOA program in the mail.

9.5.5.4 Enforcement

Each Permittee should review their Municipal Code to determine the most appropriate method to implement the Enforcement section of the CIA/HOA program.

Enforcement of BMPs in common interest developments will be conducted using the following mechanisms: public reporting hotline, analysis of dry weather/illicit discharge monitoring results, and municipal employee observations.

Enforcement of Requirements through CC&Rs

Covenants, conditions and restrictions (CC&Rs) are the governing documents of CIAs/HOAs and provide legal authority for maintenance associations to set and enforce rules for the operation and maintenance of common interest developments.

The California Legislature enacted the existing laws authorizing CC&Rs in 1872. The law assumes that real estate transfers are contractual transactions and that binding obligations may be included within these contracts. When a resident of a CIA/HOA signs these documents, they are obligating themselves under law to comply with the rules contained therein. CC&Rs then, are an ideal vehicle for pollution prevention and other controls to protect water quality.

Most new common interest developments are required to include NPDES compliance language in their CC&Rs; this language can be adapted for inclusion into the CC&Rs for existing CIAs/HOAs. However, it should be noted that changes to existing CC&Rs require a vote by homeowners within an association. Therefore, residents of CIAs/HOAs must be made aware of the need for NPDES compliance and of the penalties for non-compliance. **Section 9.4.4.2** discusses several ways of getting this information to CIAs/HOAs.

Steps of Enforcement

Because enforcement will be conducted in steps for CIAs/HOAs, the Permittee must provide for an inventorying of violations, and where a particular CIA/HOA is in the enforcement scheme. The numbers of enforcement actions should be maintained and reported annually. The enforcement steps include:

- Notice of Non-compliance (verbal and/or written warnings, to individual resident or CIA/HOA Board)
- Administrative Compliance Order (written notice to CIA/HOA Board)
- Cease and Desist Order (written notice to CIA/HOA Board)
- Civil or Criminal Enforcement (includes fines and assessments levied on CIA/HOA Board and/or individual resident)

Enforcement for the CIA/HOA Program should follow the Enforcement Consistency Guide (see **Section 10.0**).

9.6 Training Program Details

Education and training of municipal staff is one of the keys to a successful stormwater program. To assist responsible municipal staff in understanding the each program, several training modules have been developed and can be found in **Appendix B, Section B-9**.

9.6.1 Training Modules for the Model Industrial/Commercial Program

Six training modules are available that cover different aspects of the Existing Development Program. The following sections describe the types of training and corresponding documentation that should be maintained by the Permittees.

Existing Development Program Management Module (Exhibit B-9.I)

This training module is targeted to Stormwater Program Managers. The module includes an overview of the Existing Development Program and then detailed discussions of the requirements that stormwater managers must address in their local implementation plans. Step by step instructions are provided to aid the managers in preparing their LIPs for industry, commercial businesses, residential, and common interest areas.

Field Implementation of Existing Development Program Module (Exhibit B-9.II)

This training module is targeted to staff responsible for code enforcement and inspection of industries facilities. The module addresses the basic program element requirements and then provides detailed instruction on conducting inspections, including inspection forms, record keeping requirements, and enforcement tools available for code violations.

Existing Development Program Training – Automobile Mechanical Repair, Maintenance, Fueling and Cleaning Businesses Module (Exhibit B-9.III)

This training module is for business owners and operators of automobile maintenance related businesses. The module explains the overall effort by Orange County to address stormwater and what the business can do to improve water quality. The module provides examples of good source control Best Management Practices, including BMPs for fueling, maintenance & repair, and vehicle washing. References are provided for the business owner to pursue for more information.

Existing Development Program Training – Landscape Maintenance Businesses Module (Exhibit B-9.IV)

This training module is for business owners and operators of landscape maintenance related businesses. The module explains the overall effort by Orange County to address stormwater and what the business can do to improve water quality. The module provides examples of good source control Best Management Practices in the areas of pest control, yard fertilizing and safer alternatives. References for the business owner to pursue for more information are also provided.

Existing Development Program Training – Common Interest Areas/Homeowner Associations Module (Exhibit B-9.V)

This training module is for Homeowner Associations and their corresponding staff responsible for common interest areas. The module provides an overview of the County's stormwater program and what the HOA can do to improve water quality. Examples of source control Best

Management Practices are provided, including BMPs for landscaping and irrigation, disposal of animal waste, and pool cleaning.

Existing Development Program Training – Industrial Stormwater Monitoring Module (Exhibit B-9.VI)

This training module is used in conjunction with the Field Implementation of Existing Development module (Exhibit B-9.II); consequently the audience is staff responsible for code enforcement and inspection of industries facilities, as well as the managers of industrial facilities subject to monitoring requirements. The module provides an overview of the regulatory requirements for industrial monitoring and then specifics on analytical monitoring. This includes specifics regarding determining if a facility is subject to monitoring requirements, the location of monitoring sites and the selection of constituents to be monitored, sampling and analysis methods, and reporting requirements. In particular, the module emphasizes the importance of using standardized methods for sampling, analysis, and reporting.

9.6.2 Municipal Employee Education for the Residential Model Program

Many types of municipality employees spend a considerable amount of their workday in residential areas, these employees may function as program inspectors. Candidate municipal employees for residential program education efforts include:

- Flood control field crews
- Solid waste collection personnel
- Street sweeping personnel
- Street maintenance field crews
- Planning department personnel
- Parks and Recreation maintenance personnel
- Utilities department field personnel

Training modules will be available to the Permittees for training their employees. Training should also be available for enforcement officers so they understand the magnitude residential activities play in receiving water quality.

9.7 Program Effectiveness Assessment (PEA)

9.7.1 PEA for the Commercial/Industrial Facilities Model Program

The Commercial/Industrial Facilities Model Program consists of five main sections that provide information for the Annual Report:

Source Identification and Facility Inventory

- Watershed-based inventory of commercial and industrial facilities pursuant to the guidance document, including the following information:
 - Facility address
 - Name of facility manager
 - Emergency contacts
 - SIC code
 - Hydrologic unit
 - Pollutant (303(d) listed and others) types
 - “Automatic high priority” designation
- Significant changes in inventory (i.e., increase/decrease in number of facilities, reclassification of facilities, etc.)

Prioritization

- Summary list of high priority commercial sites
- Summary of medium priority commercial sites (Santa Ana RWQCB jurisdiction only)
- Summary list of low priority commercial sites (Santa Ana RWQCB jurisdiction only)
- Changes in prioritization since last report

Best Management Practice (BMP) Implementation

- Business categories
- List of source control BMPs in use
- List of treatment control BMPs in use
- Modifications to BMPs since last report

Inspection and Monitoring of Commercial/Industrial Sites

- Summary of inspection efforts
- Summary of enforcement actions

- Summary of Monitoring efforts

Outreach

- Summary of outreach material
- Summary of distribution and implementation effort
- Summary of training efforts

Please note that some of the information necessary for input into the Annual Report will be common to more than one section; where this is the case, that information is listed only once, in the section to which the given information is most pertinent. A questionnaire has been developed to assist the Permittees in submitting appropriate information to the principal Permittee for the Annual Report (see **Appendix A-9**).

9.7.2 PEA for the Residential Model Program

Each Permittee is required to prepare a program report regarding their efforts in the residential program. The residential program report will in turn become part of the Permittee's Annual Report submitted to the Principle Permittee and the appropriate RWQCB. The Residential Reporting Program (RRP) provides the opportunity for each Permittee to compile and summarize pertinent existing residential activity and to assess the effectiveness of the Residential Program.

In preparing the RRP, the Permittee must describe all efforts undertaken or is undertaking to implement the requirements for the residential component. The following information describing the goals and milestones of the residential program are addressed in the RRP:

- Which pollution prevention methods will be encouraged for implementation, and how and where they will be encouraged.
- A completed inventory of high priority residential areas and activities.
- How BMPs will be implemented, or required to be implemented, for high priority areas and activities.
- A description of enforcement mechanisms and how they will be used.

The RRP also provides the basis for the residential program effectiveness assessment. RRP reports are submitted each year to the Principal Permittee as a part of annual status reports, and provide the basis for evaluating each city's long-term water pollution reduction efforts.

Program Report

Each Permittee is required to compose an Annual Report documenting all activities conducted during the past annual reporting period for each component of the residential program, including:

- Source Identification and Inventory

- BMP Requirements
- Implementation Strategy

A questionnaire has been developed to assist the Permittees in compiling their Annual Reports (see **Appendix A-9**).

Source Identification

A summary of the following source identification and inventorying procedures should be integrated into the RRP:

- Map combining residential areas, and drainage facilities for the residential areas within the Permittee's jurisdiction.
- Map representing the environmentally sensitive areas, and 303(d) listed waterbodies within the Permittee's jurisdiction.
- Map of high priority residential areas within Permittee's jurisdiction.
- Map of areas where priority classification changed since last report.
- Summary list of high priority residential activities.

Best Management Practice (BMP) Requirements

The following information for residential areas and activities should be collected, summarized, and integrated into the RRP:

- Summary list of implemented BMPs for the baseline program.
- Summary list of implemented BMPs for the enhanced program.
- Modification of BMP designations since last report.

Implementation Strategy

The following information for residential areas and activities should be collected, summarized, and integrated into the RRP:

- Summary of municipality employee education activities.
- Summary of residential education and outreach campaign.
- Summary of hotline calls regarding residential areas and activities.
- Summary of enforcement actions.

Effectiveness Assessment Strategy

The RRP demonstrates a Permittee's commitment to pollution prevention and source reduction by providing an iterative evaluation process. The process results in an annual assessment and a report that outlines, for the residential program:

- Program elements with past and present problems in need of improvement.

- Improvements that occurred during the reporting year.
- Specific action plans and timeframes for implementing necessary improvements.

Each reporting year serves as the benchmark for the next year's resource effort and process evaluation.

In assessing the effectiveness of the Permittee's residential program, the following items are addressed:

- Assessment of Permittee's effort to implement goals established in the residential program.
- Adequacy of existing BMPs.
- Assessment of public input to the residential program.
 - Response to public outreach
 - Number of complaints
- Assessment of amount and type of disseminated information.
- Assessment of enforcement activities.
- Specific action plans and timeframes for implementing necessary improvements.

Determination of Needed Modifications

Through collection and analysis of the above information for the RRP, a baseline for comparison can be established that will be built upon with each successive Annual Report. This in turn will allow for the identification of trends that can be evaluated to establish the efficacy of the residential program and to determine where modifications may be necessary to improve effectiveness.

Once the determination is made that modifications are necessary to the residential program, a schedule for implementation of changes will need to be determined. Once the modifications are in place, effectiveness assessment will continue as outlined in above, and the iterative evaluation and improvement cycle will continue.

9.7.3 PEA for the CIA/HOA Model Program

Each of the sections of the CIA/HOA Activities Program provides for the collection of information that will be input into the CIA/HOA Program Report (Program Report). The Program Report, in turn, is a subset of the Annual Report, compiling and summarizing pertinent CIA/HOA activity data from each Permittee for ease of use and review by the Regional Board.

Information in the Program Report must describe all efforts the Permittee has undertaken or is undertaking to implement the requirements for the CIA/HOA Activities Program.

In addition to detailing what information must be included in the Program Report, this section also discusses methods for assessing the effectiveness of the CIA/HOA Activities Program and mechanisms for modifying the guidance document to improve effectiveness.

In order to determine the effectiveness of the program element, every year the Permittees provide a comprehensive description of all of the activities they have conducted to meet the requirements of each component of the DAMP. Permittees will be required to provide quantitative information and qualitative information (narrative) for the implementation of their stormwater/urban runoff program.

Although the exact format has not been developed, for the Program every year each Permittee will be expected to report the following types of information:

The CIA/HOA Activities Model Program Guidance document consists of five main sections that provide information for the Annual Report:

- Current Practices and Activities of Concern for CIAs/HOAs
 - Summary list of CIAs/HOAs with publicly owned and maintained streets and storm drains
 - Summary list of activities in CIAs/HOAs with publicly owned and maintained streets and storm drains
 - Summary list of CIAs/HOAs with privately owned and maintained streets and storm drains
 - Summary list of activities in CIAs/HOAs with privately owned and maintained streets and storm drains
 - Changes in type of CIA/HOA (i.e., whether or not the CIA/HOA maintains its own streets and storm drains) since last report
 - Changes in activities for either type of CIA/HOA area since last report
- Prioritization
 - Summary list of CIAs/HOAs directly tributary to 303(d) listed water bodies
 - Summary list of CIAs/HOAs adjacent to or discharging to ESAs
 - Summary list of CIAs/HOAs contributing significant pollutant loads to the storm drain system
 - Summary list of CIAs/HOAs that maintain streets and storm drains.
 - Changes in prioritization since last report
- Best Management Practices for CIAs/HOAs
 - List of pollution prevention controls in use
 - List of source control BMPs in use

- o List of treatment control BMPs in use
- o Modifications to BMPs since last report
- Implementation Strategy
 - o Summary of implementation efforts
 - o Summary of outreach material
 - o Summary of distribution and implementation effort (including number of CIA/HOA inspections, direct mailings, etc.)
 - o Summary of training efforts

The information contained in these sections can be easily recorded and analyzed using various software programs that allow for field recording of inspection and inventory data, management of large inventory databases, and electronic compilation and reporting of results. It is anticipated that the information required as part of the CIA/HOA Activities Program will be largely collected via the use of this software.

Please note that some of the information necessary for input into the Annual Report will be common to more than one section; where this is the case, that information is listed only once, in the section to which the given information is most pertinent.

Determination of Needed Modifications

Through collection and analysis of the above information for the CIA/HOA Activities Program, utilizing software and other means, a baseline for comparison can be established that will be built upon with each successive Annual Report. Inspections and timely reporting will allow for the identification of trends that can be evaluated to establish the efficacy of the CIA/HOA Activities Program and to determine where modifications may be necessary to improve effectiveness.

Once the determination is made that modifications are necessary to a CIA/HOA Activities Program, a schedule for implementation of changes will need to be determined. Once the modifications are in place, effectiveness assessment will continue as outlined in this section, and the iterative evaluation and improvement cycle will continue.