A-9.0 EXISTING DEVELOPMENT

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

1. **Section A-9.1**, Program Summary
2. **Section A-9.2**, Industrial/Commercial Program
3. **Section A-9.3**, Food Facility Inspection Program
4. **Section A-9.4**, Mobile Business Program
5. **Section A-9.5,** Residential Program
6. **Section A-9.6**, Common Interest Area/Homeowners Association Activities Program
7. **Section A-9.7**, Retrofitting Existing Development Program
8. **Section A-9.8**, Training Program Details

A-9.1 PROGRAM SUMMARY

A-9.1.1 Overview

The existing development component of this plan is comprised of eight programs: industrial, commercial, food facility, mobile business, residential, common interest and homeowner association areas, retrofitting existing development, and a training program.

The following outlines and describes City departments and staff that are responsible for implementation of the existing development component.

Public Works Department – Maintenance Division
Contact Name: Luis Estevez
Title: Public Works Manager
Telephone: 949-461-3485

Responsible for the operation and maintenance of local flood control facilities. Field crews should receive training to identify industrial and commercial facilities and activities and residential activities that have potential to threaten receiving water quality.

Public Works – Water Quality Division
Contact Name: Devin Slaven
Title: Water Quality Specialist
Telephone: 949-461-3436

Water Quality Inspectors are responsible for inspecting industrial and commercial facilities for compliance with the industrial/commercial program and City code, and residential areas for compliance with the residential program and City codes.

Fire Services (Orange County Fire Authority)
Contact Name: Michael Boyle
Title: Battalion Chief
Telephone: 949-389-0077

Inspects businesses within the City for compliance with the Uniform Fire Code and responds to 911 calls that may involve industrial and commercial discharges, spills, chemical emergencies, accidents, etc.

Public Agencies

In addition to the City Departments described, the City relies on certain public agencies for successful implementation of the industrial program.

Orange County Health Care Agency
Environmental Health Division
Certified Unified Program Agency (CUPA)

The Environmental Health Division of the Orange County Health Care Agency inspects businesses within the City that generate hazardous waste for compliance with State and Federal regulations. Proper storage and care of hazardous waste is an important component of pollutant source control.

Orange County Health Care Agency
Environmental Health
Food Facility Inspection

Conducts inspections of all food facilities within the City as described in **DAMP Section 9.3**.

A-9.1.2 Program Commitments

The major program commitments and the subsections in which they are described in detail include:

- Inspection of industrial and commercial facilities **(A-9.2);**
- Inspection of Food Service Establishments **(A-9.3)**
- Regulation of mobile businesses **(A-9.4)**
- Oversight of residential areas **A-9.5**
- Oversight of Common Interest Area/Homeowners Association Activities Program **A-9.6**
- Existing development retrofitting **(A-9.7)**
- Training **(A-9.8)**

A-9.1.3 Regulatory Requirements

The program described in this section was developed pursuant to Section F.3.b of the San Diego Order, Sections IX and X of the Santa Ana Order, and **DAMP Section 9.2**.

A-9.2 INDUSTRIAL/COMMERCIAL PROGRAM

The City's Industrial/Commercial Program includes specifications for pollution-prevention methods for industrial and commercial areas and activities located within the City. Specific pollution prevention practices that are generally recognized in each Discharger's industry or business, or for that Discharger's activity, as being effective and economically advantageous, were certified by the City (see **Section A-9.2.3**). The City through an inspection program summarized in **Section A-9.2.4** will verify implementation of pollution-prevention methods by industries and commercial facilities. Inspectors will use a checklist and/or inspection forms for their inspections, which will also include appropriate pollution-prevention methods.

A-9.2.1 Source Identification and Facility Inventory

The City of Lake Forest develops and annually updates a watershed-based inventory of all industrial and commercial sites within its jurisdiction, regardless of site ownership. The process for conducting the inventory is explained in the **DAMP Section 9.2.1**. The components that comprise the inventory include:

- All industrial facilities located within the City's jurisdiction
- All commercial facilities listed in **Tables 9-2 and 9-3** from **DAMP Section 9.2.1** that are located within the City's jurisdiction.
- Watersheds where each industrial or commercial facility is located
- Identified potential pollutants and activities with the potential to discharge pollutants
- Identified industrial or commercial discharges into, or adjacent to, an Environmentally Sensitive Area (ESA).
- Identified industrial or commercial discharges into, or adjacent to, an Area of Special Biological Significance (ASBS).
- Identified industrial or commercial discharges into an ESA that include pollutants of concern.

The City's inventory database includes the following information about each identified industry or commercial facility within the City's jurisdiction:

- Business Name;
- Physical Address Information;
- Mailing Address Information;
- Business Contact Name
- Emergency Contact
- Lot Size
- SIC Code;
- Industrial-Specific Information

- Commercial-Specific Information
- Watershed;
- GIS Information;
- Local Licensing/Permits
- Potential pollutants
- Proximity to and/or discharge to ESA;/ASBS
- Pollutants of concern into an ESA
- Comments/Notes.

The current watershed-based inventory of industrial and commercial facilities within the city's jurisdiction is provided in **Exhibit A-9.I.** A GIS map showing the location of these industrial facilities and their proximity to ESAs has also been provided as part of **Exhibit A-9.I**.

A-9.2.2 Prioritization for Inspection

The City of Lake Forest prioritizes industrial and commercial sites and sources as *high, medium*, and *low*, based on their respective threat to water quality and the procedures set forth in **DAMP Section 9.2.2.2**. A classification of High Priority indicates that the facility contains a site or sources with a high potential threat to the water quality. Permit requirements classify some industries as mandatory High Priority facilities. For industries that were not pre-classified, the prioritization process, which is consistent with permit requirements as outlined in **DAMP Section 9.2.2.2**, consisted of assigning a score to each facility based on the following factors:

- Type of Activity
- Material Used
- Waste Generated
- Pollutant Discharge Potential
- Non-Stormwater Discharges
- Size of Facility
- Proximity to an Environmentally Sensitive Water Body

Industries that received a score of greater than or equal to 25 were ranked as High Priority, those with a score below 25 and greater than 15 were ranked as Medium Priority, and those with a score less than or equal to 15 were ranked as low priority.

A-9.2.3 BMP Implementation

The City of Lake Forest has designated a minimum set of activity-specific BMPs for industrial and commercial facilities, as set forth in **DAMP Section 9.2.3** and modified according to City requirements. The City has designated the BMPs shown in **Tables A-9.1 and A-9.2** below that are appropriate to prevent or mitigate pollution generated from the specific activities at each site. The corresponding fact sheets are presented in **Exhibit A-9.II**.

Table A-9.1
Industrial Activity BMPs

BMP Fact Sheet	Activity
IC1.	AIRPLANE MAINTENANCE AND REPAIR
IC2.	ANIMAL HANDLING AREAS
IC3.	BUILDING MAINTENANCE
IC4.	CARPET CLEANING
IC5.	CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING
IC6.	CONTAMINATED OR ERODIBLE SURFACES AREAS
IC7.	LANDSCAPE MAINTENANCE
IC8.	NURSERIES AND GREENHOUSES
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
IC13.	OVER WATER ACTIVITIES
IC14.	PAINTING, FINISHING, AND COATINGS OF VEHICLES, BOATS, BUILDINGS, AND EQUIPMENT
IC15.	PARKING AND STORAGE AREA MAINTENANCE
IC16.	POOL AND FOUNTAIN CLEANING
IC17.	SPILL PREVENTION AND CLEANUP
IC18.	VEHICLE AND EQUIPMENT FUELING
IC19.	VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR
IC20.	VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING
IC21.	WASTE HANDLING AND DISPOSAL

IC22.	EATING AND DRINKING ESTABLISHMENTS
IC23.	FIRE SPRINKLER TESTING/MAINTENANCE

Table A-9. 2
Commercial BMPs

Activities/Sources	BMP 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

Activities/Sources	BMP Fact Sheets
	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
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	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

The City encourages the implementation of the designated BMPs at each industrial and commercial 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 will be implemented.

A-9.2.4 Inspection, Monitoring and Enforcement

A-9.2.4.1 Inspection

Inspection frequencies for industrial and commercial facilities are based on permit requirements and the priority ranking assigned to each facility as described in **Section A-9.2.2.** A summary of required inspection frequencies based on priority ranking is shown in **Table A-9.3**. In addition to the inspection frequencies described, the City investigates all complaints of illegal discharges from industrial and commercial facilities made by the public or by another agency or those violations arising from the results or dry-weather field screening or analytical monitoring program. In the event that an industrial site is found to be non-compliant, inspection frequency will be increased to, at a minimum, once per month. Once a facility has been brought into compliance, an inspection frequency of once every six months will be maintained for the next calendar year following the date at which the facility is deemed to be in compliance.

Table A-9.3
Inspection Schedule Based on Priority Ranking

Priority	Inspection Frequency
High	Annually
Medium	Biannually
Low	Once per permit cycle (5 years)

At a minimum, the City of Lake Forest conducts an annual water quality inspection on at least twenty percent of the industrial and commercial sites inventoried as described in **Sections A-9.1.3 and A-9.2.3** (excluding food facilities, which are addressed by **Section A-9.3**. and mobile businesses, which are addressed by **Section A-9.4**). If food facilities are identified as non-compliant the are added to the commercial site inventory until compliance is achieved.

The City of Lake Forest inspects industrial facilities to determine if they are in compliance with City ordinances, to review BMP implementation, to assess BMP effectiveness and to verify inventory information used for facility prioritization. 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-stormwater discharges.

The inspection form provided in **Exhibit A-9.III** will be used and provides 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.

In general the City of Lake Forest will conduct one of two types of inspections:

- **Compliance Inspections**
  Initial compliance inspections will typically 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 stormwater 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 inspection will cover the same information as an initial compliance inspection in order to verify compliance and that BMPs are being effectively implemented.

- **Follow-up Inspections**
  For those facilities deemed to be non-compliant, the Permittee will perform compliance inspections once a month until said facilities are shown to be complaint, and then once every four months for a full calendar year after the facility achieves compliance. Generally, these inspection will be similar to Advisory 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.

Should an inspected site demonstrate non-compliance, the City will coordinate the notification of appropriate agencies. An incident or practice of non-compliance that requires a hazardous materials emergency response will be considered a threat to human or environmental health and will be reported to the RWQCB and to appropriate hazardous waste management agencies. The City will provide oral notification to the RWQCB within 24 hours of the discovery of a non-compliant site meeting the criteria listed below. This will also be followed by written notification within 5 days of the discovery.

Criteria to be used to determine whether an event of non-compliance poses a threat to human or environmental health include the following:

- 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 **DAMP Section 10**).

A-9.2.4.2 Monitoring

The City of Lake Forest will review industrial facility BMP plans and review the facility monitoring data of its runoff in accordance with Section 3.b(4) (Inspection of industrial and Commercial Sites/Sources) of the Permit.

A-9.2.4.3 Enforcement

City inspectors with enforcement authority will issue enforcement actions to industrial and commercial facility owners and operators determined to be out of compliance as detailed in **DAMP Section 9.2.4**. The inspectors will 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.

If a City inspector observes a significant and/or immediate threat to water quality, action will be taken to require the facility owner and/or operator to immediately cease the discharge.

The enforcement mechanisms available to inspectors, as detailed in **DAMP Section 9.2.4**, are as follows (in increasing order of severity):

- Notice of Violation
- Administrative compliance orders
- Cease and desist orders
- Infractions and misdemeanors

While these measures typically escalate in enforcement action, they are not required to be issued in the exact order presented here. City inspectors will apply or recommend any of the enforcement steps or combination of enforcement as appropriate based on the enforcement consistency guide (Included as **DAMP Exhibit 4.I**) and City procedures. The City will also take measures ensure that violations of a similar nature are subjected to similar types of enforcement remedies.

A-9.2.4 Outreach and Education

The outreach strategy for reaching industrial businesses includes efforts such as including providing stormwater information of on the City's/ County's webpage, conducting mass mailings, holding workshops, and development and distribution of brochures, posters, fact sheets, etc. The outreach component of **DAMP Section 6.0** goes into specific detail on requirements for the approach of outreach efforts and the materials that have currently been developed are included in **DAMP Appendix B, Section B-6**.

A-9.3 FOOD SERVICE FACILITIES INSPECTION PROGRAM

The program described in this section was developed pursuant to Section F.3.b(3)(d) of the San Diego Order, Section X.9 of the Santa Ana Order, and **DAMP Section 9.3**.

On behalf of the Permittees, the Orange County Health Care Agency (OCHCA) conducts the annual water quality inspection on all food service facilities, per the Food Facility Inspection Program described in **DAMP Section 9.3**. Water quality issues are documented and included in the OCHCA's monthly reports. The Permittees are responsible for conducting follow-up inspection on facilities with water quality issues to confirm the implementation of best management practices for pollution prevention and to address the following activities:

1. Trash storage and disposal;
2. Grease storage and disposal;
3. Maintenance of trash collection area and grease interceptors;
4. Proper discharge of wash water (e.g., from floor mats, driveways, sidewalks, etc.);
5. Identification of outdoor sewer and MS4 connections; and
6. Education of property managers when grease and/or trash facilities are shared by multiple facilities.

A-9.4 MOBILE BUSINESS PROGRAM

The program described in this section was developed pursuant to Section F.3.b(3)(a) of the San Diego Order, Section X.8 of the Santa Ana Order, and **DAMP Section 9.4**.

The mobile surface cleaner businesses addressed in this program are those which provide one or more of the following services:

1. Cleaning (e.g., power sweeping, washing) driveways and parking lots;
2. Cleaning building exteriors (except sand blasting, window cleaning);
3. Driveway cleaning (e.g., power sweeping, washing) services;
4. Parking lot cleaning (e.g., power sweeping, washing); services;
5. Power washing building exteriors;
6. Pressure washing (e.g. buildings, decks, fences); and
7. Steam cleaning building exteriors

An Implementation Strategy was developed to identify the framework for the mobile business pilot program and is included as **DAMP Exhibit [RESERVED]**.

A-9.4.1 Mobile Business Inventory

The City of Lake Forest updates as needed the list of mobile surface cleaner businesses that report their business address as being within the City per the inventory protocol described in **DAMP Section 9.4**.

A-9.4.2 Best Management Practice (BMP) Implementation

The City of Lake Forest has designated a minimum set of activity-specific BMPs for mobile surface cleaner businesses, per **DAMP Section 9.4.2**. These BMPs are presented in the form of a Surface Cleaner BMP Fact Sheet, included as **DAMP Exhibit [GET]**.

A-9.4.3 Inspections/Self-certifications

On a biennial basis, the City of Lake Forest will ensure that each known mobile surface cleaner business whose headquarters is listed within the City's jurisdiction achieves one of the following end points:

1. Successful completion of an online training program; or
2. Completion of a self-certification form; or
3. Inspection conducted by the Permittee

A-9.4.4 Enforcement

A-9.2.4.3 Enforcement

City inspectors with enforcement authority will issue enforcement actions to mobile business owners and operators determined to be out of compliance as detailed in **DAMP Section 9.2.4**. The inspectors will 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.

If a City inspector observes a significant and/or immediate threat to water quality, action will be taken to require the mobile business owner and/or operator to immediately cease the discharge.

The enforcement mechanisms available to inspectors, as detailed in **DAMP Section 9.2.4**, are as follows (in increasing order of severity):

- Notice of Violation
- Administrative compliance orders
- Cease and desist orders
- Infractions and misdemeanors

While these measures typically escalate in enforcement action, they are not required to be issued in the exact order presented here. City inspectors will apply or recommend any of the enforcement steps or combination of enforcement as appropriate based on the enforcement consistency guide (Included as **DAMP Exhibit 4.I**) and City procedures. The City will also take measures ensure that violations of a similar nature are subjected to similar types of enforcement remedies.

A-9.5 RESIDENTIAL PROGRAM

The program described in this section was developed pursuant to Section F.3.c. of the San Diego Order, Section XI of the Santa Ana Order and **DAMP Section 9.5**.

A-9.5.1 Program Overview

The City of Lake Forest's Residential Program includes specifications for pollution-prevention methods for residential areas and activities located within the City. Specific pollution

prevention practices that are recognized for each residential activity with high potential to pose a threat to water quality, as being effective and economically advantageous, are provided in the activity fact sheets presented in **Exhibit A-9.II**. The City will use the implementation strategies discussed in **Section A-9.5.4** to encourage pollution prevention.

A-9.5.2 Source Identification and Inventory

The City of Lake Forest has identified the following potential areas and activities that pose a high threat to water quality by following the procedure outlined in **DAMP Section 9.5.2**.

- *Automobile repair, maintenance, washing and parking;*
- *Home and garden care activities and product use and disposal (pesticides, herbicides, and fertilizers);*
- *Disposal of trash, pet waste, green waste, and household hazardous waste (e.g., paints, cleaning products);*
- *Any other residential source that the Copermittee determines may contribute a significant pollutant load to the MS4;*
- *Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and*
- *Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon, the ocean, or other receiving waters within an environmentally sensitive area.*

These residential activities are assumed to occur with equal likelihood in all residential areas within the City's jurisdiction. The implementation of the residential program is designed to address these activities on a citywide basis.

A-9.5.3 Best Management Practice Requirements

The City of Lake Forest has designated a minimum set of activity-specific BMPs for residential activities, as set forth in **DAMP Section 9.5** and modified according to City requirements. The City has selected the BMPs shown in **Table A-9.3** below that are appropriate to prevent or mitigate pollution generated from the specific activities typical of residences within the jurisdiction. The corresponding BMP fact sheets are included as **Exhibit A-9.II** The City requires the implementation of the designated BMPs at each residence to limit the potential impact of the residential activities on receiving water quality.

Table A-9.3
Designated Residential Activities BMPs

Activity	BMP Fact Sheet
Automobile Repair and Maintenance	R-1
Automobile Washing	R-2
Automobile Parking	R-3
Home and Garden Care Activities	R-4
Disposal of Pet Wastes	R-5
Disposal of Green Wastes	R-6
Household Hazardous Waste BMPs	R-7
Water Conservation	R-8

A-9.5.4 Program Implementation

The implementation of the residential program will rely on education and outreach to notify and urge residents to observe the designated sets of BMPs for each of the high threat activities. The City will encourage the implementation of the designated BMPs for each residence within its jurisdiction by conducting the following as appropriate:

- *Training City Personnel* who have regular contact with residential areas (e.g. park maintenance personnel, street sweepers, code enforcement officers, etc.) to serve as informal inspectors performing field reviews.
- *Responding to Hotline Calls* by activating trained field review response personnel.
- *Updating the City's Website* (*www.lakeforestca.gov*) by providing the BMP fact sheets and information on residential stormwater pollution prevention.
- *Conducting Direct Mailings* which include the BMP fact sheets as well as information on household hazardous waste collection sites, and dates and times of operation. Mailings will also typically include the City's contact information, the City hotline number (877-89-SPILL), and a statement to call 911 in an emergency situation. Mailing can also be posted on the City's website.
- *Public Service Announcements* reminding residents that the storm drain system conveys untreated water to the ocean using the established theme, "The Ocean begins at your front door." Announcements shall also include reminders that the water pollution reporting hotline number is a 24-hour service.

A-9.5.5 Enforcement

Enforcement actions may be initiated by the City as a response to hotline reports and complaints, or by observations by City representatives. All enforcement actions will be documented and recorded for subsequent inclusion in the City's annual progress report. The enforcement mechanisms available to field reviewers, as detailed in **DAMP Section 10** and the Water Quality Ordinance are as follows (in increasing order of severity):

- Notice of Violation;
- Administrative Compliance Order;
- Cease and Desist Orders;
- Infractions and Misdemeanors.

While these measures typically escalate in enforcement action, they are not required to be issued in the exact order presented here. City inspectors will apply or recommend any of the enforcement steps or combination of enforcement as appropriate based on the enforcement consistency guide (Included as **DAMP Exhibit 4.I**) and City procedures. The City will also take measures ensure that violations of a similar nature are subjected to similar types of enforcement remedies. Samples of the enforcement forms to be used by the City's Authorized Inspectors are included in **Exhibit A-9.V**.

A-9.6 COMMON INTEREST AREAS/HOMEOWNERS ASSOCIATION ACTIVITIES PROGRAM

The common interest area and homeowners association (CIA/HOA) program described in this section was developed pursuant to Section F.6 of the San Diego Order, Section XI.4 of the Santa Ana Order, and **DAMP Section 9.6**.

A-9.6.1 Program Overview

The City of Lake Forest's Common Interest Area (CIA) / Homeowner Association Area (HOA) Activities Program includes specifications for pollution-prevention methods for CIA/HOA areas and activities located within the City. Specific pollution prevention practices that are recognized for each CIA/HOA activity with high potential to pose a threat to water quality, as being effective and economically advantageous, are provided in the activity fact sheets presented in **Exhibit A-9.II**. The City will use the implementation strategies discussed in **Section A-9.6.5** to encourage pollution prevention.

A-9.6.2 Current Practices and Activities of Concern

DAMP Section 9.6.2.2 lists high priority activities that commonly occur in CIA/HOA areas, and describes the potential pollutants generated by these activities. **Table A-9.9**, presented below, illustrates the relationship of these activities and the potential pollutants they generate.

Table A-9.4
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.*

A-9.6.3 Prioritization of Locations

As part of the residential program, the City has developed, and will update annually, a watershed-based inventory of HOA residential areas (including common interest areas and homeowners associations), pollutants potentially discharged from those areas, and environmentally sensitive areas within its jurisdiction. Additionally, the City is developing a GIS map with layers depicting specific details such as:

- Residential land use areas
- Watershed(s) within municipality boundaries
- Drainage facilities
- Environmentally sensitive areas (ESAs), including 303(d) water bodies

The process for conducting the inventory is detailed in **DAMP Section 9.6.3.1**. The City's inventory spreadsheet is included in **Exhibit A-9.I**.

A residential area, hence CIA/HOA area, is prioritized based on whether it is:

- Directly tributary to 303(d) listed water bodies, where pollutant causing impairment is present in discharge (i.e., flows from the CIA/HOA discharge directly to 303(d) listed water bodies)
- Discharging to environmentally sensitive areas (ESAs)
- Found to be contributing significant pollutant loads to the storm drain system, through analysis of monitoring data

- Determined to be responsible for maintenance of streets and storm drains within the CIA/HOA

A-9.6.4 Best Management Practices Implementation

The City of Lake Forest has designated a minimum set of activity-specific BMPs for CIA/HOA areas listed in **Table A-9.5** and **Table A-9.6**, and presented in the fact sheets included in **Exhibit A-9.II** . Each CIA/HOA area is expected to implement those BMPs that are associated with the activities being conducted. If the desired result is not being achieved, the BMPs will be assessed and modified or, if necessary, changed.

Table A-9.5
BMPs for CIAs/HOAs with Publicly-Owned and Maintained Streets and Stormdrains

ACTIVITY	BMP	Fact Sheet[1]
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 IC-7
Operation and maintenance of community pools	Pool cleaning BMPs	IC-16
Operations and maintenance of recreation areas such as stables, golf courses, and parks	Disposal of Pet Waste BMPs Landscape Maintenance BMPs Disposal of Green Waste BMPs	R-5 FP-2 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	Material storage, handling, and	FF-13

various materials such as cleaners	disposal BMPs	
Loading and unloading of materials	Material loading and unloading BMPs	FF-6

Table A-9.6
BMPs for CIAs/HOAs with Privately-Owned and Maintained Streets and Storm Drains

Includes all the BMPs listed for Publicly-owned CIAs/HOAs from Table 9-11 of the DAMP plus the following:

ACTIVITY	BMP	Fact Sheet[1]
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

A-9.6.5 Implementation Strategy

The City's plan for implementing the CIA/HOA Program follows the process outlined in **DAMP Section 9.6.5.2**. The City's implementation plan includes education and outreach as described both in that section and in **DAMP Section 6.0**.

Implementation efforts will vary depending on whether high priority activities occur within a CIA/HOA area, or if the area is located within an area selected for enhanced implementation as part of the residential program.

The following implementation efforts can be utilized for CIAs/HOA areas within the City's jurisdiction :

- Mail letter explaining CIA/HOA program to association governing board and/or property management company. The letter typically explains activities of concern and their environmental impacts, BMPs to reduce the impact, and consequences of not complying with the CIA/HOA program. The letter will also encourage participation in annual outreach workshops as described in **DAMP Section A-9.6.5**.
- Mail BMP fact sheets to maintenance association governing board and/or property management company
- Mail questionnaire to all residents based on BMPs appropriate for that CIA/HOA.

A-9.6.6 Enforcement

Enforcement mechanisms available to the City of Lake Forest, as detailed in **DAMP Section 10.0**, are as follows (in increasing order of severity):

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

While these measures typically escalate in enforcement action, they are not required to be issued in the exact order presented here. City inspectors will apply or recommend any of the enforcement steps or combination of enforcement as appropriate based on the enforcement consistency guide and City procedures. The City will also take measures ensure that violations of a similar nature are subjected to similar types of enforcement remedies.

A-9.7 RETROFITTING EXISTING DEVELOPMENT PROGRAM

The Retrofitting Existing Development Program described in this section was developed pursuant to Section F.3.d of the San Diego Order and **DAMP Section 9.8**.

A-9.7.1 Source Identification

Source identification by land use inventory for pollutants of concern to a TMDL or an ESA is summarized for municipal land uses in the Table of BMPs by Municipal Facilities and Programs and the City's Municipal Facilities Inventory in **DAMP Section 5.0**; for Commercial/Industrial land uses on the Commercial/Industrial Inventory in **DAMP Section 9**; and for Residential Land Uses on the Homeowners Association and Residential Inventories in **DAMP Section 9**. This information is composited by watershed in the Watershed Work Plans. Existing land uses in the City of Lake Forest are tributary to waterbodies listed or recently listed as impaired for bacteria indicators, nutrients, metals, phosphorus, selenium .

A-9.7.2 Geographic Prioritization

Land use sites or rights-of-way already developed or re-developed under Third Term Permit WQMP (SUSMP) requirements or Fourth Term Permit LID, WQMP, Hydromodification, or Existing Development Retrofit requirement, are identified for the City on **Exhibit 9-[RESERVED]**, and are composited by watershed in the Watershed Work Plans, which depict "Existing and Planned Mitigation Projects". The exhibits also identify receiving waters where previously-existing problems have been mitigated by regional restoration, hydromodification,

mitigation, Watershed Structural BMP Implementation and/or waiver projects completed during the First through Third or a subsequent Permit Term; and regional receiving-water projects currently in the planning stages. This context is used to track progress and help the City of Lake Forest prioritize for retrofitting, as well as identify areas potentially contributory to regional mitigation or stormwater waiver projects. The City of Lake Forest and Watershed Work Plan maps are updated as redevelopment occurs or as retrofit/mitigation projects are implemented.

<Identify problem areas> are identified for the City of Lake Forest on **Exhibit 9-[RESERVED]**, the "Geographic Prioritization Map", and are composited by watershed in the Watershed Work Plans.

Within the highest-priority drainages critical to protect receiving waters, the highest retrofitting priority rank is designated for existing developments or rights-of-way with the largest impervious areas (mostly institutional and commercial sites with parking lots, and streets). Lesser priority is designated for existing development types or rights-of-way with smaller impervious areas (typically residential, homeowners association, and parks), as shown in **Exhibit 9-[RESERVED]**, the City's "Impervious Areas Prioritization Map".

A-9.7.3 BMP Prioritization

The suitability of higher-priority, high-impervious-area sites or rights-of-way for retrofitting with infiltration-dependent BMPs is determined by evaluating soil classes, depth to groundwater, and/or landslide risk. This geotechnical information is presented in **Exhibit 9-[RESERVED]**, "Infiltration Suitability" in the Watershed Work Plans. In the City of Lake Forest overall, <insert description of soil, water table, etc.> results in a suitability rating of "<insert rating>" for infiltration-dependent BMPs throughout the City.

Suitability for on-site biofiltration or retention/detention basin BMP retrofits within high-priority, high-impervious-area sites or rights-of-way is assessed as a function of available on-site permeable area down-gradient from impermeable area, as depicted in the city's "Biofiltration/Detention Basin Suitability" **Exhibit 9-[RESERVED]**. Off-site permeable areas are considered, if publicly owned or potentially available. Within the City of Lake Forest, high-priority, high-impervious-area land use sites and rights-of-way, on-site detention basin retrofits are typically <feasible or not feasible> due to <explanation>.

Higher-priority sites or rights-of-way with large impervious areas and with space or soil constraints making them unsuitable for infiltration-dependent or retention/detention basin BMPs are potentially retrofittable (on- or off-site) with other source controls/LID, detention/storage structures, or treatment process units/treatment trains effective for storm flow modulation and/or pollutant removal. **Table A-9.7** identifies factors affecting BMP selection.

Table A-9.7
Potential On-site LID, Storage and Treatment BMP Retrofit Project Benefits

Project Type	Relative Cost	Storm Flow Attenuation	Stormwater Pollutant	Water Conservation	Energy Conservation	Air Quality	Aesthetics	Installation Difficulty	Maintenance Need

			Removal						
LID BMPs/Source Controls									
Vegetated Swales	)	(	(	;	;	;	(	)	)
Biofiltration Planters	(	(	)	(	(	(	)	(	(
Reduce Impervious Area	(	(	(	;	;	(	)	(	)
Disconnect impervious area	(	(	(	;	;	(	(	(	)
Porous pavement	(	(	)	;	;	;	(	;	(
Landscape enhancement	)	(	;	)	)	)	)	(	(
Efficient irrigation	)	(	;	)	)	)	(	)	(
Beneficial re-use	;	)	)	)	)	)	;	;	;
Stormwater Detention/ Storage Structures									
Green roof	;	)	)	;	)	)	)	;	(
Above-surface storage	(	)	(	(	(	;	;	(	(
Below-surface storage	;	)	(	(	(	;	)	;	(
Stormwater Treatment Process Units									
Gravity/vortex separator units	;	;	)	;	;	;	;	;	;
Trash screen/filter at inlets	)	;	)	;	;	;	;	)	(
Filtration vaults	;	;	)	;	;	;	;	;	;

) Higher benefit (Moderate to low benefit ; No effect or higher impact

A-9.7.4 Retrofit Project Ranking and Feasibility

Higher-priority sites or rights-of-way suitable for retrofitting with BMPs or BMP combinations that are cost-effective, have multiple high to moderate benefits, contribute to TMDL compliance, and/or would conform to WQMP (SUSMP) or Hydromodification parameters applicable to new development projects, are given priority for focused feasibility analyses in the City's annual Work Plan and/or the regional Watershed Work Plans on a staged basis consistent with staffing resources and funding opportunities. Site-specific analysis factors including landowner cooperation, neighborhood acceptance, jurisdictional issues and funding source(s) are investigated to determine feasibility. For high-priority sites or rights-of-way where constraints preclude effective BMP deployment on-site at locations considered critical to protect receiving waters, an off-site project may be considered as a regional mitigation project to improve water quality. Such regional projects may include regional water quality treatment BMPs, creek or wetlands restoration or habitat enhancement, rainfall storage or re-use, and in-stream hydromodification. Retrofit BMP or regional mitigation projects considered highly feasible are identified in the annual Jurisdictional and/or Watershed Work Plan updates and pursued on a schedule consistent with funding availability, staff resources, permitting requirements and landowner cooperation.

A-9.8 TRAINING PROGRAM

To assist responsible municipal staff and contract staff in understanding the DAMP's Model E Program, annual training sessions will be conducted. In addition to Permittee sponsored training, staff may also attend training seminars or workshops related to general water quality and stormwater management during construction, conducted by other organizations. Required training for municipal employees is included in **Table A-3.2** of this LIP.

A-9.8.1 Training Modules

To support implementation of the Existing Development Program element, six training modules were developed during the Third Term Permits as described in DAMP Appendix B, Section B-9. The modules include *Existing Development Program Management Module (**Appendix B, Exhibit B-9.I**), Field Implementation of Existing Development Program Module (**Appendix B, Exhibit B-9.II**)* and *Industrial Stormwater Monitoring Module (**Appendix B, Exhibit B-9.VI**)*. The modules will be substantially updated in 2010-11 to reflect the requirements of the Fourth Term Permits.

Exhibit A-9.I

Industrial & Commercial Facilities, and Residential/HOA/CIA Inventories

City of Lake Forest
Water Quality Industrial Inventory

Date of Inspection #1	WDID #	Business Name	Street #	Street Name	Street Suffix	City	State	Zip	Phone	Contact Last Name	Contact First Name	SIC Code	SIC Code Description	NAICS Code	Watershed (Actual)	Inspector	bg_lat	bg_long
08/24/10	930I019009	Agilent Technologies formerly Varian, Inc.	25200	Commercentre	Drive	Lake Forest	CA	92630	800-854-0277	Goodrich	Cari	2899 2835 3829	In Vitro/In vivo Diagnostics Substs. Measuring & Controlling Devices	334510	Newport Bay	Jerry	33.667519	-117.68968
08/24/10	930S014516	Associated Ready Mix	25901	Towne Centre	Drive	Foothill Ranch	CA	92610	580-1844	Huff, Ron	Pisano, Chris	3273	Ready Mix Concrete Manufacturing	32732	Newport Bay	Jerry	33.6764555	-117.66581
09/28/10	830S006454	Con-Way Western Express CWX	20697	Prism	Place	Lake Forest	CA	92630	581-9030	Heilman	John	4213	Freight - General - Local	484110	Newport Bay	Jerry	33.661415	-117.67595
09/14/10	930S014348	Dynacast Inc.	25952	Commercentre	Drive	Lake Forest	CA	92630	707-1211 Ext. 837	Babakhanian	Armen	3364	Foundaries/Dye-casting, non-ferrous	331522	Newport Bay	Jerry	33.661837	-117.67913
08/25/10	930S005374	El Toro Materials	20851	El Toro	Road	Lake Forest	CA	92630	458-7993	Basich	R.N.	1442	Construction Sand/Gravel screening/washing	212321	Aliso Creek	Jerry	33.6611874	-117.64547
08/19/10	930S016059	Farino Construction Services	23282	Olive	Avenue	Lake Forest	CA	92630	768-8000	Farino, Richard	Bromley, Alic	3271	Clay Refractory Manufacturing	327124	Aliso Creek	Jerry	33.624677	-117.69116
03/08/10	830I020176	International Color Posters	19651	Alter (formerly located at 20761		Foothill Ranch	CA	92610	768-1005	Guerineau	Eric	2752	Printing/Lithographics	323110	Newport Bay	Devin	33.6776271	-117.65794
08/11/09	830S017498	Oakley, Inc.	1	Icon		Foothill Ranch	CA	92610	951-0991	Krueger	Al	2396	Automotive parts and accessories	441310	Aliso Creek	Jerry	33.67162	-117.64606
10/13/10	930S011155	Robertson's Ready Mix	25931	Towne Centre	Drive	Foothill Ranch	CA	92610	(909) 493-6500	Smith	Loren	3273	Ready Mix Concrete Manufacturing	32732	Newport Bay	Jerry	33.680607	-117.67826
09/22/10	9301019009	Rolling Frito-Lay Sales	26962	Vista Terrace		Lake Forest	CA	92630	909-941-6273	Burton, Charles	Chris Johnson, Mgr.	2096 5141	Food, prepared, perishable, packaged for individual resale	311919	Newport Bay	Devin	33.6648489	-117.65974

City of Lake Forest
Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Bargain City Van & Truck Rentals	24961	Whisler	Drive		Lake Forest	CA	92630	Robert Flickinger	Owner	455-4404	Auto Parking Storage Vehicle rental	7359	SAR	High		Newport Bay	33.6249990	-117.693795
		Barnhoorn Kaas Mercedes BMW Service	20622	Pascal	Way	#B	Lake Forest	CA	92630	Poul Kaas Egense	Owner	609-0971	Auto repair	7538	SAR	High		Newport Bay	33.6627110	-117.668635
	04/13/10	Bemus Landscape Company	2031	S. Anne	Street		Santa Ana	CA	92630			714-795-5600	Landscaping Service	0781	SAR	High	Jerry	Newport Bay	33.645835	-117.693354
7/6/10		Big O Tire Stores	20742	Lake Forest	Drive	#C3	Lake Forest	CA	92630	Rich Posey	Owner	462-9088	Auto repair	7538	SAR	Medium	Jerry	Newport Bay	33.6454250	-117.688968
10/22/10	05/11/10	Chevron Station	20731	Lake Forest	Drive		Lake Forest	CA	92630	Donald Berasteggy E. Lodia, Elodia Almara	Manager	951-9708 (714) 726-6843	Gas station	5541	SAR	High	Jerry Beaudoin, Jian Peng	Newport Bay	33.6614820	-117.668516
	01/06/10	Combined Property Mgmt.	26552	Town Centre	Drive		Foothill Ranch	CA	92610	Ceasar Beanales	Prop. Mgr.	(310) 228-2966	Property management		SAR	High	Jerry	Newport Bay	33.6863900	-117.66
		El Conejito Authentic Mexican Food	24331	Muirlands	Blvd.	#I	Lake Forest	CA	92630	Juan Herrera	Owner	458-1760	Restaurant	5812	SAR	High		Newport Bay	33.6274801	-117.702681
		Embassy Carpet Cleaners	22065	Robin	Street		Lake Forest	CA	92630	Robert/Steve Ford	Owners	305-4125	Carpet Cleaning - On customer's property	7217	SAR	High		Newport Bay	33.6421790	-117.707491
		Enterprise Rent-A-Car	23591	Rockfield	Blvd.	#B	Lake Forest	CA	92630	Cliff Pfeiffer	Rental manager	855-2966	Auto Parking Storage Car rental	7514	SAR	High		Newport Bay	33.6312370	-117.717972
	10/08/09	Fitch Plastering		Vista Terrace			Lake Forest	CA	92630	Paul F. Danforth		588-9545	Plaster Accessories	5032	SAR	High	Jerry	Newport Bay	33.6664590	-117.662454
	Out of Business 05/01/10	Foothill Ranch Dodge	81	Auto Center	Drive		Foothill Ranch	CA	92610	Hesham El Hamayel		471-8000	Auto Dealership-new/used	5511	SAR	High	Jerry	Newport Bay	33.6757450	-117.6592
	05/18/10	Hikari Sushi	24531	Trabuco	Road	#J	Lake Forest	CA	92630	Frank Lee Byung Moon Yoo		859-2336	Restaurant	5812	SAR	High	Jerry	Newport Bay	33.6554540	-117.701632
10/22/10		Jack In the Box #3287	22661	Lake Forest	Drive		Lake Forest	CA	92630	Gail Haddad, Mayra Santibanez	General Manager	859-5785	Restaurant	5812	SAR	Medium	Jian Peng	Newport Bay	33.6425123	-117.696748
	5/7/2010 Now Out of Business	Jiffy Lube #1301	20781	Lake Forest	Drive		Lake Forest	CA	92630	Alvin Huber	Store manager	583-0470	Auto repair	7549	SAR	High		Newport Bay	33.6605620	-117.669596
09/24/10 10/01/10		Jose's Mobile Detail (Possible AKA: Detail in Motion) 24242 Ursula, L.F. 92630	22765	Working at Aspan Plaza (Aspan Street at Lake Forest	Street		Lake Forest	CA	92630	Jose Sanches	Owner	981-1833	Mobile Car Detailer	7549	SAR	High	Joe Vaughan	Newport Bay	33.6293544	-117.712519
		Konica	25662	Atlantic Ocean	Drive		Lake Forest	CA	92630	Bob Brown	Manager	472-8150	Camera/Photo Supplies	7384	SAR	High		Newport Bay	33.6654270	-117.682495
	08/25/09 Out of Business	Laguna Hills Nursery		Auto Center	Drive		Foothill Ranch	CA	92610	Gary Matsuoka	Owner	830-5653	Retail nursery	5193	SAR	High	Jerry	Newport Bay	33.6763900	-117.66072
	06/28/10	Lake Forest Muffler	20732	Lake Forest	Drive	A-B	Lake Forest	CA	92630	Martin Alfaro	Manager	334-0402	Automotive Repair	7537	SAR	High	Joe Vaughan	Newport Bay		
	05/24/10	Lake Forest United Gasoline AKA: Vallero Gas Station	22942	Ridge Route	Drive		Lake Forest	CA	92630	Western States Construction, Inc. Jose Robles	Demo Supr.	(714) 695-9300	Gas station	5541	SAR	High	Jerry	Newport Bay	33.6287630	-117.704197
7/6/10		Master Auto Center	20732	Lake Forest	Drive	#B6	Lake Forest	CA	92630	Mehdi Fakharizadh	Owner	770-5556	Auto repair	7538	SAR	Medium	Joe Vaughan	Newport Bay	33.6454514	-117.688916
		McDonald's Restaurants	24511	Trabuco	Trabuco		Lake Forest	CA	92630	William Cho	Yasenia Vanegas, Asst. Mgr.	206-9085	Restaurant	5812	SAR	High		Newport Bay	33.6552820	-117.702129

City of Lake Forest
Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Midas Auto Service Experts	22752	Centre	Drive		Lake Forest	CA	92630	Eric Castano / Jeremy Dye	Mgr.	855-1218	Auto repair	7533	SAR	High		Newport Bay	33.6314740	-117.716409
	11/09/09	Mobil Oil Station	27252	Portola	Parkway		Foothill Ranch	CA	92610	Terri Birch		830-0308	Gas station	5541	SAR	High	Jerry	Newport Bay	33.6726710	-117.655781
	01/01/10	Outback Steak House	26652	Portola	Parkway		Foothill Ranch	CA	92610	Paul Steinberg	Manager	455-4158	Restaurant	5812	SAR	High	Jerry	Newport Bay	33.6804287	-117.664823
	06/28/10	Pacific West Asset Management Corporation Office (3191 D. Airport Loop Costa Mesa, CA 92626	20732	Lake Forest	Drive		Lake Forest	CA	92630	Lambros Sekeris	Office Mgr.	(714) 433-7300 (714) 330-2054	Property Management	6531	SAR	High	Joe Vaughan			
	Out of Business	Phillips Tire Co.		Bake	Parkway	#A	Lake Forest	CA	92630	Louis Torres	Manager	837-3434	Auto repair	3011	SAR	High		Newport Bay	33.6596223	-117.699284
	04/01/09	Philly's Best, Inc.	26612	Towne Centre	Drive	#H	Foothill Ranch	CA	92610	Bob Levey		466-9445	Restaurant	5812	SAR	HIgh	Jerry	Newport Bay	33.6758830	-117.667445
7/6/10		Promax	20742	Lake Forest	Drive	#C2	Lake Forest	CA	92630	Ray Nojavan	Service Manager	597-1999	Auto repair	7538	SAR	High	Jerry	Newport Bay	33.6454250	-117.688968
		Promotional Signs	20361	Hermana	Circle		Lake Forest	CA	92630	Richard Christie	President	458-1000	Printing Sign company	7389	SAR	High		Newport Bay	33.6663240	-117.658159
10/22/10		Rancho Parkway Shell Station	26721	Rancho	Parkway		Lake Forest	CA	92630	Jose Hernandez	Mgr.	455-0133	Gas station	5541	SAR	High	Jian Peng	Newport Bay	33.6731090	-117.665983
		Rockfield Chevron Service Center	23631	Rockfield	Blvd.		Lake Forest	CA	92630	George Godfrey		581-1420	Auto repair	5541	SAR	High		Newport Bay	33.6297930	-117.71678
7/6/10		Saddleback Automotive	20742	Lake Forest	Drive	#C1	Lake Forest	CA	92630	Mike Wondrash	General Manager	770-8900	Auto repair	7538	SAR	High	Jerry	Newport Bay	33.6454250	-117.688968
		Saddleback Materials	20712	Indian Ocean	Drive		Lake Forest	CA	92630	Gary Plumley		595-8222	Construction materials	5200	SAR	High		Newport Bay	33.6638578	-117.676868
		Saddleback Paint Center	22600-A	Lambert	Street	#705	Lake Forest	CA	92630			586-1160	Retail paint	5231	SAR	High		Newport Bay	33.6347560	-117.714547
	1/11/10	Santana's Professional Auto Detailing					Operating in Lake Forest			Santana Salmeron	Owner	951-272-6447 or 714-227-3583 - cell	Commercial Mobile Detailer		SAR	HIgh	Jerry	Newport Bay	33.6351600	-117.712952
	2/10/2010 02/22/10 04/07/10	Silhouette Plastic Surgery Institute	27462	Portola	Parkway	#100	Foothill Ranch	CA	92610	Hootan M. Daneshmand, M.D.	Owner	727-9099	Plastic Surgery		SAR	High	Jerry	Newport Bay	33.6768890	-117.659689
		Stanley Steemer Carpet Cleaner	20412	Barents Sea	Circle		Lake Forest	CA	92630	Ronnie Hall	Branch Manager	855-0245	Carpet Cleaning & Upholstery	7217	SAR	High		Newport Bay	33.6659150	-117.678825
	10/06/09	Starline Nails & Spa, Inc.	27472	Portola	Parkway	#204	Foothill Ranch	CA	92610	Refused to I.d. herself.	Manager	206-9898	Nail Salon		SAR	High	Jerry	Newport Bay	33.6707470	-117.652266
		Sunstate Equipment	20772	Indian Ocean	Drive		Lake Forest	CA	92630	Rich Detken	Manager	699-1051	Equipment rental	7359	SAR	High		Newport Bay	33.6607900	-117.678085
		Un-named Auto Repair Co.	20732	Lake Forest	Drive		Lake Forest	CA	92630				Auto repair	7549	SAR	High		Newport Bay	33.6454514	-117.688916
	06/28/10	V Tech Automotive	20732	Lake Forest	Drive	B5	Lake Forest	CA	92630	James Seid	Manager	(714) 597-9500	Auto repair	7538	SAR	High	Joe Vaughan	Newport Bay		
	10/05/09	Waste Management	21015 21025	Marin			Lake Forest	CA	92630	David Koppel	Route Manager	949-451-2600 949-451-2643	Refuse Removal Service	4953	SAR	High	Jerry	Newport Bay	33.6581819	-117.68511

City of Lake Forest
Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Wheel & Tire Connection/Action Auto	23646	Rockfield	Blvd.		Lake Forest	CA	92630	Dom Devera	Sales Manager	540-1406	Auto repair	5531	SAR	High		Newport Bay	33.6242369	-117.712134
		7-Eleven Food Store #20803	21701	Lake Forest	Drive	#3	Lake Forest	CA	92630	Tom & Anjee Rim	Owners	714-532-2373	Food-Grocery store	5411	SAR	Low		Newport Bay	33.6445166	-117.691403
		7-Eleven Food Stores	24386	Muirlands	Blvd.		Lake Forest	CA	92630	Dan Richardson	Manager	859-9191	Food Grocery store	5411	SAR	Low		Newport Bay	33.6268920	-117.702125
		A.G. Heinze, Inc.	20291	Valencia	Circle		Lake Forest	CA	92630	Steve Valladares	Dir. Of Sales	586-9000	Precision Micro Optics	3827	SAR	Low		Newport Bay	33.6673630	-117.660989
10/22/10		Ace Printing & Graphics	20025	Lake Forest	Drive	#A-109	Lake Forest	CA	92630	Mike Mowler	Owner	470-4852	Printer	2754	SAR	High	Jian Peng	Newport Bay	33.6707490	-117.661504
		Adgraphics	25958	Commercentre	Drive		Lake Forest	CA	92630	Steve Puchi	Plant Mgr.	900-1640, x. 229	Printer	2754	SAR	Medium		Newport Bay	33.6640170	-117.682927
		Advanced Transmission Inc	20732	Lake Forest	Drive	#B5	Lake Forest	CA	92630	Mehdi Fakharizadh	Owner		Auto repair	7537	SAR	Medium		Newport Bay	33.6454514	-117.688916
		Albatros Mexican Food, Inc.	23591	Rockfield	Blvd.	#G	Lake Forest	**CA**	92630	Eduardo Peregrina		949-859-9600	Restaurant	5812	SAR	Low		Newport Bay	33.6312370	-117.717972
		Albertsons	24251	Muirlands	Blvd.		Lake Forest	CA	92630	Ron Riepma	Manager	581-1642	Food Supermarket	5411	SAR	Low		Newport Bay	33.6302450	-117.706477
		Alicia Complete Auto Repair	20602	Pascal	Way	#A	Lake Forest	CA	92630	David McLeod	Owner	951-7807	Auto repair	7538	SAR	Medium		Newport Bay	33.6628632	-117.669174
7/19/10		Allen Tire Company	20761	Lake Forest	Drive	#K	Lake Forest	CA	92630	Jesse Payan	Manager	583-9038	General Automotive Repair & Tires	7538	SAR	High	Joe Vaughan	Newport Bay		
		Aloha Hawaii	21771	Lake Forest	Drive	#114	Lake Forest	CA	92630	Methangkool Sumon	Manager	587-9898	BBQ Restaurant	5812	SAR	Low		Newport Bay	33.6470220	-117.687819
		Alpha Fotoworks	22641	Lake Forest	Drive	#B9	Lake Forest	CA	92630	Sam Yu	Owner	380-1340	Photo developer	7384	SAR	Low		Newport Bay	33.6426244	-117.696316
		AM PM Franchise	20572	Lake Forest	Drive		Lake Forest	CA	92630	Sam George		586-4680	Gas Station & Convenience Store	5411 5541	SAR	Low	Jerry	Newport Bay	33.6635040	-117.666086
		Ameci Pizza & Pasta	25431	Trabuco	Road	#B6	Lake Forest	CA	92630	Samia Ahmad		830-6401	Restaurant	5812	SAR	Low		Newport Bay	33.6492252	-117.687861
		America's Tire Company	22765	Aspan	Street		Lake Forest	CA	92630	Jim Fuller		472-8840	Auto repair and retail tires	7538	SAR	Medium		Newport Bay	33.5985231	-117.691343
		AMF Forest Lanes	22771	Centre	Drive		Lake Forest	CA	92630	Nancy McKay		770-0055	Bowling Alley/Food	5812	SAR	Low		Newport Bay	33.6319690	-117.717324
		Arby's #6533	26801	Portola	Parkway		Foothill Ranch	CA	92610	George Rodriguez		830-8862	Restaurant	5812	SAR	Low		Newport Bay	33.6792620	-117.663085
		Arizona Pipeline Co.	23817	Rockfield	Blvd.		Lake Forest	CA	92630				Construction	1623	SAR	Medium		Newport Bay	33.6287063	-117.716257
	05/19/10	Ascension Cemetery	24754	Trabuco	Road		Lake Forest	CA	92630	John D. Callaghan, Jr. George Harsch, Proj. Mgr.		837-1331	Cemetery	6531	SAR	High	Jerry	Newport Bay	33.6518680	-117.697087
		Aspen Cleaners	22851	Lake Forest	Drive	#B	Lake Forest	CA	92630	Kamal Dhillon	Owner	951-1151	Dry Cleaners	7216	SAR	Low		Newport Bay	33.6306970	-117.715704
10/22/10		Autobody USA	23892	Remme Ridge			Lake Forest	CA	92630	Robert Senger	Manager	472-1046	Auto Body repair	7532	SAR	Medium	Jian Peng	Newport Bay	33.6347056	-117.712898

City of Lake Forest
Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Baffin Bay RV & Self Storage	25650	Baffin Bay			Lake Forest	CA	92630				Vehicle storage yard	7549	SAR	Low		Newport Bay	33.6687888	-117.682847
		Bagels & Brew Inc	21771	Lake Forest	Drive	#100	Lake Forest	CA	92630	David & Michelle Vassilian	Owners	951-8985	Restaurant	5812	SAR	Low		Newport Bay	33.6470220	-117.687819
		Baja Fresh Mexican Grill	20671	Lake Forest	Drive	#B-101	Lake Forest	CA	92630	Ronald J. Mehrens Jr.	Vice President of Operations	855-8866	Restaurant	5812	SAR	Low		Newport Bay	33.6625270	-117.66823
9/8/10		Bake Auto Care Note: Acquired Bake Muffler & Fabrication in 2004	20771	Bake	Parkway	#H	Lake Forest	CA	92630	Lazarus Pouryad	Owner	581-5111	Auto Repair		SAR	Medium	Joe Vaughan	Newport Bay	33.6596223	-117.699284
		Baskin Robbins Ice Cream	26761	Portola	Parkway	#2B	Foothill Ranch	CA	92610			598-0310	Ice cream/Food	5812	SAR	Low		Newport Bay	33.6791900	-117.662615
		Battery Experts	20601	Canada	Road	#B	Lake Forest	CA	92630	Greg Rapp	President	837-6322	Auto-Battery sales	5531	SAR	Low		Newport Bay	33.6629140	-117.671328
		Baywash 24-HR Self-Service Carwash	20722	Lake Forest	Drive		Lake Forest	CA	92630			830-5028	Car Wash	7542	SAR	Low		Newport Bay	33.6615720	-117.667511
		Beacon Bay Auto Wash	23581	Rockfield	Blvd.		Lake Forest	CA	92630	Aldo Chumpitaz		770-9376	Car Wash	7542	SAR	Low		Newport Bay	33.6316429	-117.718255
		Best Yogurt	25432	Trabuco	Road	#102	Lake Forest	CA	92630			770-1540	Ice cream/Food	5812	SAR	Low		Newport Bay	33.6489636	-117.687817
		Biago's Italian Restaurant	24301	Muirlands	Blvd.	#H	Lake Forest	CA	92630	Benny Lamberta & Mark	Manager Owner	8373850 870-8700	Restaurant	5812	SAR	Medium		Newport Bay	33.6295540	-117.705023
9/1/10		Bike Company - (The)	21098	Bake	Parkway	#112	Lake Forest	CA	92630	Joe Binatena	Owner	888-697-6717	Bike Shop	5941	SAR	Medium	Jerry	Newport Bay		
		Black Forest Bakery Café	21731	Lake Forest	Drive	#104	Lake Forest	CA	92630	Darlene Daniel/Hannu Makela	Owners	768-6101	Bakery	5812	SAR	Low		Newport Bay	33.6445037	-117.691431
		Blair Towing Inc	26100	Dimension	Drive		Lake Forest	CA	92630	Randy Blair		588-8000	Auto Parking Storage Towing	7549	SAR	Low		Newport Bay	33.6634790	-117.674914
		Bob's Kabob House, Inc.	45	Auto Center	Drive	#116	Lake Forest	CA	92630				Restaurant	5812	SAR	Low		Newport Bay	33.6746760	-117.66293
		Bob's Philly's Best	22722	Lambert	Street	#1703	Lake Forest	CA	92630	Bob Levey & Giovanny Rojas	Owners	855-8442	Restaurant	5812	SAR	Low		Newport Bay	33.6329570	-117.712609
		Bokkes Independent Mercedes Service	20591	Canada	Road		Lake Forest	CA	92630	Tom Bokkes		830-3411	Auto repair	7538	SAR	Low		Newport Bay	33.6631200	-117.671086
		Bon Bon Candy	26612	Towne Centre	Drive	#A	Foothill Ranch	CA	92610	Sharye Im	Manager	588-1767	Food/Candy	5441	SAR	Low		Newport Bay	33.6758830	-117.667445
		Budweiser King Racing	26231	Dimension	Drive		Lake Forest	CA	92630	Kenny Bernstein & Christine Thieroff	Manager	830-2070	Auto Repair/Race Cars	7538	SAR	Low		Newport Bay	33.6621350	-117.671932
		Burger Town USA	24418	Muirlands	Blvd.		Lake Forest	CA	92630	Mey Chen	Owner	586-9841	Restaurant	5812	SAR	Low		Newport Bay	33.6277350	-117.703541
		C. J.'s Produce Co.	22706	Aspan	Street	#301	Lake Forest	CA	92630	Mark Haness		859-6116	Produce Broker	5148	SAR	Low		Newport Bay	33.5984912	-117.691336
		Café at Marks' Catering - (The)	20702	Lake Forest	Drive	#A-6	Lake Forest	CA	92630	Deborah Thornton & Linda Sterrett-Melville		768-7903	Restaurant & Catering	5812	SAR	Low		Newport Bay	33.6609770	-117.667404
		California Fish Grill	41	Auto Center	Drive		Lake Forest	CA	92630	Lilia Laura		470-9610	Restaurant	5812	SAR	Low		Newport Bay	33.6750870	-117.663165
		California Wine Merchant & Deli	23591	Rockfield	Blvd.	#H	Lake Forest	CA	92630	Nancy Song	Owner	830-6250	Restaurant	5921, 5411	SAR	Low	Jerry	Newport Bay	33.6312370	-117.717972
		Candy & Fancy	21731	Lake Forest	Drive	#103	Lake Forest	CA	92630	Jang Hee Lim Choi		458-7630	Food/Candy	5441	SAR	Low		Newport Bay	33.6445037	-117.691431

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Captain Cream	23642	Rockfield	Blvd.		Lake Forest	CA	92630			951-5052	Food	5813	SAR	Low		Newport Bay	33.6242358	-117.712133
		Carl's Jr Restaurants	20532	Lake Forest	Drive		Lake Forest	CA	92630	Sandi Pasanen		768-0589	Restaurant	5812	SAR	Low		Newport Bay	33.6459791	-117.687884
		Celestica Corp.	25892-25092	Towne Centre	Drive		Foothill Ranch	CA	92610				Electronic Equipment Repair	7629	SAR	Low		Newport Bay	33.6763010	-117.665742
		Certified Japanese Auto Repair	20771	Bake	Parkway	#F	Lake Forest	CA	92630	Long Nguyen	Owner	770-4954	Auto repair	7538	SAR	Low		Newport Bay	33.6596223	-117.699284
		Charo Chicken	22611	Lake Forest	Drive	#C2	Lake Forest	CA	92630	Annmarie E. Pickens		581-3770	Restaurant	5812	SAR	Low		Newport Bay	33.6428409	-117.695523
		Charo Chicken	26696	Portola	Parkway		Foothill Ranch	CA	92610			837-7800	Restaurant	5812	SAR	Low		Newport Bay	33.6811030	-117.665731
		Chevron Bake Hand Car Wash	24571	Trabuco	Road		Lake Forest	CA	92630	Ron Jones	Manager	380-9292	Gas station & car wash	5541	SAR	Low		Newport Bay	33.6547450	-117.70109
		Chili's Grill & Bar	26782	Portola	Parkway		Foothill Ranch	CA	92610	Hodge Fitzpatrick	General Manager	830-6353	Restaurant	5812	SAR	Low		Newport Bay	33.6780380	-117.66293
		China Express Food	24354	Muirlands	Blvd.		Lake Forest	CA	92630	Kelly Nguyen	Manager	855-1266	Restaurant	5812	SAR	Low		Newport Bay	33.6272134	-117.702461
		Chocolate Forest	24301	Muirlands	Blvd.	#M	Lake Forest	CA	92630	Judy Mohler		837-7303	Food/Candy	5441	SAR	Low		Newport Bay	33.6295540	-117.705023
		Chuck E Cheese's	26562	Towne Centre	Drive		Foothill Ranch	CA	92610	Brenda Edwards	Manager	586-9975	Restaurant	5812	SAR	Low		Newport Bay	33.6789430	-117.667329
		Cicero's Pizzeria	24531	Trabuco	Road	#F	Lake Forest	CA	92630	Gary Zamazamian	Owner	855-3114	Restaurant	5812	SAR	Low		Newport Bay	33.6554540	-117.701632
		Color Me Custom Painting	25401	Groveside	Lane		Lake Forest	CA	92630	Tom Reese	Owner	714-345-2611	Painting & Decorating		SAR	Low		Newport Bay	33.6496860	-117.686852
		Corner Broiler	24301	Muirlands	Blvd.	Y	Lake Forest	CA	92630				Restaurant	5812	SAR	Low		Newport Bay	33.6295540	-117.705023
		Cosco Fire Protection	25902	Towne Centre	Drive		Foothill Ranch	CA	92610	Randy Howard	RSI Foreman	714-947-8770	Equip repair Fire Protection	7699	SAR	Low		Newport Bay	33.6798900	-117.676444
		Costa Azul Gourmet Foods to Go	20651	Lake Forest	Drive		Lake Forest	CA	92630			855-2985	Restaurant	5812	SAR	Low		Newport Bay	33.6622370	-117.667881
		Crossroads Automotive	20592	Lake Forest	Drive		Lake Forest	CA	92630			470-0900	Auto repair	7538	SAR	Low		Newport Bay	33.6631320	-117.665408
		Dairy Queen	26612	Towne Centre	Drive	#C	Foothill Ranch	CA	92610			830-5010	Food	5812	SAR	Low		Newport Bay	33.6758830	-117.667445
		Daphne's Greek Café	26612	Towne Centre	Drive	#I	Foothill Ranch	CA	92610	Raphael Ponce	Manager	206-0049	Restaurant	5812	SAR	Low		Newport Bay	33.6758830	-117.667445
		Del Taco #906	26702	Portola	Parkway		Foothill Ranch	CA	92610	Aracely Mercado		462-9300	Restaurant	5812	SAR	Low		Newport Bay	33.6788640	-117.664004
		Del Taco #962 (#342)	22859	Lake Forest	Drive		Lake Forest	CA	92630	Elena Tellez	Manager	588-9894	Restaurant	5812	SAR	Low		Newport Bay	33.6310600	-117.716132
		Denny's Restaurant	26712	Portola	Parkway		Foothill Ranch	CA	92610	Frank Frate	Manager	586-3310	Restaurant	5812	SAR	Low		Newport Bay	33.6793450	-117.664186

City of Lake Forest
Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Der Wienerschitzel	20652	Lake Forest	Drive		Lake Forest	CA	92630	Joel Delgado	Manager		Restaurant	5812	SAR	Low		Newport Bay	33.6622640	-117.666995
		Diedrich Coffee Corp	22621	Lake Forest	Drive	#D2	Lake Forest	CA	92630	Steve Holmes	General Manager	837-4555	Coffee/Food	5812	SAR	Low		Newport Bay	33.6427468	-117.695856
		Diho Chinese & Thai Food To Go	23600	Rockfield	Blvd.	#2L	Lake Forest	CA	92630	Linda Sae-Wong	Owner	859-4192	Restaurant	5812	SAR	Low		Newport Bay	33.6291820	-117.718796
		Din Ho Chinese Restaurant	21741	Lake Forest	Drive		Lake Forest	CA	92630	Xiao Quin Zhang (Nancy)	Manager	951-0427	Restaurant	5812	SAR	Low		Newport Bay	33.6444994	-117.691441
10/22/10		Discount Tire Centers Inc	23942	McWhorter	Way		Lake Forest	CA	92630	Chris Maxey, Russ Climson	Manager	855-8155	Auto-Tires	7534	SAR	High	Jian Peng	Newport Bay	33.6353465	-117.712125
		Diversified Rockfield LLC	23792	Rockfield	Blvd.	130	Lake Forest	CA	92630	Reggie De la Cuesta			Property management	6531	SAR	Low		Newport Bay	33.6267150	-117.715304
		Dolce Vita Restaurant	22741	Lambert	Street	#1605	Lake Forest	CA	92630	Lilian Gharavi	Owner	472-2272	Restaurant	5812	SAR	Low		Newport Bay	33.6322910	-117.713531
		Domino's Pizza	23082	Muirlands	Blvd.	#B	Lake Forest	CA	92630	John Dotson		770-2112	Restaurant	5812	SAR	Low		Newport Bay	33.6353466	-117.710476
		Domino's Pizza	23082	Ridge Route	Drive	#B	Lake Forest	CA	92630	John Dotson		770-2112	Restaurant	5812	SAR	Low		Newport Bay	33.6295520	-117.70421
		Dragon Buffet	24416	Muirlands	Blvd.		Lake Forest	CA	92630	Kevin Lin	Manager	581-6648	Restaurant	5812	SAR	Low		Newport Bay	33.6275520	-117.703851
		Dry Clean Express	21212	Bake	Parkway	#E	Lake Forest	CA	92630	Patricia & Samuel Gonzales		586-8815	Dry Cleaners	7216	SAR	Low		Newport Bay	33.6544529	-117.702777
		Dylern Inc	26814	Vista Terrrace			Lake Forest	CA	92630	Bob Robertson		770-8912	Wholesale medical equipment	5047	SAR	Low		Newport Bay	33.6645260	-117.662824
		Econo Lube N Tune & Brakes	22861	Lake Forest	Drive		Lake Forest	CA	92630	Jose Padilla	Owner	951-3067	Auto repair	7549	SAR	Low		Newport Bay	33.6308230	-117.716669
	04/14/10	El Pollo Loco	21212	Bake	Parkway	#G	Lake Forest	CA	92630	Roland Sponberg / Esmeralda Garcia		454-8312	Restaurant	5812	SAR	Low		Newport Bay	33.6544529	-117.702777
		El Pollo Loco	20163	Lake Forest	Drive		Lake Forest	CA	92630	Teo Martinez Gary Brubaker	General Manager	581-5499	Restaurant	5812	SAR	High		Newport Bay	33.6700310	-117.662333
		El Toro Memorial Park	25751	Trabuco	Road		Lake Forest	CA	92630	Tim Deutsch	General Manager	951-9102	Cemetery	6531	SAR	Low		Newport Bay	33.6392076	-117.681871
		Elite Dry Cleaning & Laundry Service	22641	Lake Forest	Drive	#B11	Lake Forest	CA	92630	Dan Miller	Owner	951-3024	Dry Cleaners	7216	SAR	Low		Newport Bay	33.6426244	-117.696316
		Empanada Man Pizzeria	20761	Lake Forest	Drive	#A	Lake Forest	CA	92630	Omar Bizaro	Owner	855-9257	Restaurant	5812	SAR	Low		Newport Bay	33.6611150	-117.669057
		Enterprise Rent-A-Car	20671	Lake Forest	Drive	#104B	Lake Forest	CA	92630	Mr. Silveran		949-859-0693	Auto Parking Storage Car rental	7514	SAR	Low		Newport Bay	33.6625270	-117.66823
		Euro American Collision	20591	Pascal	Way		Lake Forest	CA	92630			951-2939	Auto Body repair	3443	SAR	Low		Newport Bay	33.6631250	-117.669472
		Evergreen Lawn Service - Reggie Aguayo for Baker Ranch Area I & II	20572	Lake Forest	Drive		Lake Forest	CA	92630	Candace Cox, CCAM	Managing Agt.	645-1451 - Baker Ranch 678-3375 - Evergreen Lawn Service	Landscaping Service		SAR	Low		Newport Bay	33.6635040	-117.666086

City of Lake Forest
Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Ewing Irrigation & Industrial Products	23941	McWhorter	Way		Lake Forest	CA	92630	Mark Mora	Manager	470-1000	Irrigation equipment	5099	SAR	Low		Newport Bay	33.6353388	-117.712069
		Exhibit Works EWI Worldwide dba:	19531	Pauling			Foothill Ranch	CA	92610	Jim McDaniel	General Mgr.	470-0850	Wholesale commercial equipment	5046	SAR	Low		Newport Bay	33.6782290	-117.651579
		Fabricante Auto Body & Painting	26341	Dimension	Drive		Lake Forest	CA	92630	Norman Delay	Owners	859-8639	Auto Body repair	7532	SAR	Low		Newport Bay	33.6620060	-117.670263
		Family Chiropractic	25431	Trabuco	Road		Lake Forest	CA	92630			380-8883	Chiropractic Office	8041	SAR	Low		Newport Bay	33.6492252	-117.687861
		Family Martial Arts Center, Inc.	24301	Muirlands	Blvd.		Lake Forest	CA	92630	Michael Kim		457-6127	Martial Arts		SAR	Low		Newport Bay	33.6295540	-117.705023
		Farmers Workshop	23372	El Toro	Road		Lake Forest	CA	92630	Michelle		859-1557	Food	5812	SAR	Low		Newport Bay	33.6233059	-117.696967
		Foothill Auto Service	26911	Vista Terrrace			Lake Forest	CA	92630	Glen Larsen	Owner	770-5956	Auto repair	7538	SAR	Low		Newport Bay	33.6660910	-117.660428
		Foothill Cleaners	20651	Lake Forest	Drive	#A111	Lake Forest	CA	92630	Han & Liz Lee	Owners	951-5329	Dry Cleaners	7216	SAR	Low		Newport Bay	33.6622370	-117.667881
		Foothill Ranch Auto Spa	19232	Alton	Parkway		Foothill Ranch	CA	92610	Steve Kim Kook Cho	Manager	699-1222	Car Wash	7542	SAR	Low		Newport Bay	33.6826098	-117.667512
	Out of Business 01/10/10	Foothill Ranch Chevrolet	70	Auto Center	Drive		Foothill Ranch	CA	92610	Mark Dershem	General Manager	457-2000	Auto Dealership-new/used	5511	SAR	High		Newport Bay	33.6752170	-117.661233
		Formosa Chinese Restaurant	23702	Rockfield	Blvd.		Lake Forest	CA	92630			458-7125	Restaurant	5812	SAR	Low		Newport Bay	33.6280800	-117.71663
		Fresca's Mexican Grill	41	Auto Center	Drive	#102	Lake Forest	CA	92630	Jorge Sanchez		454-0404	Restaurant	5812	SAR	Low		Newport Bay	33.6750870	-117.663165
		Fresca's Mexican Grill	22681	Lake Forest	Drive	#A1A	Lake Forest	CA	92630	Gary Roldan	Owner	837-8397	Restaurant	5812	SAR	Low		Newport Bay	33.6339960	-117.711437
		Fuddruckers, Inc	26771	Rancho	Parkway		Lake Forest	CA	92630	Brett Ales	General manager	597-2071	Restaurant	5812	SAR	Low		Newport Bay	33.6716600	-117.664438
		Golden Wok Chinese Restaurant	24301	Muirlands	Blvd.	#A	Lake Forest	CA	92630	Paul Kwong	Owner	581-2920	Restaurant	5812	SAR	Low		Newport Bay	33.6295540	-117.705023
		Goodyear Tire Center	26492	Towne Centre	Drive		Foothill Ranch	CA	92610	Christopher Taylor	Store Manager	587-0500	Tire Sales & Auto repair	7534	SAR	Low		Newport Bay	33.6812400	-117.669907
		Grand Automotive	19232	Alton	Parkway		Foothill Ranch	CA	92610	Houssam S. Kabbani		454-1449	Auto repair	7538	SAR	Low		Newport Bay	33.6826098	-117.667512
		Green Thumb International Nursery	23782	Bridger	Road		Lake Forest	CA	92630	Bud Bergquist	Business owner	837-3040	Retail nursery	5261	SAR	Low		Newport Bay	33.6171650	-117.707981
		Greenways Environmental LLC	21791	Lake Forest	Drive	#201	Lake Forest	CA	92630	Kevin Fretz		380-8301	Landscape Products/Wholesale	0781	SAR	Low		Newport Bay	33.6444778	-117.691487
		Gypsy Cocktail Lounge	23600	Rockfield	Blvd.	#3A	Lake Forest	CA	92630			206-9990	Food	5813	SAR	Low		Newport Bay	33.6291820	-117.718796
		Harv's Express Car Wash	20602	Lake Forest	Drive		Lake Forest	CA	92630	Al Hernandez		457-7935	Car Wash	7542	SAR	Low	Jerry	Newport Bay	33.6630410	-117.666454
		Haute Links	24531	Trabuco	Road	#E	Lake Forest	CA	92630	Gary & Sianne Fitzmorris	Owners	472-8088	Restaurant	5812	SAR	Low		Newport Bay	33.6554540	-117.701632

City of Lake Forest
Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Henry's Donuts	22641	Lake Forest	Drive	#B6	Lake Forest	CA	92630	Hui Wang Lilia Lau Edgar Rios	Owner	8556029 858-0766	Food Donut store	5812	SAR	Low		Newport Bay	33.6426244	-117.696316
		Hergesheimer Motorsports	20612	Canada	Road		Lake Forest	CA	92630	Laura Oviatt			Auto repair	7538	SAR	Low		Newport Bay	33.6625130	-117.670444
		Hilton Garden Inn	27082	Towne Centre	Drive		Foothill Ranch	CA	92610	Al Battaglino	Director	859-4000	Restaurant	5812	SAR	Low		Newport Bay	33.6791673	-117.678263
		Hitchcock Plastering	23991	Raleigh	Street		Lake Forest	CA	92630	Ron Hitchcock	Owner	584-5320	Painting and Coating		SAR	Low		Newport Bay	33.6304210	-117.71148
		Hi-Tech Automotive Center	22751	Aspan	Street	B	Lake Forest	CA	92630	Maryann S. Holter		472-3750	Auto repair	7538	SAR	Low		Newport Bay	33.6310788	-117.714268
		Hi-Tech Collision & Glass Centers	22582	Shannon	Circle		Lake Forest	CA	92630	Mike Armstrong		583-1555	Auto Body repair	7532	SAR	Low		Newport Bay	33.6341279	-117.712775
		Home Depot	20021	Lake Forest	Drive		Lake Forest	CA	92630	Elizabeth Pacitti	Store manager	609-0221	Retail lumber	5032	SAR	Low		Newport Bay	33.6710100	-117.662763
		House of Grind	26612	Towne Centre	Drive	#B	Foothill Ranch	CA	92610	Hye Sung Yun	Owner	Coffee/Food	Eating or Drinking Establishments	5812	SAR	Low		Newport Bay	33.6758830	-117.667445
		Hydro-Scape Products Inc.	22542	Shannon	Circle		Lake Forest	CA	92630	Mario Sanchez	Store Manager	951-8827	Equipment	5083	SAR	Low		Newport Bay	33.6348446	-117.712298
		I Flow Corp.	20202	Windrow	Drive		Lake Forest	CA	92630	Dan Harris/Air Heart Corp.		632-5306	Medical Equipment - Drug Delivery System		SAR	Low		Newport Bay	33.6689260	-117.657565
		Inka Grill	23600	Rockfield	Blvd.	#2K	Lake Forest	CA	92630	George Skandalos		587-9008	Restaurant	5812	SAR	Low		Newport Bay	33.6291820	-117.718796
		Inka Mama's	26676	Portola	Parkway	#B	Foothill Ranch	CA	92610	Angela Kishijara	Owners	859-3253	Restaurant	5812	SAR	Low		Newport Bay	33.6804056	-117.664809
		In-N-Out Burger	26482	Towne Centre	Drive		Foothill Ranch	CA	92610	Jo-Ann Koo	Store Mgr.	455-0739	Restaurant	5812	SAR	Low		Newport Bay	33.6814970	-117.669342
		Insulectro	20362	Windrow	Drive		Lake Forest	CA	92630	Dave Klebba	Manager	587-3200	Equiptment Repair Electronic Parts/Equiptment	5099	SAR	Low		Newport Bay	33.6663860	-117.659408
		International House of Pancakes	23592	Rockfield	Blvd.	#A	Lake Forest	CA	92630	Ramin Zahedi		951-8581	Restaurant	5812	SAR	Low		Newport Bay	33.6242212	-117.71212
		Iron Mule	21212	Bake	Parkway	#C	Lake Forest	CA	92630	Steven J. Quella		586-6853	Food/Bar	5813	SAR	Low		Newport Bay	33.6544529	-117.702777
		Irvine European Auto Repair	22741	Aspan	Street	E	Lake Forest	CA	92630	Mike Bumo		951-3700	Auto repair	7538	SAR	Low		Newport Bay	33.6313090	-117.715657
		Irvine Ranch Water District Baker Plant	21082	Wisteria			Lake Forest	CA	92630	Dave Asman		453-5806	Utility-Water District	4941	SAR	Low		Newport Bay	33.6570931	-117.683539
		Islands Restaurants	26582	Towne Centre	Drive		Foothill Ranch	CA	92610	John Ladd		588-0086	Restaurant	5812	SAR	Low		Newport Bay	33.6780210	-117.666829
		It's-A-Deli	20651	Lake Forest	Drive	#A110	Lake Forest	CA	92630	Douglas A. Davis		472-4285	Restaurant	5812	SAR	Low		Newport Bay	33.6622370	-117.667881
		J & S Liquor	25262	Jeronimo	Road		Lake Forest	CA	92630	Tirath & Joga Singh		714-761-5670	Food-Liquor	5182	SAR	Low		Newport Bay	33.6278859	-117.690429
		Jack In the Box	20101	Lake Forest	Drive		Lake Forest	CA	92630	Georgi	General Manager	455-1228	Restaurant	5812	SAR	Low		Newport Bay	33.6702210	-117.661804

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Japon	23808	Mercury	Road		Lake Forest	CA	92630				Restaurant	5812	SAR	Low		Newport Bay	33.6258573	-117.713845
		Jersey Mike's Subs	45	Auto Center	Drive		Lake Forest	CA	92630	Hector Haget	Owner	636-1057	Restaurant	5812	SAR	Low		Newport Bay	33.6746760	-117.66293
		Joe's Place	23600	Rockfield	Blvd.	#2Q	Lake Forest	CA	92630			951-2611	Food/Bar	5812	SAR	Low		Newport Bay	33.6291820	-117.718796
		Juice It Up!	26612	Towne Centre	Drive	#D	Foothill Ranch	CA	92610	Dhaval "Dave" Shah		461-0611	Juice bar/Food	5812	SAR	Low		Newport Bay	33.6758830	-117.667445
		Juice Stop	22611	Lake Forest	Drive	#C5	Lake Forest	CA	92630	Abdul Rahimi		837-1585	Food service	5812	SAR	Low		Newport Bay	33.6428409	-117.695523
		Katz & Associates	21791	Lake Forest	Drive	#202	Lake Forest	CA	92630	Jesse Rehmeier		949-597-3535	Landscape Administrative Office	782	SAR	Low		Newport Bay	33.6444778	-117.691487
		KD's Donuts	26761	Portola	Parkway	#2F	Foothill Ranch	CA	92610	Joe T. Yam	Owner	588-1688	Food	5812	SAR	Low		Newport Bay	33.6791900	-117.662615
		Kentucky Fried Chicken	24541	Trabuco	Road		Lake Forest	CA	92630	Herlinda Zamora		800-544-5774	Restaurant	5812	SAR	Low		Newport Bay	33.6550080	-117.701781
		Kim's Kitchen	23591	Rockfield	Blvd.	#G	Lake Forest	CA	92630				Restaurant	5812	SAR	Low		Newport Bay	33.6312370	-117.717972
		King & I Thai Cuisine	22421	El Toro	Road	#J	Lake Forest	CA	92630	Pete Ruksiri		855-3970	Restaurant	5812	SAR	Low		Newport Bay	33.6383161	-117.67796
		Knight Inc	20531	Crescent Bay	Drive		Lake Forest	CA	92630	Daryl Wood	Manager	595-4800	Equip. Repair Mfg. pumps & pumping equipment		SAR	Low		Newport Bay	33.6638710	-117.690675
		Kolla's	23822	Mercury	Road		Lake Forest	CA	92630				Restaurant	5812	SAR	Low		Newport Bay	33.6248800	-117.71438
		La Perlita Mexican Food	26771	Portola	Parkway	#3B	Foothill Ranch	CA	92610	Humberto & Amelia Huerta	Owners	583-7862	Restaurant	5812	SAR	Low		Newport Bay	33.6793580	-117.662261
		Laguna Hills Travelodge, LLC	23150	Lake Center	Drive		Lake Forest	CA	92630	George Thaung	Property Owner		Hotel-Lodging	7011	SAR	Low		Newport Bay	33.6268050	-117.716521
		Lake Forest Cleaners & Laundry	24301	Muirlands	Blvd.	#J	Lake Forest	CA	92630	John and Grace Park	Owner	586-0420	Dry Cleaners	7216	SAR	Low		Newport Bay	33.6295540	-117.705023
10/22/10		Lake Forest Mobil	21721	Lake Forest	Drive		Lake Forest	CA	92630	Fred Hatami John Monfared	Owner	770-1007	Gas station	7538	SAR	High	Jian Peng	Newport Bay	33.6474840	-117.685712
		Lake Forest Nursing Center	25652	Old Trabuco	Road		Lake Forest	CA	92630	Bill Schifferli		380-9380	Health, skilled nursing facility	8051	SAR	Low		Newport Bay	33.6453130	-117.682721
		Lake Forest Pool & Spa Supply	20761	Lake Forest	Drive	#C	Lake Forest	CA	92630	Jack & Tammi Benson	Owners	380-0309	Pool supplies & service	5999	SAR	Low		Newport Bay	33.6611150	-117.669057
		Lake Forest Transmission Inc	22741	Aspan	Street	A	Lake Forest	CA	92630	Rob James		455-0545	Auto repair	7537	SAR	Low		Newport Bay	33.6313090	-117.715657
		Landscape Specialist Inc.	23676	Birtcher	Drive		Lake Forest	CA	92630	Tom Hernandez		581-9737	Landscape aministration office	0781	SAR	Low		Newport Bay	33.6328210	-117.717381
		Lasting Impressions Landscape Maintenance	27076	Burbank	Avenue		Foothill Ranch	CA	92610	Ruben Green, President	President	586-5296	Landscape Maintenance	0781	SAR	Low		Newport Bay	33.6787260	-117.658092
		Lili's Bakery & Café	20651	Lake Forest	Drive	#A107	Lake Forest	CA	92630	Amir Ghasemi	Manager	770-5454	Bakery	5461	SAR	Low		Newport Bay	33.6622370	-117.667881

City of Lake Forest
Water Quality Inventory Commercial

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		Limelight Java	26741	Portola	Parkway	#1A	Foothill Ranch	CA	92610	Jung Suk Park		454-9574	Cofee/Food	5812	SAR	Low		Newport Bay	33.6807009	-117.66348
		Los Cabos Cantina Mexican Bar and Grill	20702	Lake Forest	Drive	#A2 &3	Lake Forest	CA	92630	Enrique Renteria Timothy J. Morris		215-4081	Restaurant	5812	SAR	Low		Newport Bay	33.6609770	-117.667404
		Los Primos Mexican Food	26721	Rancho	Parkway		Lake Forest	CA	92630	Anselmo V. Santiago	Owner	581-6031	Restaurant	5812	SAR	Low		Newport Bay	33.6731090	-117.665983
		Luscious Jimmy's Catering	22600-G	Lambert	Street	#1404	Lake Forest	CA	92630	Jim Birmingham Jr	Owner	461-9423	Food Caterer	5812	SAR	Low		Newport Bay	33.6347560	-117.714547
		M & R Shell Station	21762	Lake Forest	Drive		Lake Forest	CA	92630			458-6168	Gas station	5541	SAR	Low		Newport Bay	33.6463420	-117.686154
		Maggie Moos Ice Cream	21701	Lake Forest	Drive	#1	Lake Forest	CA	92630	Patrice Mudd	Owner	859-8812	Ice cream/Food	5812	SAR	Low		Newport Bay	33.6445166	-117.691403
		Maki Yaki 3	20761	Lake Forest	Drive	#B	Lake Forest	CA	92630	Kyumg Sook Song		837-1713	Restaurant	5812	SAR	Low		Newport Bay	33.6611150	-117.669057
		Manhattan Deli	20702	Lake Forest	Drive	#A1	Lake Forest	CA	92630	Victor A. Cuda		768-5750	Restaurant	5812	SAR	Low		Newport Bay	33.6609770	-117.667404
		Marco Auto Detailing	23676	Birtcher	Drive		Lake Forest	CA	92630				Mobile Auto Wash Detailing	7549	SAR	Low		Newport Bay	33.6328210	-117.717381
		Market Café	22722	Lambert	Street	#1706	Lake Forest	CA	92630	Lilian Gharavi	Owner	859-9132	Restaurant	5812	SAR	Low		Newport Bay	33.6329570	-117.712609
		Mark's Catering	20702	Lake Forest	Drive	#A6	Lake Forest	CA	92630	Mark DePalma Debbie Thornton	Owner	768-7900	Food Caterer	5812	SAR	Low		Newport Bay	33.6609770	-117.667404
		Matsu Sushi Teriyaki House	24301	Muirlands	Blvd.	#U	Lake Forest	CA	92630				Restaurant	5812	SAR	Low		Newport Bay	33.6295540	-117.705023
		McDonald's Restaurants	26692	Portola	Parkway		Foothill Ranch	CA	92610	Paul Carrillo		460-0203	Restaurant	5812	SAR	Low		Newport Bay	33.6805730	-117.665509
		McDonald's Restaurants	23742	Rockfield	Blvd.		Lake Forest	CA	92630	Juan Flores		581-9261	Restaurant	5812	SAR	Low		Newport Bay	33.6277310	-117.716117
9/15/10		McGhie Motors	20771	Bake	Parkway	B	Foothill Ranch	CA	92610	Robin McGhie	Owner	949-768-1293	Auto repair	7538	SAR	High	Joe Vaughan	Newport Bay		
		McLaren Unibody Inc	20781	Canada	Road		Lake Forest	CA	92630	George McLaren		855-0145	Auto Body repair	7532	SAR	Low		Newport Bay	33.6603350	-117.672987
		Memphis Bar-B-Q	27412	Portola	Parkway	#D	Lake Forest	CA	92630	Walid Daoud	Owner	830-2727	Restaurant	5812	SAR	Low		Newport Bay	33.6712110	-117.65306
		Miguel's California Mexican Cocina	26592	Towne Centre	Drive		Foothill Ranch	CA	92610	Javier S. Vasquez		597-1079	Restaurant	5812	SAR	Low		Newport Bay	33.6771900	-117.666627
		Mimi's Café	22651	Lake Forest	Drive		Lake Forest	CA	92630	Angel Osuna	Manager	457-1052	Restaurant	5812	SAR	Low		Newport Bay	33.6336688	-117.71108
		Musick Facility	20751	Bake	Parkway		Lake Forest	CA	92630				Jail Facility	9223	SAR	Low		Newport Bay	33.6606280	-117.698367
		Mustard Café	41	Auto Center	Drive	#103	Lake Forest	CA	92630	HE & KK			Restaurant	5812	SAR	Low		Newport Bay	33.6750870	-117.663165
		Natraj's Tandoori	26612	Towne Centre	Drive	#K	Foothill Ranch	CA	92610	Vijay Khosla	Owner	949-830-2015 949-963-2278	Restaurant	5812	SAR	Low		Newport Bay	33.6758830	-117.667445

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Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		New Shanghai Restaurant	20562	Regency	Lane	#K	Lake Forest	CA	92630			830-1122	Restaurant	5812	SAR	Low		Newport Bay	33.6634458	-117.664968
		New York Pizza & Italian Restaurant	26761	Portola	Parkway	#2H	Foothill Ranch	CA	92610	Tracy Nash		587-0566	Restaurant	5812	SAR	Low		Newport Bay	33.6791900	-117.662615
		New York Upper Crust Pizza	26612	Towne Centre	Drive	#F	Foothill Ranch	CA	92610			951-7400	Restaurant	5812	SAR	Low		Newport Bay	33.6758830	-117.667445
		Nobest, Inc.		Pittsford	Drive		Lake Forest	CA	92630	Jose Castellanos	Foreman	714-892-5583	General Engineering Contractor		SAR	Low		Newport Bay	33.6496296	-117.66989
		Nory's Restaurant	23798	Mercury	Road		Lake Forest	CA	92630			714-836-5279	Restaurant		SAR	Low		Newport Bay	33.6258573	-117.713845
		O. C. Cars, Inc.	20622	Pascal	Way	#D	Lake Forest	CA	92630	Don Martin	Owner	768-3192	Auto repair	7538	SAR	Low		Newport Bay	33.6627110	-117.668635
		Olivewood Elementary School	23391	Dune Mear	Road		Lake Forest	CA	92630	Jim Simone		580-3251	School - Elementary		SAR	Low		Newport Bay	33.6229438	-117.704849
		P.S. Business Parks	22600	Lambert	Street	805	Lake Forest	CA	92630				Property management	6531	SAR	Low		Newport Bay	33.6347560	-117.714547
		Pacific Commercentre Business Park	2566 & 2564	Bake	Parkway		Lake Forest	CA	92630	Emily Christiensen	Property Manager		Property Management	6531	SAR	Low		Newport Bay	33.6800776	-117.654531
		Pasta Bravo	22611	Lake Forest	Drive	#C6	Lake Forest	CA	92630	Tom Mergen		457-8047	Restaurant	5812	SAR	Low		Newport Bay	33.6428409	-117.695523
		Pat & Oscar's	26771	Rancho	Parkway		Lake Forest	CA	92630	Pourya Rahbar		707-3900	Restaurant	5812	SAR	Low		Newport Bay	33.6716600	-117.664438
		Peanuts Sandwiches	22722	Centre	Drive	#A	Lake Forest	CA	92630	Ron Mitchell		472-3922	Food	5812	SAR	Low		Newport Bay	33.6318370	-117.715899
10/22/10		Pep Boys Automotive Supercenters	22671	Lake Forest	Drive		Lake Forest	CA	92630	Ralph King, Wm. Hites	General Manager	855-9593	Auto repair	7538	SAR	High	Jian Peng	Newport Bay	33.6424563	-117.696965
		Peppino's Italian Family Restaurants	23600	Rockfield	Blvd.	#2-R	Lake Forest	CA	92630	Joseph Moscatiello		951-2611	Restaurant	5812	SAR	Low		Newport Bay	33.6291820	-117.718796
		Peppino's Italian Family Restaurants	26612	Towne Centre	Drive	#L	Foothill Ranch	CA	92610	Lina Madison		951-1210	Restaurant	5812	SAR	Low		Newport Bay	33.6758830	-117.667445
		Pho Bo Vang	23764	Mercury	Road	#O	Lake Forest	CA	92630	Dean Vu		707-5768	Restaurant	5812	SAR	Low		Newport Bay	33.6258573	-117.713845
		Piccolo Cucina & Pizzeria	20651	Lake Forest	Drive	#A101	Lake Forest	CA	92630	Humberto G. Gereda	Owner	951-6140	Restaurant	5812	SAR	Low		Newport Bay	33.6622370	-117.667881
		Pick Up Stix	26696	Portola	Parkway	#G-1	Foothill Ranch	CA	92610	Charlie Zhang / Gloria Carrillo		452-0282	Restaurant	5812	SAR	Low		Newport Bay	33.6811030	-117.665731
		Pizza Hut	26781	Portola	Parkway	#4A	Foothill Ranch	CA	92610	Kristen Gallegos		462-0111	Restaurant	5812	SAR	Low		Newport Bay	33.6789590	-117.663201
		Pizza Mona	22641	Lake Forest	Drive	#B4	Lake Forest	CA	92630	Bijan Mohadjer	Owner	454-8989	Restaurant	5812	SAR	Low		Newport Bay	33.6426244	-117.696316
		Plaza Pool Supply	24360	Muirlands	Blvd.		Lake Forest	CA	92630	Bob Edwards	Owner	586-0130	Pool supplies & service	5999	SAR	Low		Newport Bay	33.6271535	-117.702398
		Polar Bear Frozen Yogurt	24301	Muirlands	Blvd.	#S	Lake Forest	CA	92630	Bradford			Ice cream/Food	5812	SAR	Low		Newport Bay	33.6295540	-117.705023

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		Power Cleaners	20562	Regency	Lane	#F	Lake Forest	CA	92630	Peter Doaifi	Owner	472-0393	Dry Cleaners	7216	SAR	Low		Newport Bay	33.6634458	-117.664968
		Purrfect Auto Service	20751	Bake	Parkway		Lake Forest	CA	92630	Azim Atta		830-7614	Auto repair	7538	SAR	Low		Newport Bay	33.6606280	-117.698367
		Quigley's Auto Body & Paint	26921	Vista Terrrace			Lake Forest	CA	92630	Glenn Quigley		768-5915	Auto Body repair	7532	SAR	Low		Newport Bay	33.6657439	-117.660526
		Quizno's Subs	20025	Lake Forest	Drive	#102	Lake Forest	CA	92630	Tim Waiss		830-5104	Restaurant	5812	SAR	Low		Newport Bay	33.6707490	-117.661504
		Quizno's Subs	24531	Trabuco	Trabuco	#G	Lake Forest	CA	92630	Reza Tabdili	Owner	461-9500	Restaurant	5812	SAR	Low		Newport Bay	33.6554540	-117.701632
		R & E Deli & Catering	24331	Muirlands	Blvd.	#G	Lake Forest	CA	92630	Monica Johnson-Evans	Owner	597-1724	Restaurant	5812	SAR	Low		Newport Bay	33.6274801	-117.702681
		Ralphs Grocery Company	26751	Portola	Parkway		Foothill Ranch	CA	92610	Mike Butler	Manager	457-9349	Grocery Store	5411	SAR	Low		Newport Bay	33.6781058	-117.661903
		Ralphs Grocery Company	21751	Lake Forest	Drive		Lake Forest	CA	92630	John Antenucci	Store Director	855-1241	Grocery Store	5411	SAR	Low		Newport Bay	33.6444951	-117.69145
		Red Brick Pizza House	27412	Portola	Parkway	#E	Foothill Ranch	CA	92610	Pinki Patel	Owner	707-7499	Restaurant	5812	SAR	Low		Newport Bay	33.6712110	-117.65306
		Red Robin Restaurant	26522	Towne Centre	Drive		Foothill Ranch	CA	92610	Adin Phillco		297-8200	Restaurant		SAR	Low		Newport Bay	33.6821709	-117.674732
		Red Sea Hookah Lounge	23600	Rockfield	Blvd.	#2J	Lake Forest	CA	92630	Napoly Salloum & Jeffrey		951-9600	Food & Tobacco	5813	SAR	Low		Newport Bay	33.6291820	-117.718796
		Refrigeration Supplies Distributor	26021	Atlantic Ocean	Drive		Lake Forest	CA	92630	Andy McNeill	V.P. Operations	380-9558	Refrigeration & heating equipment (No	5078	SAR	Low		Newport Bay	33.6669340	-117.676728
		Rico Sabor	27412	Portola	Parkway	#F	Foothill Ranch	CA	92610	Violeta Rodriguez	Owner	215-4080	Restaurant	5812	SAR	Low		Newport Bay	33.6712110	-117.65306
		Rising Sun Chinese Food	26761	Portola	Parkway	#2G	Foothill Ranch	CA	92610	Li Zhang	Owner	588-6178	Restaurant	5812	SAR	Low		Newport Bay	33.6791900	-117.662615
		Rockfield Shell Station	23652	Rockfield	Blvd.		Lake Forest	CA	92630	Mohammad Zarkesh		581-5770	Gas station & convenience store	5541	SAR	Low		Newport Bay	33.6285820	-117.716898
		Royal Pastries & Doughnuts	25435	Trabuco	Trabuco	#9	Lake Forest	CA	92630	Vang Seav Lim	Owners	768-1076	Food/Bakery	5461	SAR	Low		Newport Bay	33.6491957	-117.687813
		Rubio's Baja Grill #91 AKA: Rubios Fresh Mexican Grill	26612	Towne Centre	Drive	#G	Foothill Ranch	CA	92610	George Martinez/Leo Flores		830-0331	Restaurant	5812	SAR	Low		Newport Bay	33.6758830	-117.667445
		Sav-On Drugs Inc	21761	Lake Forest	Drive		Lake Forest	CA	92630	Dave Lonsway	Manager	855-8797	Retail pharmacy	5122	SAR	Low		Newport Bay	33.6444908	-117.691459
		Schlotzsky's Deli	22611	Lake Forest	Drive	#C1	Lake Forest	CA	92630	Tony Gonzales	Manager	586-1003	Restaurant	5812	SAR	Low		Newport Bay	33.6428409	-117.695523
		Serrano 1 Hr Cleaners	21771	Lake Forest	Drive	#105	Lake Forest	CA	92630	Andrew Kim		855-4251	Dry Cleaners	7216	SAR	Low		Newport Bay	33.6470220	-117.687819
		Serrano Creek Ranch Equestrian Center	25201	Trabuco	Road		Lake Forest	CA	92630	Matt Rayl		768-5891	Stables	0752	SAR	Low		Newport Bay	33.6499008	-117.689252
10/22/10		Servicemaster AAA Restoration	22651	Lambert	Street	#105	Lake Forest	CA	92630	Michael Demeter	Manager	855-8623	Carpet Cleaning & Repair	7538	SAR	Hih	Jian Peng	Newport Bay	33.6339040	-117.714291

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Sherwin Williams Paint Store Group	22500	Muirlands	Blvd.	#c	Lake Forest	CA	92630	Jason Tondre	Manager	707-1207	Paint sales/Retail	5231	SAR	Low		Newport Bay	33.6356020	-117.711272
		Shmaze Custom Coatings	20792	Canada	Road		Lake Forest	CA	92630	Michael Shamassian		583-1448	Auto Body/paint	7532	SAR	Low		Newport Bay	33.6601100	-117.673461
		Souplantation	26572	Towne Centre	Drive		Foothill Ranch	CA	92610	Dave Maples	Manager	472-1044	Restaurant	5812	SAR	Low		Newport Bay	33.6785120	-117.667094
		Spectrum Care Landscape	27181	Burbank	Avenue		Foothill Ranch	CA	92610	Roland Tittle		454-6900	Landscape	0781	SAR	Low		Newport Bay	33.6788890	-117.656527
9/29/10		Spice India	20651	Lake Forest	Drive	#A102	Lake Forest	CA	92630	Sanjit & Satti David Alfanso	Owners	855-1076	Grocery store + food	5411	SAR	Medium	Jerry	Newport Bay	33.6622370	-117.667881
		Spice Thai Cuisine	24301	Muirlands	Blvd.	#R	Lake Forest	CA	92630	David & Pranom Gjestland	Owner	458-9606	Restaurant	5812	SAR	Low		Newport Bay	33.6295540	-117.705023
		Starbucks Coffee	24301	Muirlands	Blvd.	#D	Lake Forest	CA	92630	Lauren Williams	Store manager	457-9046	Coffee/Food	5812	SAR	Low		Newport Bay	33.6295540	-117.705023
		Starbucks Coffee	27412	Portola	Parkway	#G	Foothill Ranch	CA	92610	Greg Sedia	Manager	597-0675	Coffee/Food	5812	SAR	Low		Newport Bay	33.6712110	-117.65306
		Starbucks Coffee	24531	Trabuco	Trabuco	#A	Lake Forest	CA	92630	Jim Brown	Manager	837-8841	Coffee/Food	5812	SAR	Low		Newport Bay	33.6554540	-117.701632
		Subway Sandwiches & Salads	22851	Lake Forest	Drive	#C	Lake Forest	CA	92630	Alireza Hejazi	Owner	458-8177	Restaurant	5812	SAR	Low		Newport Bay	33.6306970	-117.715704
		Subway Sandwiches & Salads	26781	Portola	Parkway	#4C	Foothill Ranch	CA	92610	Michael Couron	Regional operations director	457-1044	Restaurant	5812	SAR	Low		Newport Bay	33.6789590	-117.663201
		Summit Crest (Osterman & Summit Crest) - APN's 613-571-06 and 07		Lake Forest	CA	92630	/Eric Cernich (949) 579-0451	Oxbow Communities			Property Developers				SAR	Low		Newport Bay	0.0000000	0
		Sunset Landscape Maintenance, Inc.	27201	Burbank	Avenue		Foothill Ranch	CA	92610	Matt Brooks James Roughan		800-696-0678 or 455-4636	Landscape	0781	SAR	Low		Newport Bay	33.6797940	-117.656155
		Sushi Boy	22641	Lake Forest	Drive	#B7	Lake Forest	CA	92630	Suzuki Tada	Regional Manager	859-7600	Restaurant	5812	SAR	Low		Newport Bay	33.6426244	-117.696316
		Sushi Jin	21212	Bake	Parkway	#B & C	Lake Forest	CA	92630	Jenny & Young Heo	Owners	588-9800	Restaurant	5812	SAR	Low		Newport Bay	33.6544529	-117.702777
		Sushi Time	26781	Portola	Parkway	#4D	Foothill Ranch	CA	92610	Hiroshi & Cathy Toyosaka		5811301 714-968-2657	Restaurant	5812	SAR	Low		Newport Bay	33.6789590	-117.663201
		Sushi Wazen	22641	Lake Forest	Drive	#B-7	Lake Forest	CA	92630	Nobuhito Onoh			Restaurant		SAR	Low		Newport Bay	33.6426244	-117.696316
		Sweetland Donuts	25432	Trabuco	Trabuco	#103	Lake Forest	CA	92630	Savy Srey Suos		855-6975	Restaurant	5812	SAR	Low		Newport Bay	33.6489636	-117.687817
		Taco Bell	26656	Portola	Parkway		Foothill Ranch	CA	92610	John Blanset		455-9406	Restaurant	5812	SAR	Low		Newport Bay	33.6804248	-117.664821
		Taco Bell #3196	23651	Rockfield	Blvd.		Lake Forest	CA	92630	Patrick Brown		586-2974	Restaurant	5812	SAR	Low		Newport Bay	33.6302638	-117.717701
	02/10/10	Tacos Ensenada	24601	Raymond	Way	#1	Lake Forest	CA	92630	Robert Maldonado	Business owner	583-7711 714-730-2590	Restaurant	5812	SAR	High		Newport Bay	33.6214000	-117.701315
		Taqueria Las Alondras	24324	Muirlands	Blvd.		Lake Forest	CA	92630	Yolanda Jaramillio		949-533-9729	Restaurant	5812	SAR	Low		Newport Bay	33.6275086	-117.702782

City of Lake Forest
Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Teriyaki House	22851	Lake Forest	Drive	#A	Lake Forest	CA	92630	Sung Won Lee		951-1151	Restaurant	5812	SAR	Low		Newport Bay	33.6306970	-117.715704
		Texas Rib and BBQ	23600	Rockfield	Blvd.	#3B	Lake Forest	CA	92630	Sam Fadli	Oper. Mgr.	830-8700	Restaurant	5812	SAR	Low		Newport Bay	33.6291820	-117.718796
		Thai Taste	22722	Lambert	Street	#1704	Lake Forest	CA	92630	Charoenpong & Jarinporn Oonpanyo	Owners	461-7888	Restaurant	5812	SAR	Low		Newport Bay	33.6329570	-117.712609
		Thanh Binh II	23600	Rockfield	Blvd.	#2H	Lake Forest	CA	92630	Lana Chung		457-1460	Restaurant	5812	SAR	Low		Newport Bay	33.6291820	-117.718796
		The Clothes Doctor	26741	Portola	Parkway	#1F	Foothill Ranch	CA	92610	Sergio Nunez	Manager	588-9821	Tailor	7219	SAR	Low		Newport Bay	33.6807009	-117.66348
		The Hat	23641	Rockfield	Blvd.		Lake Forest	CA	92630	James Thomas / Laura Loc		586-9200	Restaurant	5812	SAR	Low		Newport Bay	33.6307630	-117.717411
		The Pearl Nightclub	23600	Rockfield	Blvd.	#3F-I	Lake Forest	CA	92630			768-7500	Food	5813	SAR	Low		Newport Bay	33.6291820	-117.718796
		The Service Station of Lake Forest	22512	Aspan	Street		Lake Forest	CA	92630	Frank Garcia		458-7300	Auto repair	7538	SAR	Low		Newport Bay	33.6351600	-117.712952
		Thuanh Binh Restaurant	23600	Rockfield	Blvd.		Lake Forest	CA	92630	Ha Xu Chung		457-1460	Restaurant	5812	SAR	Low		Newport Bay	33.6291820	-117.718796
		Togo's Eatery	25432	Trabuco	Trabuco	#105	Lake Forest	CA	92630	Greg Woepse		583-1030	Restaurant	5812	SAR	Low		Newport Bay	33.6489636	-117.687817
		Togo's Eatery	26612	Towne Centre	Drive	#J	Foothill Ranch	CA	92610	Danny K. Kim		5895300 861-1546	Restaurant	5812	SAR	Low		Newport Bay	33.6758830	-117.667445
		TruGreen Land Care LLC - dba: Miramar Nursery	20200	Bake	Parkway		Lake Forest	CA	92630	Ty Hayward		951-7999	Landscape service	0781	SAR	Low		Newport Bay	33.6663257	-117.685114
		Tully's Coffee	20025	Lake Forest	Drive	#A101	Lake Forest	CA	92630	Lisa Avina	Manager	859-8683	Coffee/Food	5812	SAR	Low		Newport Bay	33.6707490	-117.661504
		Twin Dragon Chinese Restaurant	26612	Towne Centre	Drive	#E	Foothill Ranch	CA	92610	Richard Fu	Owner	837-2088	Restaurant	5812	SAR	Low		Newport Bay	33.6758830	-117.667445
		Uoko Japanese Cuisine	23600	Rockfield	Blvd.	#2I	Lake Forest	CA	92630			837-7231	Restaurant	5812	SAR	Low		Newport Bay	33.6291820	-117.718796
		USA Mini-Mart	26731	Portola	Parkway		Foothill Ranch	CA	92610	Dave Moore		597-0470	Gas station	5541	SAR	Low		Newport Bay	33.6803550	-117.664127
		W B Starr Inc	20602	Canada	Road		Lake Forest	CA	92630	William & Martha Starr	Owners	770-8835	Landscape	0781	SAR	Low		Newport Bay	33.6628130	-117.670194
		Wahoo's Fish Taco	27412	Portola	Parkway	#A	Foothill Ranch	CA	92610	Wilbert Chan	Manager	639-0344	Restaurant	5812	SAR	Low		Newport Bay	33.6712110	-117.65306
		Wahoo's Fish Taco	23600	Rockfield	Blvd.	#2D 1/2 & E	Lake Forest	CA	92630	Adrian Gomez	General Manager	830-7386	Restaurant	5812	SAR	Low		Newport Bay	33.6291820	-117.718796
		Wasabi Japanese Restaurant	20651	Lake Forest	Drive	#A104	Lake Forest	CA	92630	Nam T. Lee	Owner	454-9958	Restaurant	5812	SAR	Low		Newport Bay	33.6622370	-117.667881
		WC Construction	21141	Canada	Road		Lake Forest	CA	92630	Todd Snider	Director	714-846-4343	Construction	1542	SAR	Low		Newport Bay	33.6554220	-117.678907
		Weinerschnitzel	20652	Lake Forest	Drive		Lake Forest	CA	92630	Edgar	Assistant Manager	583-1508	Restaurant	5812	SAR	Low		Newport Bay	33.6622640	-117.666995

City of Lake Forest
Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Wendy's Old Fashioned Hamburgers	26792	Portola	Parkway		Foothill Ranch	CA	92610	Filiberto Cielo	District Manager	597-9016 701-4962	Restaurant	5812	SAR	Low		Newport Bay	33.6783310	-117.663592
		Western Digital	26160	Enterprise	Court		Lake Forest	CA	92630				Computer equipment		SAR	Low		Newport Bay	33.6676230	-117.673106
		Yogi's Grill	22331	El Toro	Road		Lake Forest	CA	92630			855-9099	Restaurant	5812	SAR	Low		Newport Bay	33.6386270	-117.678459
		Zone In Sport Marketing/AYTF	20331	Lake Forest	Drive	#C11	Lake Forest	CA	92630			454-8577	Printing-Marketing	7389	SAR	Low		Newport Bay	33.6670600	-117.663411
		Apple Orchard Deli	9	Orchard	Road		Lake Forest	CA	92630				Restaurant	5812	SAR	Medium		Newport Bay	33.6712026	-117.671865
	05/13/10	Bayside Concrete Construction Company	20631	Canada	Road		Lake Forest	CA	92630	Kary F.Yergler	President	770-4700	Construction, concrete	1771	SAR	High	Joe Vaughan	Newport Bay	33.6625480	-117.671771
		Clark's House of Suspension	26901	Vista Terrace			Lake Forest	CA	92630			768-6261	Auto Front End Alignment	7538	SAR	Medium		Newport Bay	33.6663210	-117.66097
		Dovico's Custom Furniture Refinishing	22600	Lambert	Street		Lake Forest	CA	92630			770-0490	Paint/Coating-Furniture refinishers	2851	SAR	Medium		Newport Bay	33.6347560	-117.714547
10/22/10		E Z Lube, Inc.	26731	Rancho	Parkway		Lake Forest	CA	92630	Eric Coulter	Store Manager	465-9912	Auto repair	7549	SAR	Medium	Jian Peng	Newport Bay	33.6727690	-117.665452
		Frank's Irvine Subaru	23663	Rockfield	Blvd.		Lake Forest	CA	92630	Desiree Farey		837-3500	Auto Parking Storage Retail	7538	SAR	Medium		Newport Bay	33.6302820	-117.717102
		Happy Wok	21212	Bake	Parkway	#B	Lake Forest	CA	92630	Peter Ng	Owner	457-9313	Restaurant	5812	SAR	Medium		Newport Bay	33.6544529	-117.702777
		Impact Marketing	19781	Pauling			Lake Forest	CA	92630				Printing/Marketing		SAR	Medium		Newport Bay	33.6751750	-117.652741
		L & M Automotive	20641	Pascal	Way		Lake Forest	CA	92630	Charles & Gina Smith	Owners	770-3265	Auto repair	7538	SAR	Medium		Newport Bay	33.6621850	-117.669617
		Lake Forest Auto Repair	22741	Aspan	Street	C	Lake Forest	CA	92630	Steve Costos		380-9840	Auto repair	7538	SAR	Medium		Newport Bay	33.6313090	-117.715657
		Metropolitan Water District	20584	Bake	Parkway		Lake Forest	CA	92630			213-217-6000	Water	4941	SAR	Medium		Newport Bay	33.6615339	-117.695463
	04/13/10	Miramar Wholesale Nurseries	19480	Baker Ranch	Road		Foothill Ranch	CA	92610	Ty Hayward	Manager	951-7999	Retail nursery	0181	SAR	High		Newport Bay	33.6795413	-117.6789
		Monarch Industries/Mon Pac Industrial Supply	20722	Linear	Lane		Lake Forest	CA	92630	Amy J. Martin		460-9490	Paint/Coating Adhesives supply	5085	SAR	Medium		Newport Bay	33.6610640	-117.673323
		Nakase Brothers Nursery	20621	Lake Forest	Drive		Lake Forest	CA	92630				Wholesale nursery	0181	SAR	Medium		Newport Bay	33.6459079	-117.68845
		Paws Pet Resort	20641	Pascal	Way		Lake Forest	CA	92630	David Salbato	Contract	951-2013962	Dog Groomer	5999	SAR	Medium		Newport Bay	33.6621850	-117.669617
7/6/10		Purrfect Auto Service #17	20732	Lake Forest	Drive	#B1	Lake Forest	CA	92630	Sean Haidar John Shaw	Gen. Mgr. Manager	457-1150	Auto repair	7538	SAR	Medium	Jerry	Newport Bay	33.6454514	-117.688916
9/9/10		R & S Auto Care	20771	Bake	Parkway	#D	Lake Forest	CA	92630	Kourosh Azar	Owner	586-5333	Auto repair	7538	SAR	Medium	Jerry	Newport Bay	33.6596223	-117.699284
		The Furniture Artists	22600	Lambert	Street	G-1403	Lake Forest	CA	92630	Mark Hedges	Owner	770-8369	Paint Coatings-Furniture Refinishers	2851	SAR	Medium		Newport Bay	33.6347560	-117.714547

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Trench Shoring Co	20542	Pascal	Way		Lake Forest	CA	92630	Thomas E. Malloy		588-3966	Equipment Rental - Construction	7353	SAR	Medium		Newport Bay	33.6638329	-117.66929
		USA Express Goodyear	24561	Trabuco	Trabuco		Lake Forest	CA	92630	Roger Mattar	Manager	454-8001	Auto repair	7534	SAR	Medium		Newport Bay	33.6550820	-117.700801
		X-J Jaguar Plus	20602	Pascal	Way	#D	Lake Forest	CA	92630	Rick Mehrbrodt	Owner	855-3082	Auto repair	7538	SAR	Medium		Newport Bay	33.6628632	-117.669174
		99 Cents Only Store	23829	El Toro	Road		Lake Forest	CA	92630	Paul Ramos	Manager	597-0999	Food Retail general merchandise	5141	SDR	High		Aliso Creek	33.6167352	-117.705429
		A+ Auto Center	23141	Orange	Avenue	#L	Lake Forest	CA	92630	Behrooz-Sharif		855-8180	Auto repair	7538	SDR	High		Aliso Creek	33.6265964	-117.691718
		AAMCO	23131	Orange	Avenue		Lake Forest	CA	92630	Ken Piel		768-6993	Auto repair	7538	SDR	High		Aliso Creek	33.6229577	-117.69483
		Abel's Bakery	24601	Raymond	Way	#7	Lake Forest	CA	92630	Gerry Valdivia	Vice President	699-0930	Food Retail bakery	5461	SDR	High		Aliso Creek	33.6214000	-117.701315
		ADT Auto Service	23121	Orange	Avenue		Lake Forest	CA	92630			770-9737	Auto repair	7538	SDR	High		Aliso Creek	33.6271270	-117.690525
		Advanced Auto Repair	23211	Orange	Avenue	#H	Lake Forest	CA	92630	Juan M. Ramos	Owner	837-266	Auto Body repair	7532	SDR	High		Aliso Creek	33.6224251	-117.695193
		Advanced Body Shop	23091	Cherry	Avenue	#H	Lake Forest	CA	92630	Kareem		855-414	Auto Body repair	7538	SDR	High		Aliso Creek	33.6273380	-117.686693
		Advantage Radiator Repair	23141	Orange	Avenue	#C	Lake Forest	CA	92630	Robert Treat			Auto repair	7538	SDR	High		Aliso Creek	33.6265964	-117.691718
		Affordable Auto Center	23141	Orange	Avenue	#A & #B	Lake Forest	CA	92630	Jalal Shahravesh			Auto repair	7538	SDR	High		Aliso Creek	33.6265964	-117.691718
		Al Madani Market	24601	Raymond	Way	#13	Lake Forest	CA	92630	Imran Hossain	Owner	707-5463	Food market & food	5812	SDR	High		Aliso Creek	33.6214000	-117.701315
		All Tune and Lube	23211	Cherry	Avenue	#E	Lake Forest	CA	92630	Rigo Rodriguez	Owner	859-2600	Auto repair	7538	SDR	High		Aliso Creek	33.6259950	-117.689228
		Ameci Pizza and Pasta	23766	Mercury	Road		Lake Forest	CA	92630	Samia Ahmad		472-5466	Restaurant	5812	SDR	High		Aliso Creek	33.6258573	-117.713845
		American Automotive Center	23121	Orange	Avenue		Lake Forest	CA	92630				Auto repair	7538	SDR	High		Aliso Creek	33.6271270	-117.690525
		American Discount Tires	23121	Orange	Avenue		Lake Forest	CA	92630				Auto repair	3011	SDR	High		Aliso Creek	33.6271270	-117.690525
		American Tire & Service Co.	24421	Rockfield	Blvd.		Lake Forest	CA	92630	Chris Samaniego	Manager	581-2660	Tires/Auto repair	7538	SDR	High		Aliso Creek	33.6226879	-117.71083
		Aquatic Dreams/Saphire Pools	21035	Barclay	Lane		Lake Forest	CA	92630	Bob Grant & Kevin	Contractors	951-202-9604	Pool Cleaning Service	7389	SDR	High		Aliso Creek	33.6570710	-117.663895
		Arbys Roast Beef Restaurants #1011	23862	Bridger	Road	#A	Lake Forest	CA	92630	Marco Perez	General Manager	581-1082	Restaurant	5812	SDR	High		Aliso Creek	33.6163320	-117.707274
		Arco AM/PM	29080	Portola	Parkway		Lake Forest	CA	92630	Patrick Foley		460-0398	Gas station & Convenience store	5541	SDR	High		Aliso Creek	33.6626690	-117.653707
	02/17/2010 03/31/2010	Armstrong Garden Centers	29000	Portola	Parkway		Lake Forest	CA	92630	Ian Hydoski	Reg. Mgr.	(626) 914-1091 and (949)	Retail nursery	5261	SDR	High	Jerry	Aliso Creek	33.6631710	-117.653956

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Asia Buffet	23552	El Toro	Road		Lake Forest	CA	92630	Ho Ka Ki	Mgr	206-9988	Restaurant	5812	SDR	High		Aliso Creek	33.6206836	-117.700235
		Asia Buffet	23552	El Toro	Road		Lake Forest	CA	92630	Benjamin Josida		310-866-2516	Restaurant	5812	SDR	High		Aliso Creek	33.6206836	-117.700235
		Asiana Ranch Market	23807	El Toro	Road		Lake Forest	CA	92630	Gilbert Francisco		454-8100	Market-Food	5141	SDR	High		Aliso Creek	33.6170739	-117.705016
	2/4/2010 Re-inspected 03/04/10	AT&T	23011	El Toro	Road		Lake Forest	CA	92630	Jon Hisamoto	Property Mgr.		Utility-Telephone	4812	SDR	High	Jerry	Aliso Creek	33.6286639	-117.690636
		Atom Detailing	29400	Portola	Parkway		Foothill Ranch	CA	92610	Adam Aldantar	Owner		Vehicle detailing	7549	SDR	High		Aliso Creek	33.6614980	-117.654336
		Auto Experts	23141	Orange	Avenue	#G	Lake Forest	CA	92630	Mehrzad Sangari		457-9807	Auto Body/vehicle detailing	7538	SDR	High		Aliso Creek	33.6265964	-117.691718
		Auto Smog Test Only	23211	Cherry	Avenue	#G	Lake Forest	CA	92630	Mike Razani		472-9222	Auto repair	7538	SDR	High		Aliso Creek	33.6259950	-117.689228
		Automotriz Esquivel	25081	Front	Street		Lake Forest	CA	92630	Luis Esquivel		598-0818	Auto repair	7538	SDR	High		Aliso Creek	33.6265310	-117.692478
		Avalon Tent & Party	20111	Ellipse			Foothill Ranch	CA	92610	Corie Lovelace		855-3933	Party rentals	7999	SDR	High		Aliso Creek	33.6708127	-117.648269
		Avilas El Ranchito	24406	Muirlands	Blvd.		Lake Forest	CA	92630	Jeremy Avilas/ Sal Avila/Maria Avila		855-4989	Restaurant	5812	SDR	High		Aliso Creek	33.6278890	-117.703942
		B G Emilio's Pizza Parlor	23364	El Toro	Road		Lake Forest	CA	92630	Emil Sdao		859-9351	Restaurant	5812	SDR	High		Aliso Creek	33.6233445	-117.696924
		Bally Total Fitness/Juice Bar	23633	El Toro	Road		Lake Forest	CA	92630	Christopher Kho	General Manager	457-1185	Food Recreation, physical fitness	5812	SDR	High		Aliso Creek	33.6206310	-117.70471
		Baskin Robbins Ice Cream & Yogurt	23659	El Toro	Road		Lake Forest	CA	92630	Deloris McConnell	Business owner	837-3514	Ice cream/Food	5812	SDR	High		Aliso Creek	33.6188804	-117.702807
		Beach Cities Towing	23211	Front	Street		Lake Forest	CA	92630	Gary Hile		472-4383	Auto Parking Storage Tow yard	7549	SDR	High		Aliso Creek	33.6264524	-117.6928
		Beacon Bay Auto Wash	23602	El Toro	Road		Lake Forest	CA	92630				Car Wash	7542	SDR	High		Aliso Creek	33.6197280	-117.701411
8/4/10		Bell Tower Plaza	2406	Raymond	Way		Lake Forest	CA	92630	Youssef Abraham	Property Owner	(714) 454-2888	Property Owner and Management	6531	SDR	High	Joe Vaughan	Aliso Creek		
		Big O Tire Stores #653	23081	Orange	Avenue	#A	Lake Forest	CA	92630	John Terberg		588-0934	Tires/Auto repair	3011	SDR	High		Aliso Creek	33.6273530	-117.690693
		Big Shots Billiards Bar & Grill	23512	El Toro	Road		Lake Forest	CA	92630	Chance Betor		830-2255	Food/Bar	5812	SDR	High		Aliso Creek	33.6213599	-117.69938
		Bobby "D's"	23532	El Toro	Road		Lake Forest	CA	92630				Restaurant	5812	SDR	High		Aliso Creek	33.6210217	-117.699807
		Bob's Auto Body Shop	24953	Whisler	Drive		Lake Forest	CA	92630			830-5378	Auto Body repair	7538	SDR	High		Aliso Creek	33.6251460	-117.693861
		Boneheads Grilled Fish	23704	El Toro	Drive		Lake Forest	CA	92630				Restaurant	5812	SDR	High		Aliso Creek	33.6205341	-117.69403
		Boscoe's Sports Grill	23364	El Toro	Road		Lake Forest	CA	92630	Frank Ayala		305-2798	Restaurant	5812	SDR	High		Aliso Creek	33.6233445	-117.696924

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
9/15/10		Brake Masters	20771	Bake	Parkway		Lake Forest	CA	92630	Danny Nunez	Manager	707-0177	Auto Repair	7538	SDR	High	Joe Vaughan	Aliso Creek		
		Buchheim Properties - Home Depot Shopping Center	23647	El Toro	Road		Lake Forest	CA	92630	Greg McClelland/Kim Thompson	Property Owner	714-747-4950	Retail Property	6531	SDR	High		Aliso Creek	33.6189114	-117.702769
		Café Matinee	23532	El Toro	Road	#15	Lake Forest	CA	92630	Gus Naddour	Owner	588-7511	Restaurant	5812	SDR	High		Aliso Creek	33.6210217	-117.699807
	12/29/09	Café Rio - Lake Forest	24312	Rockfield	Blvd.		Lake Forest	CA	92630	Claudio Salomon	General Mgr.	334-9292	Restaurant	5812	SDR	High	Jerry	Aliso Creek	33.6161188	-117.703857
		Caliente Southwest Grill	22331	El Toro	Road	#B	Lake Forest	CA	92630	Heather Flanagan	Manager	472-4045	Restaurant	5812	SDR	High		Aliso Creek	33.6386270	-117.678459
		Car Test Only	23141	Orange	Avenue	#E	Lake Forest	CA	92630	Sara Nojavan		454-9676	Auto repair	7549	SDR	High		Aliso Creek	33.6265964	-117.691718
		Carl's Jr Restaurant #99	23402	El Toro	Road		Lake Forest	CA	92630	Laura McDonald		586-3931	Restaurant	5812	SDR	High		Aliso Creek	33.6224570	-117.696903
		Carmel's Restaurant	23781	El Toro	Road		Lake Forest	CA	92630	Julia Espinoza		770-7050	Restaurant	5812	SDR	High		Aliso Creek	33.6174576	-117.704547
10/22/10		Carsmetics Express Accident Repair	25252	Jeronimo	Road		Lake Forest	CA	92630	John Wilson Chris Fotiudas	Operations Manager	470-1600	Auto Body repair	7532	SDR	High	Jian Peng	Aliso Creek	33.6275098	-117.689428
10/22/10		Celebrity Cleaners	25252	Jeronimo	Road	#A	Lake Forest	CA	92630	Pinh Voung and Donald Flick Employee	Owner	859-5174	Dry Cleaners	7216	SDR	High	Jian Peng	Aliso Creek	33.6275098	-117.689428
11/8/10		Chapin Masonry	19185	Echo Pass	Road	#176	Trabuco Canyon	CA	92679			855-9004	Construction	1741	SDR	High		Aliso Creek	33.6833850	-117.630446
		Cherry Avenue Auto Clinic	23211	Cherry	Avenue	#I	Lake Forest	CA	92630	Andy Shieh		770-2639	Auto repair	7538	SDR	High		Aliso Creek	33.6259950	-117.689228
		China Buffet	23552	El Toro	Road		Lake Forest	CA	92630				Restaurant	5812	SDR	High		Aliso Creek	33.6206836	-117.700235
		Chipotle Mexican Grill	22379	El Toro	Road		Lake Forest	CA	92630	Yuri Bravo / Terry Smith	Manager / General Mgr.	830-9091	Restaurant	5812	SDR	High		Aliso Creek	33.6379890	-117.680519
		Chronic Tacos	23781	El Toro	Drive		Lake Forest	CA	92630	Rob Sleenhoff			Restaurant	5812	SDR	High	Jerry	Aliso Creek	33.6205341	-117.69403
		CMS Painting					Lake Forest	CA	92630	Cory Swedelson-Lic:773914			Painter		SDR	High		Aliso Creek	33.6469661	-117.689218
		Cycle City	24320	Swartz	Drive		Lake Forest	CA	92630	Harold & Susan Bohrer	Owners	770-6544	Motorcycle accessories/repair	5571	SDR	High		Aliso Creek	33.6155202	-117.705639
		D & G Truck Rentals	23222	Olive	Avenue		Lake Forest	CA	92630			380-3920	Auto Parking Storage Auto rental	7513	SDR	High		Aliso Creek	33.6246810	-117.690647
		Dairy Queen of Lake Forest	22331	El Toro	Road	#D	Lake Forest	CA	92630	Steve Koch	Owner	768-6983	Restaurant	5812	SDR	High		Aliso Creek	33.6386270	-117.678459
		Del Taco #136	22401	El Toro	Road		Lake Forest	CA	92630	Martin Alvarez		586-5124	Restaurant	5541	SDR	High		Aliso Creek	33.6384765	-117.67742
		Del Taco #246	22349	El Toro	Road		Lake Forest	CA	92630	Jeffrey Eichstaebt		586-3757	Restaurant	5812	SDR	High		Aliso Creek	33.6380910	-117.67927
		Deluxe Donuts	23801	El Toro	Road		Lake Forest	CA	92630	Huong Rum Bou		586-1113	Food/Donut Store	5812	SDR	High		Aliso Creek	33.6171662	-117.704903

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
	07/22/09	Denny's Restaurant	23515	El Toro	Road		Lake Forest	CA	92630			458-6000	Restaurant	5812	SDR	High	Jerry	Aliso Creek	33.6214514	-117.699608
		Denny's Restaurant	23552	El Toro	Road		Lake Forest	CA	92630	Lee Leslie		583-1464	Restaurant	5812	SDR	High		Aliso Creek	33.6206836	-117.700235
	09/25/09	Distinctive Landscape Design	23591	El Toro	Road	#167	Lake Forest	CA	92630			472-8198	Landscape Design	0781	SDR	High	Jerry	Aliso Creek	33.6212490	-117.699773
		DK's Donuts	24842	Muirlands	Blvd.		Lake Forest	CA	92630	Siphaun Ouk	Owner	581-4810	Food	5812	SDR	High		Aliso Creek	33.6226689	-117.696624
		Dream Dinners Lake Forest	22369	El Toro	Road		Lake Forest	CA	92630	Debbie Ranck	Manager	235-9371	Food	5812	SDR	High		Aliso Creek	33.6386018	-117.676532
		EGBAR Coffee Co.	21991	El Toro	Road	9	Lake Forest	CA	92630	Jeff Blackwell		461-7880	Restaurant	5812	SDR	High		Aliso Creek	33.6436020	-117.667542
10/22/10		El Paraiso Restaurant	25252	Jeronimo	Road	#B2	Lake Forest	CA	92630	Alasdelopez Haydee Gloribel Jose	Owner	770-2775	Restaurant	5812	SDR	High	Jian Peng	Aliso Creek	33.6275098	-117.689428
		El Pollo Loco	23601	El Toro	Road		Lake Forest	CA	92630	Sheila Kazimi	Owner	855-1133	Restaurant	5812	SDR	High		Aliso Creek	33.6197413	-117.701754
8/4/10		El Progresso Mexican Restaurant	24602	Raymond	Way	#D & #E	Lake Forest	CA	92630	Miguel de Jesus Gonzalez	Owner	458-3768	Restaurant	5812	SDR	High	Jerry	Aliso Creek	33.6220045	-117.701714
		El Toro Chevron Service	23891	Bridger	Road		Lake Forest	CA	92630	Fred Hatami		837-3370	Gas station	5541	SDR	High		Aliso Creek	33.6155910	-117.707504
		El Toro Gourmet Meats Fish & Deli	23522	El Toro	Road		Lake Forest	CA	92630	Robert Bacca		855-0215	Food/Market	5421	SDR	High		Aliso Creek	33.6211908	-117.699593
		El Toro Meat, Fish, & Deli	23522	El Toro	Road		Lake Forest	CA	92630	Lou Bacca, Inc.			Food Meat market	5147	SDR	High		Aliso Creek	33.6211908	-117.699593
		El Toro Muffler Brake and Hitch Co	23121	Orange	Avenue		Lake Forest	CA	92630				Auto repair	7538	SDR	High		Aliso Creek	33.6271270	-117.690525
		El Toro Ranch International Market	23807	El Toro	Road		Lake Forest	CA	92630	Amauri & Lita Nicasio	Owners	454-8100	Food/Market	5411	SDR	High		Aliso Creek	33.6170739	-117.705016
		ETS Lawnmower & Saw Co	23211	Cherry	Avenue	#O	Lake Forest	CA	92630	John Kim			Equipment repair	7699	SDR	High		Aliso Creek	33.6259950	-117.689228
		Excel Auto Care	23131	Orange	Avenue	#F	Lake Forest	CA	92630	Kourosh Danesh		452-0333	Auto repair	7538	SDR	High		Aliso Creek	33.6229577	-117.69483
		Executive Auto Electric	23141	Orange	Avenue	#F	Lake Forest	CA	92630			768-1415	Auto repair	7538	SDR	High		Aliso Creek	33.6265964	-117.691718
		Family Towing/U-Haul Co./Ladera Ranch Towing & Recovery/Mission Viejo Towing	23151	Orange	Avenue		Lake Forest	CA	92630	Shawn Sherrer/Lauro Rosas		472-8531	Auto Parking Storage Towing	7549	SDR	High		Aliso Creek	33.6252230	-117.693362
		Flame Broiler	23842	El Toro	Road	#101	Lake Forest	CA	92630	Luz Maria Navarro		380-0370	Restaurant	5812	SDR	High		Aliso Creek	33.6159320	-117.705557
	08/17/09	Foothill Animal Hospital	29040	Portola	Pkwy.		Foothill Ranch	CA	92610	Dorah Daniels	Office Mgr.	380-1255	Veterinary services	742	SDR	High	Jerry	Aliso Creek	33.6625640	-117.654332
		Freedom Village Retirement Community	23442	El Toro	Road		Lake Forest	CA	92630	Steve Ross		472-4700	Health, nursing facility	5812	SDR	High		Aliso Creek	33.6217010	-117.697202
		Fuddruckers, Inc	23621	El Toro	Road		Lake Forest	CA	92630	Chuck Miller	General Manager	830-7210	Restaurant	5812	SDR	High	Jian Peng	Aliso Creek	33.6192452	-117.702361

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
10/22/10		Fuji Grill	20702	Lake Forest	Drive	A-1	Lake Forest	CA	92630	Hendriek Chairrunas		714-671-1519	Restaurant	5812	SDR	High		Aliso Creek	33.6609770	-117.667404
		Ganahl Lumber Co	23132	Orange	Avenue		Lake Forest	CA	92630	Bill Shaw		830-3600	Construction/Retail lumber	5032	SDR	High		Aliso Creek	33.6261439	-117.690391
		Genghis Khan Peking & Mongolian Bar-B-Que	23615	El Toro	Road		Lake Forest	CA	92630				Restaurant	5812	SDR	High		Aliso Creek	33.6193940	-117.702179
		Genghis Khan Mongolian Barbeque	23615	El Toro	Road	#P	Lake Forest	CA	92630	Julie Newkam		951-8296	Restaurant	5812	SDR	High		Aliso Creek	33.6193940	-117.702179
		Golden Wrench Automotive	23091	Orange	Avenue	#A	Lake Forest	CA	92630			454-1188	Auto repair	7538	SDR	High		Aliso Creek	33.6271940	-117.690681
		Goodyear Tire Center	23211	Cherry	Avenue	#A	Lake Forest	CA	92630			829-8410	Auto-Tires	7538	SDR	High		Aliso Creek	33.6259950	-117.689228
		Guitar Center	23811	El Toro	Road	#A	Lake Forest	CA	92630	Anthony Riedelsheimer	Store manager	609-0055	Equip repair Retail musical instruments	5736	SDR	High		Aliso Creek	33.6170123	-117.705091
	12/09/09	Hierro's Market	24602	Raymond	Way	#S	Lake Forest	CA	92630	Jose Hierro	Owner	588-0241	Food market	5411	SDR	High	Jerry	Aliso Creek	33.6220045	-117.701714
		Hierro's Taqueria	24602	Raymond	Way	#G & H	Lake Forest	CA	92630	Javier Gonzalez	Owner	581-1292	Restaurant	5812	SDR	High		Aliso Creek	33.6220045	-117.701714
		Home Depot	23651	El Toro	Road		Lake Forest	CA	92630			206-0113	Building Supply - Retail	5531	SDR	High		Aliso Creek	33.6177820	-117.70576
		Honey Baked Ham Co.	23851	Bridger	Road		Lake Forest	CA	92630	Juan Chavez	Manager	Food	Eating or Drinking Establishments	5411	SDR	High		Aliso Creek	33.6161360	-117.70822
		Honeybaked Ham Co	24601	Raymond	Way	#2	Lake Forest	CA	92630	Juan Chavez	Store manager	Food	Eating or Drinking Establishments	5411	SDR	High		Aliso Creek	33.6214000	-117.701315
		Hydro-Steam - Working in the Orchard Shopping Center	23702	El Toro	Road		Lake Forest	CA	92630	Carlos Perez	Owner	951-696-3968	Carpet Cleaning-Steam Pressure Washing	7217	SDR	High		Aliso Creek	33.6179700	-117.703121
		Ichibancho Sushi Japanese Restaurant	23384	El Toro	Road		Lake Forest	CA	92630	Chai Eun Yong		855-6663	Restaurant	5812	SDR	High		Aliso Creek	33.6232480	-117.697031
	09/21/09	Jack In the Box #387	23812	El Toro	Road		Lake Forest	CA	92630	Alfred Diaz Gayle Haddad		581-2883	Restaurant	5812	SDR	High		Aliso Creek	33.6167611	-117.705043
		JMC Auto Repair & Mufflers	23211	Cherry	Avenue	#N	Lake Forest	CA	92630	Mateo C. Gonzalez	Owner	859-6826	Auto repair	7538	SDR	High		Aliso Creek	33.6259950	-117.689228
	06/23/10 Now Out of Business	Johnny Rockets	23632	El Toro	Road		Lake Forest	CA	92630	Betty Dawson			Restaurant	5812	SDR	High		Aliso Creek	33.6192554	-117.701989
		Juice It Up	22331	El Toro	Road	#C	Lake Forest	CA	92630	Aziz & Saira Sullan		651-0096	Restaurant	5812	SDR	High		Aliso Creek	33.6386270	-117.678459
		K O Automotive	23121	Orange	Avenue	#E	Lake Forest	CA	92630	Tony Padron		581-1231	Auto repair	7538	SDR	High		Aliso Creek	33.6271270	-117.690525
		Kokoro Sushi	23775	El Toro	Road	#A	Lake Forest	CA	92630			949-923-5880	Restaurant	5812	SDR	High		Aliso Creek	33.6175395	-117.704447
		La Cocina De Ricardo	23532	El Toro	Road	#11	Lake Forest	CA	92630	Mario Arias	Manager	586-1477	Restaurant	5812	SDR	High		Aliso Creek	33.6210217	-117.699807
		LA Fitness/Pulp Shop	29400	Portola	Parkway		Lake Forest	CA	92630	Reid Spiegl	Operations Manager	597-2077	Food Gymnasium	5812	SDR	High		Aliso Creek	33.6614980	-117.654336

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Laguna Hills Nursery	25290	Jeronimo	Road		Lake Forest	CA	92630	Nancy Matsuoka/Gary Matsuoka	Owners	830-5653	Retail nursery	5261	SDR	High		Aliso Creek	33.6268559	-117.689814
	07/22/10	Lake Forest Auto Care…	23211	Cherry	Avenue	#L	Lake Forest	CA	92630	Francisco Miranda		472-1001	Auto repair	7538	SDR	High		Aliso Creek	33.6259950	-117.689228
		Lake Forest Golf Center	23308	Cherry	Avenue		Lake Forest	CA	92630			859-1455	Golf courses		SDR	High		Aliso Creek	33.6236750	-117.689544
		Lamppost Pizza	22421	El Toro	Road	#M	Lake Forest	CA	92630	Rudi Dokovic		583-7111	Restaurant	5812	SDR	High		Aliso Creek	33.6383161	-117.67796
		Le Croissant de Paris	23615	El Toro	Road	#T	Lake Forest	CA	92630	Jolanda Day	Business owner	470-1530	Restaurant	5812	SDR	High		Aliso Creek	33.6193940	-117.702179
		Lido Cleaners of Lake Forest	22421	El Toro	Road	#C	Lake Forest	CA	92630	Larry Diaz	General Manager	859-3955	Dry Cleaners	7216	SDR	High		Aliso Creek	33.6383161	-117.67796
		Longs Drugs	23330	El Toro	Road		Lake Forest	CA	92630	Louis Ruelas	Store manager	830-7930	Retail drugstore	5122	SDR	High		Aliso Creek	33.6227919	-117.695468
		Lucille's Smokehouse BBQ	23760	El Toro	Road		Lake Forest	CA	92630	Javier Torres	General Manager	544-7233	Restaurant	5812	SDR	High		Aliso Creek	33.6171714	-117.704536
		Manila Foodmart	24601	Raymond	Way	#11	Lake Forest	CA	92630	Placita Vergara		916-9038	Restaurant	5812	SDR	High		Aliso Creek	33.6214000	-117.701315
		Maria Isabel Mexican Grill	23384	El Toro	Road		Lake Forest	CA	92630	Jesus Doran			Restaurant	5812	SDR	High		Aliso Creek	33.6232480	-117.697031
		Marketa Y Carniceria Latina	24601	Raymond	Way	#13	Lake Forest	CA	92630	Benigno Figueroa			Food market	5141	SDR	High		Aliso Creek	33.6214000	-117.701315
		McDonald's Restaurants	23861	Bridger	Road		Lake Forest	CA	92630	Assad Wahdat	Store manager	768-2976	Restaurant	5812	SDR	High		Aliso Creek	33.6159139	-117.707936
		Mega Burgers	24310	Swartz	Drive		Lake Forest	CA	92630	Minos Xilikakis	Owner	588-8289	Restaurant	5812	SDR	High		Aliso Creek	33.6155269	-117.705643
	02/10/10	Mercado y Carniceria Latina	24601	Raymond	Way		Lake Forest	CA	92630	Benny Figueroa	Proprietor	583-1205	Restaurant	5812	SDR	High		Aliso Creek	33.6214000	-117.701315
		Michael's Coffee House	29200	Portola	Parkway	#E	Lake Forest	CA	92630	Sokha Tauch		455-1348	Coffee/Food	5812	SDR	High		Aliso Creek	33.6619177	-117.65326
	04/01/10	Millennium 2000	23275	Guinea	Drive		Lake Forest	CA	92630	Raul/Maria Gonzales	Owners	800-996-8868, 714-321-7304 - cell, or 949	Carpet/Upholstery Steam Cleaning	7217	SDR	High	Jerry	Aliso Creek	33.6449488	-117.695309
		Minato Sushi	23505	El Toro	Road		Lake Forest	CA	92630	Sang Un Shin		472-4547	Restaurant	5812	SDR	High		Aliso Creek	33.6216157	-117.699396
10/4/2010 Re-inspection 10/06/10	05/24/10	Mobil Oil - On The Run SS #10568	22381	El Toro	Road		Lake Forest	CA	92630	Kamla Botejue	Mgr.	380-7817	Mobile Auto Car Washers	5541	SDR	High	Jerry	Aliso Creek	33.6375930	-117.680074
		Mr. Wok Restaurant	22421	El Toro	Road	#G	Lake Forest	CA	92630	Jim Siu Hy		707-0867	Restaurant	5812	SDR	High		Aliso Creek	33.6383161	-117.67796
		Mr. Wok Restaurant	23647	El Toro	Road		Lake Forest	CA	92630	Jim Siu Hy	Owner	588-1655	Restaurant	5812	SDR	High		Aliso Creek	33.6189114	-117.702769
	12/01/09	Nieves Landscape, Inc.		Tulip Avenue and Muirlands Blvd.			Lake Forest	CA	92630			(714) 640-3071 415-5300	Landscaping Service	7699	SDR	High	Jerry	Aliso Creek	33.6245398	-117.699263
		Nina's Indian Groceries & Fast Food	23532	El Toro	Road	#20	Lake Forest	CA	92630	Atul Desai	Owner	583-2789	Food/Market	5812	SDR	High		Aliso Creek	33.6210217	-117.699807

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Oami Japanese Restaurant	23532	El Toro	Road	#18	Lake Forest	CA	92630	Satoshi & Fusae Funayama	Owners	770-6147	Restaurant	5812	SDR	High		Aliso Creek	33.6210217	-117.699807
		Oeeshi Japanese Grill	23775	El Toro	Road	#A	Lake Forest	CA	92630			454-1360	Restaurant	5812	SDR	High		Aliso Creek	33.6175395	-117.704447
		Oil Pros	22365	El Toro	Road	#111	Lake Forest	CA	92630	Michael Sallus/Brian Hallas/Robert Cercio			Auto repair	7549	SDR	High		Aliso Creek	33.6387310	-117.680579
		Olamendis Mexican Grill	24288	Swartz	Drive		Lake Forest	CA	92630			949-370-5673	Restaurant	5812	SDR	High		Aliso Creek	33.6155416	-117.705652
	03/30/10	Orange County Auto Body	25081	Front	Street		Lake Forest	CA	92630	Max Gilmore	Tenant	(949) 859-7990	Auto repair	7538	SDR	High	Jerry	Aliso Creek	33.6265310	-117.692478
		Orange County Yellow Cab aka: Yellow Cab and Yellow Taxi	23182	Orange	Avenue		Lake Forest	CA	92630	Mike Nejire			Auto Parking Storage Taxis	7521 / 4121	SDR	High		Aliso Creek	33.6257700	-117.691767
		Orange Tree Cleaners	23532	El Toro	Road	#03	Lake Forest	CA	92630	George Bahou	Owner	951-4900	Dry Cleaners	7216	SDR	High		Aliso Creek	33.6210217	-117.699807
		Oscar's Garage	23091	Orange	Avenue	#4	Lake Forest	CA	92630	Oscar Alfaizo	Owner	279-4009	Auto repair	7538	SDR	High		Aliso Creek	33.6271940	-117.690681
		Outdoor Kitchen Concepts	24396	Swartz	Drive		Lake Forest	CA	92630			455-0040	Furniture-Retail	2511	SDR	High		Aliso Creek	33.6154699	-117.705618
	01/25/10	Pal's Sewing & Vacuum	24602	Raymond	Way	#A	Lake Forest	CA	92630	Bernard Rissen	Owner	581-1800	Retail - Repair		SDR	High	Jerry	Aliso Creek		
		Panda Express	23582	El Toro	Road		Lake Forest	CA	92630				Restaurant	5812	SDR	High		Aliso Creek	33.6198470	-117.700795
		Papa John's Pizza	22335	El Toro	Road		Lake Forest	CA	92630	Martin Chapa	Manager	951-7272	Restaurant	5812	SDR	High		Aliso Creek	33.6386390	-117.679101
		Pei Wei Asian Diner	23632	El Toro	Road		Lake Forest	CA	92630	Yalin Gizara	Manager	860-2001	Restaurant	5812	SDR	High		Aliso Creek	33.6192554	-117.701989
		Pet Depot	22485	El Toro	Road	#A	Lake Forest	CA	92630	Paul & Julie Walfield	Owners	951-7387	Pet store	5999	SDR	High		Aliso Creek	33.6375340	-117.679498
		Petco	24332	Rockfield	Blvd.		Lake Forest	CA	92630	Kent Elmore		859-6590	Retail pet supplies	5999	SDR	High		Aliso Creek	33.6163257	-117.704064
		Pizza Bite	25262	Jeronimo	Road	#B	Lake Forest	CA	92630	Ahmad Bahmani		830-8200	Restaurant	5812	SDR	High		Aliso Creek	33.6278859	-117.690429
		Pizza Hut # 705443	22481	El Toro	Road	#A	Lake Forest	CA	92630	Vincente Ibarra	General Manager	454-2400	Restaurant	5812	SDR	High		Aliso Creek	33.6625480	-117.671771
		Portola Towing	23211	Olive	Avenue		Lake Forest	CA	92630	Portola Towing/Refused to give name		450-3889	Towing Service	7549	SDR	High		Aliso Creek	33.6257760	-117.691032
		Prime Time Steaks & Sports	23532	El Toro	Road	#24	Lake Forest	CA	92630	Bill & Susan Vaughan	Owners	597-8994	Restaurant	5812	SDR	High		Aliso Creek	33.6210217	-117.699807
		Procare/Union 76	22391	El Toro	Road		Lake Forest	CA	92630	Ed Urban	Service Manager	770-2576	Gas station & auto repair	5541	SDR	High		Aliso Creek	33.6370320	-117.680809
7/15/10		Q Painting	19111	Jasper Hill	Road		Trabuco Canyon	CA	92679	Eugene Kim, Daniel Sungho Ha, Min Seol Lim	Resident, Contractor	714-890-3777 or 949-367-1180	Painting Company		SDR	High		Aliso Creek		
		Ramon's Mexican Restaurant	21991	El Toro	Road	7	Lake Forest	CA	92630	Ray Hernandez	Owner	206-9072	Restaurant		SDR	High		Aliso Creek	33.6436020	-117.667542

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Ran Zan Restaurant	23808	Mercury	Road		Lake Forest	CA	92630	Junichi Tachibana		829-0114	Restaurant	5812	SDR	High		Aliso Creek	33.6258573	-117.713845
		Roundtable Pizza	27472	Portola	Parkway		Foothill Ranch	CA	92610	Andrea Cantrell / Davood Jafari	Manager Owner	716-4222	Restaurant	5812	SDR	High		Aliso Creek	33.6707470	-117.652266
		Royal Donuts & Bagels	24356	Rockfield	Blvd.		Lake Forest	CA	92630	Davith Khor		581-3970	Food	5812	SDR	High		Aliso Creek	33.6165740	-117.704313
		S & S Auto Service Inc	23081	Orange	Avenue		Lake Forest	CA	92630	Gary Smith		770-6995	Auto repair	7538	SDR	High		Aliso Creek	33.6273530	-117.690693
		S.V. Landscape Corp	950	Pine - West			Unknown	CA		Salvador Vargas	Owner	714-448-3374	Landscape Contractor	782	SDR	High		Aliso Creek	36.7782610	-119.417932
		Sams Photo	22353	El Toro	Road		Lake Forest	CA	92630	Peter Kim		837-7872	Photo Shop	7384	SDR	High		Aliso Creek	33.6386141	-117.676083
		Scarantino's Italian Inn	23862	Bridger	Road		Lake Forest	CA	92630	Sal Scarantino		768-8757	Restaurant	5812	SDR	High		Aliso Creek	33.6163320	-117.707274
		Sierra Pool & Spa Service	23811	Bridger	Road	#103	Lake Forest	CA	92630	Mike Robinson	Owner	951-1220	Pool Maintenance	7389	SDR	High		Aliso Creek	33.6164910	-117.708791
		Simone Donuts & Croissants	22367	El Toro	Road		Lake Forest	CA	92630	Tich Ha	Owner	586-5487	Restaurant	5812	SDR	High		Aliso Creek	33.6386033	-117.676476
7/22/10		Sizzler Restaurants	23501	El Toro	Road		Lake Forest	CA	92630	~~Gary & Sally Myers~~ Danny Rosa	Multi-unit mgr.	768-7340	Restaurant	5812	SDR	High	Jerry	Aliso Creek	33.6216814	-117.699312
		Sizzler Restaurants #409	23501	El Toro	Road		Lake Forest	CA	92630	Eduardo G.		768-7340	Restaurant	5812	SDR	High		Aliso Creek	33.6216814	-117.699312
		Smart & Final #383 Stores Corp	23631	El Toro	Road	#A	Lake Forest	CA	92630	Mike McCammon	Manager	770-8281	Retail market	5411	SDR	High		Aliso Creek	33.6189972	-117.702664
	03/30/10	South County Auto Body	25081	Front	Street		Lake Forest	CA	92630	Richard Susag & Max Gilmore		859-7990	Auto Body repair	7532	SDR	High	Jerry	Aliso Creek	33.6265310	-117.692478
		Southern Exposure Landscape Management/Bruce Wayne Co	25151	Front	Street		Lake Forest	CA	92630	Bruce Dye		581-9474	Landscape	0781	SDR	High		Aliso Creek	33.6262280	-117.692107
		Starbucks Coffee	22331	El Toro	Road	#A	Lake Forest	CA	92630	Rachel Tennyson	Manager	380-7808	Coffee/Food	5812	SDR	High		Aliso Creek	33.6386270	-117.678459
		Starbucks Coffee	23841	El Toro	Road		Lake Forest	CA	92630	Lily Bijdam	Store manager	770-9419	Coffee/Food	5812	SDR	High		Aliso Creek	33.6165504	-117.705654
		Staybridge Suites	2	Orchard	Road		Lake Forest	CA	92630				Hotel-Lodging food		SDR	High		Aliso Creek	33.6714060	-117.670666
		Subway Inside Chevron Station	23891	Bridger	Road		Lake Forest	CA	92630	Fred Hatami		837-3370	Auto-Convenience	5812	SDR	High		Aliso Creek	33.6155910	-117.707504
		Subway Sandwiches & Salads	22481	El Toro	Road	#B	Lake Forest	CA	92630			837-3391	Restaurant	5812	SDR	High		Aliso Creek	33.6375997	-117.679417
		Subway Sandwiches & Salads	23342	El Toro	Road		Lake Forest	CA	92630	Sanjit K. Cheema	Owner	597-8292	Restaurant	5812	SDR	High		Aliso Creek	33.6235070	-117.696745
		Sunrise Construction	20899	Canterbury			Lake Forest	CA	92630	Steve Monsanto, Informant 949-510-2951		714-287-5431	Construction		SDR	High		Aliso Creek	33.6377512	-117.63397
		Sycamore One Hour Cleaners	22345	El Toro	Road		Lake Forest	CA	92630	Tae Hong	Owner	830-3313	Dry Cleaners	7216	SDR	High		Aliso Creek	33.6386193	-117.675857

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
8/4/201		Taqueria Don Victor	24602	Raymond	Way	#G & #H	Lake Forest	CA	92630	Juan C. Sanchez	Owner	581-2129	Restaurant	5812	SDR	High	Joe Vaughan	Aliso Creek	33.6216814	-117.699312
	08/19/09	Taste of Asia	22371	El Toro	Road	#A	Lake Forest	CA	92630	Michael Liu	Owner	380-8869	Restaurant	5812	SDR	High	Jerry	Aliso Creek	33.6386002	-117.676588
		Texas Babeque & Grill	24601	Raymond	Way	#2	Lake Forest	CA	92630	Waleid Sadduddin		770-4444	Restaurant	5812	SDR	High		Aliso Creek	33.6214000	-117.701315
		The Drive-Brew Coffee Co	21991	El Toro	Road	#8	Lake Forest	CA	92630	John & Tonya Nicholas		461-7880	Coffee/Food	5812	SDR	High		Aliso Creek	33.6436020	-117.667542
		The Pub	23552	El Toro	Road	#A	Lake Forest	CA	92630	Tim Morris	Owner	206-0744	Bar/Food	5813	SDR	High		Aliso Creek	33.6206836	-117.700235
		Tommy's Hamburgers	24280	Swartz	Drive		Lake Forest	CA	92630	B&B Contractors, Inc. DBA: The		909-627-3651	Restaurant	5812	SDR	High		Aliso Creek	33.6155469	-117.705656
		Touch of Thai	24602	Raymond	Way		Lake Forest	CA	92630	Banchongnit Srisuwan		462-9057	Restaurant	5812	SDR	High		Aliso Creek	33.6220045	-117.701714
		Trabuco Animal Hospital, Inc.	22421	El Toro	Road	#B	Lake Forest	CA	92630	David M. Bahou, DVM		581-6622	Veterinary services	0742	SDR	High		Aliso Creek	33.6383161	-117.67796
		Tula Markets, Inc.	23344	El Toro	Road		Lake Forest	CA	92630	Tim & Josefina Rosnagle	Owners	244-0748	Grocery & food	5411	SDR	High		Aliso Creek	33.6234832	-117.696771
	06/28/10	U S Smog	20732	Lake Forest	Drive	B4	Lake Forest	CA	92630	John Nguyen	Technician	334-0402	Auto repair	7538	SDR	High	Joe Vaughan	Newport Bay		
		U-Haul Co	23211	Olive	Avenue		Lake Forest	CA	92630	Jim Jarvis		768-4681	Equipment, Rental Repair	7538	SDR	High		Aliso Creek	33.6257760	-117.691032
		US Automotive	23091	Orange	Avenue	#C & D	Lake Forest	CA	92630	Morey Mohseni	General Manager	588-8885	Auto repair	7538	SDR	High		Aliso Creek	33.6271940	-117.690681
		USA Petroleum Corp.	23852	El Toro	Road		Lake Forest	CA	92630	Brian Belew	Manager	380-9280	Gas station	5541	SDR	High		Aliso Creek	33.6160764	-117.705896
		U-Store Self-Storage	25142	Front	Street		Lake Forest	CA	92630	Valerie/Michael Collar	Mgrs.	458-0111	Auto Parking Storage Self-Storage Units	4225	SDR	High		Aliso Creek	33.6256160	-117.692332
		Valley Building Materials	23271	Cherry	Avenue		Lake Forest	CA	92630	John Kolendich		855-9994	Retail lumber	5032	SDR	High		Aliso Creek	33.6254650	-117.689464
		Valuclean Cleaners	29200	Portola	Parkway	#C	Lake Forest	CA	92630	Dan Miller		462-9870	Dry Cleaners	7216	SDR	High		Aliso Creek	33.6619177	-117.65326
		Vons	22475	El Toro	Road		Lake Forest	CA	92630	Garth Small	Store Manager	588-8986	Grocery/Food	5411	SDR	high		Aliso Creek	33.6376954	-117.67929
		Wachovia Bank	23731	El Toro	Road		Lake Forest	CA	92630				Bank	6021	SDR	High		Aliso Creek	33.6181406	-117.703712
		Wendy's	23572	El Toro	Road		Lake Forest	CA	92630				Restaurant	5812	SDR	High		Aliso Creek	33.6202882	-117.700727
	05/13/10	Westrust (Orchard at Saddleback)	23706	El Toro	Road	#D	Lake Forest	CA	92630	Julie Capretta	General Manager	981-8900	Property Management		SDR	High				
		WR Lane Construction & Engineering	23651	El Toro	Road		Lake Forest	CA	92630	Duke Conlon	Superintendent	951-817-8730	Construction	1542	SDR	High		Aliso Creek	33.6177820	-117.70576
		Yogi's Cyber Hub	24872	Muirlands	Blvd.		Lake Forest	CA	92630				Food	5812	SDR	High		Aliso Creek	33.6223029	-117.696287

City of Lake Forest
Water Quality Inventory Commercial

Inspection Date 2010-11	Inspection Date 2009-10	Business Name	Street No.	Street	Street Suffix	Suite	City	State	Zip	Contact Name	Title	Phone	Business Description	SIC	Region	Priority	Inspector	Watershed	bg_lat	bg_long
		Yolanda's Restaurant	27663	El Toro	Road		Lake Forest	CA	92630				Restaurant	5812	SDR	High		Aliso Creek	33.6476063	-117.662678
		Crown One Hour Cleaners	24601	Raymond	Way	#15	Lake Forest	CA	92630	Nori Daneshfar	Business owner	855-3148	Dry Cleaners	7216	SDR	High		Aliso Creek	33.6214000	-117.701315
	7/23/2009 07/29/09 07/30/09 07/31/09	El Toro Animal Hospital	23162	El Toro Frontage	Road		Lake Forest	CA	92630	Fred Saad	D.V.M.	837-5222	Veterinary services	0742	SDR	High		Aliso Creek	33.6252799	-117.694532
		Office Depot Inc	23631	El Toro	Road	#B	Lake Forest	CA	92630	Jesse Sanders	Store Manager	588-8100	Retail office supplies	5112	SDR	High		Aliso Creek	33.6189972	-117.702664
		Omar's Birds	23507	El Toro	Road		Lake Forest	CA	92630	Mr. Omar			Pet store	5999	SDR	High		Aliso Creek	33.6215828	-117.699439
		Sav-On Drugs Inc	24372	Rockfield	Blvd.		Lake Forest	CA	92630	Tom Friend	Market Manager	830-5600	Retail pharmacy	5122	SDR	High		Aliso Creek	33.6167395	-117.704479
		Spic & Span Drycleaning	23374	El Toro	Road		Lake Forest	CA	92630	Tony Merciyan	Owner	951-2744	Dry Cleaners	7216	SDR	High		Aliso Creek	33.6232963	-117.696978
		Stater Brothers Market #142	22351	El Toro	Road		Lake Forest	CA	92630	Mark Avalos		581-3440	Grocery	5411	SDR	High		Aliso Creek	33.6384970	-117.67998
		Barnhoorn's Auto Care	23211	Cherry	Avenue	#O	Lake Forest	CA	92630	Leo Barnhoorn		770-8895	Auto repair	7538	SDR			Aliso Creek	33.6259950	-117.689228
	5/17/2010 Now Out of Business	Flo-Ject	20	Icon			Foothill Ranch	CA	92610	Ben Du and Lizette DuPrihus	Owner	584-0504	Diaphragm Pumps			High	Joe Vaughan	Aliso Creek		
	04/08/10	VACANT - Inspection requested by Property Owner	21962	El Toro	Road		Lake Forest	CA	92630	Rosemarie Haynes	Property Owner					High	Jerry	Aliso Creek	33.6233059	-117.696967
		Patton Development (David) & SilverOak Capital Corp. (Jim)		TRACT Map 16886, BK 612-Pg 571, Parcel 6&7			Lake Forest	CA	92630	David M. Patton & Jim Montgomery		852-0266 and 477-9550	Land Development	6552					33.6469661	-117.689218

City of Lake Forest HOA Inventory

MAP#	ASSOCIATION	SUB	PROPERTY MANAGEMENT CO.	ADDRESS	CITY / STATE	ZIP	CONTACT	TELEPHONE & EMAIL
1	Lake Forest I Community Assoc.		Professional Community Management	22921 Ridge Route Drive	Lake Forest, CA	92630	Cynthia Valdez	837-6100
2	Redevelopment Project Area							
3	Prothero Mobile Home Park			24701 Raymond Way	Lake Forest, CA	92630	Mike Lemp, Manager Roger Ricky, Pres.	768-1511 457-1092
4	Gates HOA			23971 Larkwood Lane	Lake Forest, CA	92630	Mark Neible, President	380-1667 neibel@cox.net
5	Freedom Village			23442 El Toro Road	Lake Forest, CA	92630	Steve Ross, Exec. Director	472-4700
6	Kimberly Gardens Mobile Owner's Assoc.		Village Way Management, Inc.	24922 Muirlands Blvd., Suite 47	Lake Forest, CA	92630	Ms. Billie Martin, President	583-7153
7	El Toro Mobile Estates HOA		Meadows Management Realty	190 Newport Center Drive, Suite 100 Newport Beach, CA 92660-6906 - (Mgt). 24291 Murilands Blvd. Lake Forest, CA 92630 - (Park)	Newport Beach, CA Lake Forest, CA	92660-6906 92630	Marilyn Macy-Green Debbie (at the park)	644-1860 472-5021 770-9531
8	Aliso Creek Villas HOA		Transpacific Companies	15661 Redhill Avenue, #201	Tustin, CA	92780-7328	Pam Hunt, Prop. Mgr.	714-285-2626, Ext. 214 pam.hunt@transpacificinc.com
9	The Shores at Lake Forest		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Dan Teter/Karen Piper	768-7261 465-2427
10	Forest Gardens Mobile Home Community			24001 Muirlands Blvd.	Lake Forest, CA	92630	Barry and Delores Graeler	830-5800
11	Prairie Ridge HOA	II	Lake Forest II Master HOA	24752 Toledo Way	Lake Forest, CA	92630	Joanne Burrows, GM	586-0860, Ext. 11 jburrows@lf2.org
12	Vista Verde HOA		CMC Association Management	23675 Birtcher Drive	Lake Forest, CA	92630	Lorna McKee, Property Manager	951-5400, Ext. 37

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Numerical by HOA Map #

City of Lake Forest HOA Inventory

MAP#	ASSOCIATION	SUB	PROPERTY MANAGEMENT CO.	ADDRESS	CITY / STATE	ZIP	CONTACT	TELEPHONE & EMAIL
13	Lake Forest Keys HOA	II		19 Hammond Street, Suite 503	Irvine, CA	92618	John Dennis	951-4792
14	Serrano Woods HOA	II	Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Amethyst Manley	465-2200, Ext. 2273
15	Lakeside Park HOA	II	So. Cal. Property Management	P.O. Box 10549	Costa Mesa, CA	92627	Jeremy Mahler	872-0950 jmahler@socalpropertymanagement.net
16	The Oaks HOA	II	Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Lyn Wyatt , Manager Silvia Manduijano, Asst. Manager	465-2257 465-2268
17	Lake Forest Townhouses Assoc.		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Arielle Thomas, (949) 465-2260	465-2260 athomas@pcminternet.com
18	Rancho Viejo HOA		Accell Property Management	23046 Avenida de la Carlota Suite 700	Laguna Hills, CA	92653	Claudia Barbieri	581-4988
18^2	Rancho Viejo II		Litehouse Community Management	30251 Golden Lantern - PMB 247, Suite E.	Laguna Niguel, CA	92677	Carol Lite, Prop. Mgr. and George Brown	249-5552 litehousecl@sbcglobal.net
19	Carefree El Toro Owners Assoc.		Western Property Management	23282 Mill Creek Drive, Suite 320	Laguna Hills, CA	92653	Susanne Castro or Lindsey Griffith	334-6025 334-6033 - fax smcwpms@aol.com or lindseywpms@yahoo.com
20	Viejo West Condominiums		Huntington West Properties, Inc	P. O. Box 1098	Westminster, CA	92684	Orlando Cruz	714-891-1522, Ext. 228
21	Bennett Ranch HOA		Progressive Community Management	27405 Puerta Real, Suite 300	Mission Viejo, CA	92691	Eli Perez	582-7770, Ext. 134 elip@progressivecm.com
22	Woodside-El Toro HOA		Ammcor Management	970 Calle Amanecer, Suite A	San Clemente, CA	92673	Dan Buckner	661-7767, Ext. 32
23	Aliso Park Estates HOA		Total Property Management	2 Corporate Park, Suite 200	Irvine, CA	92606	Pam Pudil, Prop. Mgr.	261-8282 ppudil@totalpm.com
24	Cedar Glen HOA		Seabreeze Property Management	39 Argonaut, Suite 100	Aliso Viejo, CA	92656	Megan Hewitt	855-1800, Ext. 216 mhewitt@seabreezemgmt.com

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City of Lake Forest HOA Inventory

MAP#	ASSOCIATION	SUB	PROPERTY MANAGEMENT CO.	ADDRESS	CITY / STATE	ZIP	CONTACT	TELEPHONE & EMAIL
25	Hillsford HOA		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Rick Zarski, Prop. Mgr.	768-7261 rzarski@pcm.com
26	Grandview Crest HOA		Total Property Management		Irvine, CA	92606	Michelle Benson	261-8282 mbenson@totalpm.com
27	Concord Crossing Community Assoc.		Classic Property Management	16470 Bake Parkway	Irvine, CA	92618	Eva Mason, Prop. Mgr.	716-3998, Ext. 22 e.mason@classicpropertymgmt.com
28	White Oak Condos HOA		Amber Property Management	29875 Sienna Parkway	Ladera Ranch, CA	92694	Angie Ghobrial	429-5831
29	Le Parc Town-Homeowners Assoc.		Action Property Management	29-B Technology Drive, Suite 100	Irvine, CA	92618	Don Chesemore, Assoc. Mgr.	450-0202, Ext. 335
30	Bench Mark Villas HOA		Best Community Management	Home: 24001 Muirlands Blvd. Mailing: FedEx Boxes - 23785 El Toro Road	Lake Forest, CA	92630	Patricia Gummeson 770-0186	pgummeson@bcm1.net
31	Old Trabuco Road Highlands HOA		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Doug Ward Autumn Metula	768-7261
32	Rancho de los Alisos HOA		Seabreeze Property Management	39 Argonaut, Suite 100	Aliso Viejo, CA	92656	Holly Hudgins	855-1800, Ext. 9026 hhudgins@seabreezemanagement.com.
33	Los Alisos Skyview HOA		Laguna Shores Management	26131 Marguerite Pkwy. Suite D	Mission Viejo, CA	92691	Marie Whitehouse	643-1600, Ext. 15
34	Lake Forest Drive Assoc.		Action Property Management	29-B Technology Drive, Suite 100	Irvine, CA	92618	Dawn English	450-0202 denglish@actionlife.com
35	Lake Forest II Master HOA	II	Lake Forest II Master HOA	24752 Toledo Way	Lake Forest, CA	92630	Joanne Burrows, GM	586-0860, Ext. 11 jburrows@lf2.org

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City of Lake Forest HOA Inventory

MAP#	ASSOCIATION	SUB	PROPERTY MANAGEMENT CO.	ADDRESS	CITY / STATE	ZIP	CONTACT	TELEPHONE & EMAIL
36	Citrus Lane HOA		Cardinal Property Management, Inc.	1290 N. Hancock Street, Suite 103	Anaheim, CA	92807	Kelly Bunnell, Prop. Mgr.	714-779-1300 kbunnell@cardinal-online.com
37	Serrano Highlands Master HOA		Transpacific Companies	15661 Redhill Avenue, #201	Tustin, CA	92780-7328	Pam Hunt, Prop. Mgr. - Landscape Issues (Peachwood, Peachwood and Trabuco Rds) - Call Helasco at 949-279-1479	714-285-2626, Ext. 214
38	Serrano Sandcastle HOA		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Debbie Stinson, Prop. Mgr.	465-2271 (Direct) 768-7261 dstinson@pcminternet.com
39	Vista Del Flores HOA	S	Optimum Property Management	17731 Irvine Blvd. Suite 212	Tustin, CA	92780	Maria Rubalcava, Prop. Mgr.	714-508-9070, Ext. 293 mrubalcava@optimumpm.com
40	Willow-Glen Serrano HOA	S	Keystone Pacific Property Management	16845 Von Karman, Suite 200	Irvine, CA	92606	Pam Poliakoff, Prop. Mgr. Amber Greenberg, Assistant	838-3282 838-3264 ppoliakoff@keystonepacific.com
41	Carriage Hill Serrano HOA	S	TPMS Tritz Professional Mgmt Service	1536 E. Warner Avenue, Suite .A	Santa Ana, CA	92705	Rob Tritz	714-557-5900
42	San Remo Rec reation Center		Trans Pacific	15661 Redhill Avenue, #201	Tustin, CA	92780	Pam Hunt, Prop. Mgr.	714-285-2626, Ext. 214 pam.hunt@transpacificinc.com
42	San Remo Villas HOA	S	Trans Pacific	15661 Redhill Avenue, #201	Tustin, CA	92780	Pam Hunt, Prop. Mgr.	714-285-2626, Ext. 214 pam.hunt@transpacificinc.com
43	Hillview Serrano HOA	S	TPMS Tritz Professional Mgmt Service	1536 E. Warner Ave., Suite A	Santa Ana, CA	92705	Rob Tritz, Prop. Mgr.	714-557-5900 rtritz@tpms.net
44	Tierra Vista HOA	S	Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Linda Tietz, Prop. Mgr.	465-2228 (Direct) ltietz@pcminternet.com
45	Smoke Tree Serrano HOA	S	Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Arielle Thomas, Prop. Mgr.	465-2200 (Direct) athomas@pcminternet.com

Revised: 11/08/10
Numerical by HOA Map #

City of Lake Forest HOA Inventory

MAP#	ASSOCIATION	SUB	PROPERTY MANAGEMENT CO.	ADDRESS	CITY / STATE	ZIP	CONTACT	TELEPHONE & EMAIL
46	Serrano Park Community Assoc.		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Patty LaBar, Prop. Mgr.	465-2483 (Direct) 768-7261, plabar@pcminternet.com
47A	Pacific Commercentre (Trabuco Road to Cape May Place - formerly Tasmin Sea)		Makena Properties	26522 La Alameda, Suite 285	Mission Viejo, CA	92691	Paula Halverson - Maint. Issues Emily Christiensen - Accounting	683-8784 348-3333 paula@makenaprop.com
47B	Pacific Commercentre (Crescent Bay Dr. to Dimension Drive)		Makena Properties	26522 La Alameda, Suite 285	Mission Viejo, CA	92691	Paula Halverson - Maint. Issues Emily Christiensen - Accounting	683-8784 348-3333
48	Autumnwood HOA		TSG Management Company	27129 Calle Arroyo, Suite 1802	San Juan Capistrano, CA	92675	George Gustave	481-0555 george@tsgindepentent.com
49	Dimension Business Park Association		**Note: Association no longer owns property that they maintain. Association sold property near Serrano Creek to adjacent property owner and new businesses each maintain their own.**	26211 Dimension Drive	Lake Forest, CA	92630	Charron Seitz at DW Seitz Printing	859-5325
50	Whispering Hills HOA		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Courtney Bueller	465-2448 (Direct) 768-7261
51	Meadowood HOA		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Katia Lanata	465-2423 (Direct) 768-7261 klanata@pcminternet.com
52	Classics at Lake Forest HOA		Seabreeze Property Management	39 Argonaut, Suite 100	Aliso Viejo, CA	92656	Stephanie Doyle	855-1800, Ext. 217 sdoyle@seabreezemgmt.com
53	~~Vintage Woods Apartments~~							**NO LONGER A HOA - #53 ON THE HOA MAP IS BLANK**

Revised: 11/08/10

Numerical by HOA Map #

City of Lake Forest HOA Inventory

MAP#	ASSOCIATION	SUB	PROPERTY MANAGEMENT CO.	ADDRESS	CITY / STATE	ZIP	CONTACT	TELEPHONE & EMAIL
54	San Rita Ridge HOA		Cardinal Property Management, Inc.	1290 N. Hancock Street, Suite 103	Anaheim, CA	92807	Kelly Bunnell, Prop. Mgr.	714-779-1300 kbunnell@cardinal-online.com
55	Mariposa Maintenance Assoc.		TSG Management Company	27129 Calle Arroyo, Suite 1802	San Juan Capistrano, CA	92675	George Gustave	481-0555, Ext. 2
56	Montbury HOA		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Debbie Evans, COO Kim Makaipo, Com. Mgr.	768-7261 465-2272
57	Sycamore Creek HOA		Keystone Pacific Property Management	16845 Von Karman, Suite 200	Irvine, CA	92606	Wail Poon	833-2600, Ext. 236
58	Normandale to Audubon/ El Toro Rd. to Vintage Wy			26981 Parkmount Circle	Lake Forest, CA	92630	Gene Sansone	768-0948
59	Normandale Community Assoc.		~~Walters Management~~ **NO CURRENT INFORMATION AVAILABLE**	~~17300 Red Hill Ave., Suite 210~~	~~Irvine, CA~~	~~92614~~	~~Barbara Peters, Mgr.~~	~~752-2225~~
60	Wind Rows HOA		Seabreeze Property Management	39 Argonaut, Suite 100	Aliso Viejo, CA	92656	Diana Chia, Mgr.	855-1800 or 672-9016 direct dchia@seebreezemgmt.com
61	Pheasant Creek-El Toro Condo Assoc.		Amber Property Management Company	29875 Sienna Parkway	Ladera Ranch, CA	92694	Pamela Morris and Dan Hensin	429-5831
62	River Oaks Apartments			20702 El Toro Road	Lake Forest, CA	92630	Virginia Brunt Toni Ibabaza - (pronounced - E-wa-wa-za)	855-3111

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Numerical by HOA Map #

City of Lake Forest HOA Inventory

MAP#	ASSOCIATION	SUB	PROPERTY MANAGEMENT CO.	ADDRESS	CITY / STATE	ZIP	CONTACT	TELEPHONE & EMAIL
63	El Toro Materials (formerly Baker Ranch 1 & 3) Shea Baker Ranch Joint Venture (formerly Baker Ranch 1& 3)		Bayshore Holding	4299 MacArthur Blvd., Suite 100	Newport Beach, CA	92660	Christopher O. Veitch	475-0890
64	Baker Ranch Area I Assoc.		Management Company	P.O. Box 11285	Costa Mesa, CA	92627	Candace Cox	645-1451
65	Baker Ranch Area II Assoc		Management Company	P.O. Box 11285	Costa Mesa, CA	92627	Candace Cox	645-1451
66	Forest Creek HOA	II	Lake Forest II Master HOA	24752 Toledo Way	Lake Forest, CA	92630	Joanne Burrows, GM	586-0860, Ext. 11 jburrows@lf2.org
67	Parkwood Estates HOA	II	Lake Forest II Master HOA	24752 Toledo Way	Lake Forest, CA	92630	Joanne Burrows, GM	586-0860, Ext. 11 jburrows@lf2.org
68	Lake Park West HOA	II	Lake Forest II Master HOA	24752 Toledo Way	Lake Forest, CA	92630	Joanne Burrows, GM	586-0860, Ext. 11 jburrows@lf2.org
69	Serrano Ridge HOA	II	Lake Forest II Master HOA	24752 Toledo Way	Lake Forest, CA	92630	Joanne Burrows, GM	586-0860, Ext. 11 jburrows@lf2.org
70	Indian Hills HOA	II	Lake Forest II Master HOA	24752 Toledo Way	Lake Forest, CA	92630	Joanne Burrows, GM	586-0860, Ext. 11 jburrows@lf2.org
71	The Woods HOA	II	Lake Forest II Master HOA	24752 Toledo Way	Lake Forest, CA	92630	Joanne Burrows, GM	586-0860, Ext. 11 jburrows@lf2.org

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Numerical by HOA Map #

City of Lake Forest HOA Inventory

MAP#	ASSOCIATION	SUB	PROPERTY MANAGEMENT CO.	ADDRESS	CITY / STATE	ZIP	CONTACT	TELEPHONE & EMAIL
72	Parkwood Estates II HOA	II	Lake Forest II Master HOA	24752 Toledo Way	Lake Forest, CA	92630	Joanne Burrows, GM	586-0860, Ext. 11 jburrows@lf2.org
73	Park Place Ranchwood HOA	II	Lake Forest II Master HOA	24752 Toledo Way	Lake Forest, CA	92630	Joanne Burrows, GM	586-0860, Ext. 11 jburrows@lf2.org
74	Foothill Ranch Maintenance Corporation		Merit Property Management, Inc.	1 Polaris Way, Suite 100	Aliso Viejo, CA	92656	LeeAnn Boswell, Sr. Community Mgr.	448-6000, Ext. 6224 lboswell@meritpm.com
75	Foothill Business Assoc.		Merit Property Management, Inc.	1 Polaris Way, Suite 100	Aliso Viejo, CA	92656	Patty Ayres	448-6000, Ext. 6139
76	Brittany HOA		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Bill Scales, General Mgr.	768-7261
77	Montecido HOA		Accell Property Mgmt.	23046 Avenida de la Carlota Suite 700	Laguna Hills, CA	92653	Amanda McGinley	581-4988
78	Portola Hills II HOA		Village Way Management, Inc.	P.O. Box 4708	Irvine, CA	92618	Steve Humphrey	450-1515, Ext. 215 Fax: 585-0146 humphrey@villageway.com
79	Salerno HOA		Merit Property Management, Inc.	1 Polaris Way, Suite 100	Aliso Viejo, CA	92656	Kelly McCormack	448-6000 , Ext. 6070
80	Foothill Antibes HOA		Merit Property Management, Inc.	1 Polaris Way, Suite 100	Aliso Viejo, CA	92656	LeeAnn Boswell	448-6000, Ext. 6224
81	Vineyards HOA		Action Property Management	29-B Technology Drive, Suite 100	Irvine, CA	92618	Susan Mangen	450-0202

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Numerical by HOA Map #

City of Lake Forest HOA Inventory

MAP#	ASSOCIATION	SUB	PROPERTY MANAGEMENT CO.	ADDRESS	CITY / STATE	ZIP	CONTACT	TELEPHONE & EMAIL
82	Canyon View Condominium Assoc.		Rightway Property Management	2102 Business Center Drive, Suite 130	Irvine, CA	92612	Ms. Pat Harmon, Property Mgr. Liz Cauley	858-1055 Pharmon@rightwaypm.com or lcauley@rightwaypm.com
83	Canyon Rim Townhomes Assoc.		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Courtney Buehler, Sr. Community Mgr.	465-2422 (Direct) 768-7261 cbuehler@pcminternet.com
84	Portola Hills I HOA		Professional Community Management	23726 Birtcher Drive	Lake Forest, CA	92630	Dana Davidson, Dir. Of Community Mgmt.	465-2266 ddavidson@pcminternet.com
85	Olen Corporation		Olen Commercial Realty Corporation	7 Corporate Plaza	Newport Beach, CA	92660	Jodi Nygard	916-6200 jnygard@olenproperties.com
86	Bella Palermo Condominium Association		TSG Management Company	27129 Calle Arroyo, Suite 1802	San Juan Capistrano, CA	92675	Tina Gustave	481-0556 Gen Info 388-5873 Cust Svs. After Hrs. 481-0555
Not on the HOA Map	Villorio HOA		Rightway Property Management	30422 Esperanza	Rancho Santa Margarita	92688	Pat Harmon (female) Liz Cauley	858-1055 pharmon@rightwaypm.com or lcauley@rightwaypm.com
Not on the HOA Map	Lyon Parkside Assoc.		Huntington West Properties, Inc	P. O. Box 1098	Westminster, CA	92684	Bonnie Atkinson	714-891-1522, Ext. 229

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Numerical by HOA Map #

City of Lake Forest HOA Inventory

MAP#	ASSOCIATION	SUB	PROPERTY MANAGEMENT CO.	ADDRESS	CITY / STATE	ZIP	CONTACT	TELEPHONE & EMAIL
Not on the HOA Map	MSGW Pacific Commercentre Assoc. (Enterprise Business Park)		Investors Property Service	27042 Towne Centre Drive, Suite 250	Foothill Ranch, CA	92610	John Bruton, Sr. Property Supervisor	900-6160 john.bruton@investorshq.com
			NOTE: BLANK space in the Property Management column indicates the HOA is SELF-MANAGED	Sub II = Neighborhoods of Lake Forest II Association Master HOA , Sun and Sail Club			Sub = Associations of Serrano Highlands	

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Exhibit A-9.II

Industrial/Commercial, Residential, and HOA/CIA BMP Factsheets

IC1. AIRPLANE MAINTENANCE AND REPAIR

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	x

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Utilize dry cleanup methods (i.e. sweeping), try to avoid washing down work areas.
- Use drip pans and/or containers where needed.
- Dispose of all waste products properly and recycle whenever possible.
- Paint signs near outdoor drains and post signs at sinks to remind employees and others not to pour wastes down storm drains.
- Clean storm drain inlet(s) on a regular schedule and after large storms.
- Store idle equipment under cover.
- Keep equipment clean and free of excessive oil and grease.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Only conduct maintenance or repair work in designated areas.
    - Conduct maintenance and repair work in a designated area with spill containment.
    - Construct a berm or intercept trench at doorways to prevent stormwater runoff as well as the runon of uncontaminated stormwater from adjacent areas.

2. Utilize dry cleanup methods (i.e. sweeping), try to avoid washing down work areas.
    - If work areas are washed and if discharge to the sanitary sewer is allowed treat water with an appropriate treatment device (e.g. clarifier) before discharging. DO NOT discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
    - If discharge to the sanitary sewer is not permitted, pump water to a tank and dispose of properly.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

3. Use drip pans and/or containers where needed. Keep a drip pan or container under the airplane when unclipping hoses, unscrewing filters, or conducting other maintenance and repair work that may result in fluids dripping or splattering onto the shop floor or ground.

4. Inspect airplanes for leaks.
    - Inspect incoming airplanes for leaks.
    - Inspect airplanes for leaks during regular maintenance; keep records.

5. Dispose of all waste products properly and recycle whenever possible.
    - Promptly transfer waste materials to the proper waste or recycling drums.
    - Store waste and/or recycling drums in designated areas with spill containment.
    - Separate hazardous and non-hazardous wastes, do not mix used oil and solvents and keep chlorinated solvents separate from non-chlorinated solvents.
    - Recycle greases, used oils, oil filters, antifreeze, cleaning solutions, batteries, and hydraulic and transmission fluids whenever possible.

6. Paint signs near outdoor drains and post signs at sinks to remind employees and others not to pour wastes down storm drains.
7. Clean storm drain inlet(s) on a regular schedule and after large storms.
8. Store idle equipment under cover.
9. Keep equipment clean and free of excessive oil and grease.
10. Completely drain oil filters before recycling/disposal.
11. Use non-toxic chemicals for maintenance when possible.
12. Minimize the use of solvents.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

For additional information contact:

City of Lake Forest
Public Works Department
25550 Commercentre Drive, Suite 100
Lake Forest, CA 92630
(949) 461-3480

http://www.lakeforestca.gov

IC2. ANIMAL HANDLING AREAS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Use dry cleaning methods to clean animal handling areas regularly.
- Properly collect and dispose of water when water is used for cleaning.
- Prevent animals from moving away from controlled areas where BMPs are in use (e.g. fencing, leashing, etc.)
- Clean storm drain inlet(s) on a regular schedule and after large storms.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	x
Metals	
Bacteria	x
Oil & Grease	
Organics & Toxicants	
Pesticides	
Oxygen Demanding	x

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Use dry cleaning methods to clean animal handling areas regularly.
    - Sweeping animal handling areas is encouraged over other methods.
    - Properly dispose of droppings, uneaten food, and other potential contaminants.
2. If water is used for cleaning:
    - Do not discharge wash water to storm water drains or other receiving waters.
    - Wash water should be collected and pumped to the sanitary sewer, do not allow wash water to enter storm drains. DO NOT discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
3. Keep animals in paved and covered areas, if feasible.
4. If keeping animals in covered areas is not feasible, cover the ground with vegetation or some other type of ground cover such as mulch.
5. Prevent animals from moving away from controlled areas where BMPs are in use (e.g. fencing, leashing, etc.).

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
   - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
   - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
   - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

For additional information contact:

City of Lake Forest
Public Works Department
25550 Commercentre Drive, Suite 100
Lake Forest, CA 92630
(949) 461-3480

http://www.lakeforestca.gov

IC3. BUILDING MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	x
Oil & Grease	
Organics & Toxicants	
Pesticides	
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Properly collect and dispose of water when pressure washing buildings, rooftops, and other large objects.
- Properly prepare work area before conducting building maintenance.
- Properly clean and dispose of equipment and wastes used and generated during building maintenance.
- Store toxic material under cover when not in use and during precipitation events.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Properly collect and dispose of water when pressure washing buildings, rooftops, and other large objects.
    - If pressure washing where the surrounding area is paved, use a water collection device that enables collection of wash water and associated solids. Use a sump pump, wet vacuum or similarly effective device to collect the runoff and loose materials. Dispose of the collected runoff and solids properly.
    - If pressure washing on a landscaped area (with or without soap), runoff must be dispersed as sheet flow as much as possible, rather than as a concentrated stream. The wash runoff must remain on the landscaping and not drain to pavement.
2. Properly prepare work area before conducting building maintenance.
    - Use ground or drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of collected material daily.
    - Use a ground cloth or oversized tub for activities such as paint mixing and tool cleaning.
    -

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

3. Properly clean and dispose of equipment and wastes used and generated during building maintenance.
    - Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be dumped into a sanitary sewer drain. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.
    - Properly dispose of wash water, sweepings, and sediments.
    - Properly store equipment, chemicals, and wastes.
    - Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain.

    OPTIONAL:
    - Recycle residual paints, solvents, lumber, and other materials to the maximum extent practicable
4. Employ soil erosion and stabilization techniques when exposing large areas of soil.
    - Confine excavated materials to pervious surfaces away from storm drain inlets, sidewalks, pavement, and ditches. Material must be covered if rain is expected.
    - Use chemical stabilization or geosynthetics to stabilize bare ground surfaces.
5. Store toxic material under cover when not in use and during precipitation events.
6. Properly dispose of fluids from air conditioning, cooling tower, and condensate drains.
7. Regularly inspect air emission control equipment under AQMD permit.
8. Switch to non-toxic chemicals for maintenance when possible.
    - If cleaning agents are used, select biodegradable products whenever feasible
    - Consider using a waterless and non-toxic chemical cleaning method for graffiti removal (e.g. gels or spray compounds).
9. Use chemicals that can be recycled.
    - Buy recycled products to the maximum extent practicable

10. Maintenance of portable toilets.
    - Inspect portable toilets frequently (daily during work week) for leaks and have the units serviced and sanitized at time intervals that will maintain sanitary conditions of each toilet (typically weekly).
    - A licensed waste collector should service all portable toilets;
    - Suppliers should carry bleach for disinfection in the event of a spill or leak.
    - Properly store (cover) and handle chemical materials.
    - Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read “No Dumping Drains to Ocean”.

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

For additional information contact:

City of Lake Forest
Public Works Department
25550 Commercentre Drive, Suite 100
Lake Forest, CA 92630
(949) 461-3480

http://www.ci.lake-forest.ca.us

IC4. CARPET CLEANING

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Discharge wash water to sink, toilet, or other drain connected to the sanitary sewer system.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Targeted Constituents	
Sediment	x
Nutrients	
Floatable Materials	
Metals	
Bacteria	
Oil & Grease	
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

Discharge wash water to sink, toilet, or other drain connected to the sanitary sewer system.

- Never discharge wash water to a street, gutter, parking lot, or storm drain. Either:
  empty the spent cleaning fluid tank into a utility sink or other indoor sewer connection at the service provider's home base or
  arrange with the customer to discharge into a toilet or utility sink on their premises.
- Check the local wastewater authority's requirements for discharge.
- Filter wash water before discharging to the sanitary sewer to avoid clogging pipes. Dispose of filtered material in the garbage, provided the carpet was not contaminated with hazardous materials.
- These guidelines apply even to cleaning products labeled "nontoxic" and "biodegradable."

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

Water Quality Guidelines for Carpet Cleaning Activities. Orange County Stormwater Program. Prepared by Watershed & Coastal Resources Division. January 2002. On-line: http://www.ocwatersheds.com/PublicEducation/pe_brochures_carpet.asp

Orange County Stormwater Program. 2002. Water Quality Guidelines for Carpet Cleaning Activities. March.

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IC5. CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	
Floatable Materials	
Metals	
Bacteria	
Oil & Grease	
Organics & Toxicants	
Pesticides	
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Properly collect and dispose of process water.
- Protect production, pouring, and cutting areas from stormwater runoff and runon.
- Sweep the production, pouring, and cutting areas regularly to collect loose materials.
- Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
- Use drip pans or absorbent material to catch drips from paving equipment, including equipment that is not in use.
- Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc.
- To avoid runoff, use only as much water as necessary for dust control.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Properly collect and dispose of process water.
   Discharge process water from production, pouring, equipment cleaning, and cutting activities to a sump, process water treatment or recycling system, or sanitary sewer system if allowed.
2. Protect production, pouring, and cutting areas from stormwater runoff and runon. Construct a berm around the perimeter of the area to prevent the runon of uncontaminated stormwater from adjacent areas as well as runoff of stormwater.
3. Sweep the production, pouring, and cutting areas regularly to collect loose materials.
   - DO NOT hose down area to a storm drain or conveyance ditch.
   - Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.
4. Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
5. Use drip pans or absorbent material to catch drips from paving equipment, including equipment that is not in use. Dispose of collected material and absorbents properly.
6. Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc.
   - Clean covers regularly.
   - Leave covers in place until job is complete and clean any debris for proper disposal.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

7. Conduct surface repair work during dry weather to prevent contamination from contacting stormwater runoff.
8. To avoid runoff, use only as much water as necessary for dust control.
9. Do not allow concrete and concrete pumping vehicles to discharge concrete, slurry, or rinse water into gutters, storm drains, or drainage ditches.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

Los Angeles County Stormwater Quality. Public Agency Activities Model Program. On-line: http://ladpw.org/wmd/npdes/public_TC.cfm

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998. (Revised February 2002 by the California Coastal Commission)

Santa Clara Valley Urban Runoff Pollution Prevention Program. Maintenance Best Management Practices for the Construction Industry. Brochures: Landscaping, Gardening, and Pool; Roadwork and Paving; and Fresh Concrete and Mortar Application. June 2001.

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IC6. CONTAMINATED OR ERODIBLE SURFACES AREAS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Protect contaminated or erodible surface areas from rainfall and wind dispersal.
- Protect materials from stormwater runoff and runon.
- Conduct routine maintenance.

Stencil storm drains

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Protect contaminated or erodible surface areas from rainfall and wind dispersal though one or more of the following:
    - Preserve natural vegetation.
    - Re-plant or landscaping bare ground surfaces.
    - Use chemical stabilization or geosynthetics to stabilize bare ground surfaces.
    - Remove contaminated soils.
    - Cover materials with a fixed roof or a temporary waterproof covering made of polyethylene, polypropylene or hypalon. Keep covers in place at all times when work is not occurring. If areas are so large that they cannot feasibly be covered and contained, implement erosion control practices at the perimeter of the area and at any catch basins to prevent dispersion of the stockpiled material.
2. Protect materials from stormwater runoff and runon. Construct a berm around the perimeter of the area to prevent the runon of uncontaminated stormwater from adjacent areas as well as runoff of stormwater from the material.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

3. Minimize pooling of water. Paved areas should be sloped in a manner that minimizes the pooling of water in the area. A minimum slope of 1.5 percent is recommended.
4. Conduct routine maintenance. Sweep paved areas regularly to collect loose materials.
    - DO NOT hose down area to a storm drain or conveyance ditch.
    - Properly dispose of waste materials.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

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IC7. LANDSCAPE MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Properly store and dispose of gardening wastes.
- Use mulch or other erosion control measures on exposed soils.
- Properly manage irrigation and runoff.
- Properly store and dispose of chemicals.
- Properly manage pesticide and herbicide use.
- Properly manage fertilizer use.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	x
Metals	
Bacteria	x
Oil & Grease	
Organics & Toxicants	
Pesticides	x
Oxygen Demanding	x

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Take steps to reduce landscape maintenance requirements.
    - Where feasible, retain and/or plant native vegetation with features that are determined to be beneficial. Native vegetation usually requires less maintenance than planting new vegetation.
    - When planting or replanting consider using low water use flowers, trees, shrubs, and groundcovers.
    - Consider alternative landscaping techniques such as naturescaping and xeriscaping.
2. Properly store and dispose of gardening wastes.
    - Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage at a permitted landfill or by composting.
    - Do not dispose of gardening wastes in streets, waterways, or storm drainage systems.
    - Place temporarily stockpiled material away from watercourses and storm drain inlets, and berm and/or cover.
3. Use mulch or other erosion control measures on exposed soils.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

4. Properly manage irrigation and runoff.
    - Irrigate slowly or pulse irrigate so the infiltration rate of the soil is not exceeded.
    - Inspect irrigation system regularly for leaks and to ensure that excessive runoff is not occurring.
    - If re-claimed water is used for irrigation, ensure that there is no runoff from the landscaped area(s).
    - If bailing of muddy water is required (e.g. when repairing a water line leak), do not put it in the storm drain; pour over landscaped areas.
    - Use automatic timers to minimize runoff.
    - Use popup sprinkler heads in areas with a lot of activity or where pipes may be broken. Consider the use of mechanisms that reduce water flow to broken sprinkler heads.
5. Properly store and dispose of chemicals.
    - Implement storage requirements for pesticide products with guidance from the local fire department and/or County Agricultural Commissioner.
    - Provide secondary containment for chemical storage.
    - Dispose of empty containers according to the instructions on the container label.
    - Triple rinse containers and use rinse water as product.
6. Properly manage pesticide and herbicide use.
    - Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of pesticides and herbicides and training of applicators and pest control advisors.
    - Follow manufacturers' recommendations and label directions.
    - Use pesticides only if there is an actual pest problem (not on a regular preventative schedule). When applicable use less toxic pesticides that will do the job. Avoid use of copper-based pesticides if possible. Use the minimum amount of chemicals needed for the job.
    - Do not apply pesticides if rain is expected or if wind speeds are above 5 mph.
    - Do not mix or prepare pesticides for application near storm drains. Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the targeted pest.
    - Whenever possible, use mechanical methods of vegetation removal rather than applying herbicides. Use hand weeding where practical.
    - Do not apply any chemicals directly to surface waters, unless the application is approved and permitted by the state. Do not spray pesticides within 100 feet of open waters.
    - Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.
    - When conducting mechanical or manual weed control, avoid loosening the soil, which could lead to erosion.
    - Purchase only the amount of pesticide that you can reasonably use in a given time period.
    - Careful soil mixing and layering techniques using a topsoil mix or composted organic material can be used as an effective measure to reduce herbicide use and watering.
7. Properly manage fertilizer use.
    - Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers.
    - Follow manufacturers' recommendations and label directions.
    - Employ techniques to minimize off-target application (e.g. spray drift) of fertilizer, including consideration of alternative application techniques. Calibrate fertilizer distributors to avoid excessive application.
    - Periodically test soils for determining proper fertilizer use.
    - Fertilizers should be worked into the soil rather than dumped or broadcast onto the surface.
    - Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
    - Use slow release fertilizers whenever possible to minimize leaching

8. Incorporate the following integrated pest management techniques where appropriate:
    - Mulching can be used to prevent weeds where turf is absent.
    - Remove insects by hand and place in soapy water or vegetable oil. Alternatively, remove insects with water or vacuum them off the plants.
    - Use species-specific traps (e.g. pheromone-based traps or colored sticky cards).
    - Sprinkle the ground surface with abrasive diatomaceous earth to prevent infestations by soft-bodied insects and slugs. Slugs also can be trapped in small cups filled with beer that are set in the ground so the slugs can get in easily.
    - In cases where microscopic parasites, such as bacteria and fungi, are causing damage to plants, the affected plant material can be removed and disposed of (pruning equipment should be disinfected with bleach to prevent spreading the disease organism).
    - Small mammals and birds can be excluded using fences, netting, and tree trunk guards.
    - Promote beneficial organisms, such as bats, birds, green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seedhead weevils, and spiders that prey on detrimental pest species.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Educate and train employees on the use of pesticides and pesticide application techniques. Only employees properly trained to use pesticides can apply them.
3. Train and encourage employees to use integrated pest management techniques.
4. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
5. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
6. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

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King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

Water Quality Handbook for Nurseries. Oklahoma Cooperative Extension Service. Division of Agricultural Sciences and Natural Resources. Oklahoma State University. E-951. September 1999.

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IC8. NURSERIES AND GREENHOUSES

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Properly manage irrigation and runoff.
- Properly store and dispose of gardening wastes.
- Properly store and dispose of chemicals.
- Properly manage pesticide and herbicide use.
- Properly manage fertilizer use.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	x
Metals	
Bacteria	x
Oil & Grease	
Organics & Toxicants	
Pesticides	x
Oxygen Demanding	x

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Properly manage irrigation and runoff.
    - Utilize intermittent (pulse) irrigation or drip irrigation so the infiltration rate of the soil is not exceeded.
    - Regularly inspect irrigation systems for leaks and to ensure that excessive runoff is not occurring.
    - Convert paved or bare soil areas to vegetation that will retard runoff (turf grasses or other comparable plant materials) wherever possible.
    - Group plants with similar water needs together to improve irrigation efficiency.
    - Establish plant buffer zones between production areas and ditches, creeks, ponds, lakes, or wetlands.
    - Install and use moisture sensors and automatic sprinklers for more accurate scheduling of irrigation.
    - Recycle runoff, blend with fresh water as necessary.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

2. Properly store and dispose of gardening wastes.
    - Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage at a permitted landfill or by composting.
    - Do not dispose of gardening wastes in streets, waterways, or storm drainage systems.
    - Place temporarily stockpiled material away from watercourses and storm drain inlets, and berm and/or cover.
3. Properly store and dispose of chemicals.
    - Implement storage requirements for pesticide products with guidance from the local fire department and/or County Agricultural Commissioner.
    - Provide secondary containment for chemical storage.
    - Dispose of empty containers according to the instructions on the container label.
    - Triple rinse containers and use rinse water as product.
4. Properly manage pesticide and herbicide use.
    - Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of pesticides and herbicides and training of applicators and pest control advisors.
    - Follow manufacturers' recommendations and label directions.
    - Use pesticides only if there is an actual pest problem (not on a regular preventative schedule). When applicable use less toxic pesticides that will do the job. Avoid use of copper-based pesticides if possible. Use the minimum amount of chemicals needed for the job.
    - Do not apply pesticides if rain is expected or if wind speeds are above 5 mph.
    - Do not mix or prepare pesticides for application near storm drains. Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the pest.
    - Do not mix, prepare, or spray pesticides within 100 feet of any well, stream, or pond.
    - Do not get rid of unused pesticides by washing them down drains.
    - Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.
    - Sweep pavement and sidewalk if chemicals are spilled on these surfaces before applying irrigation water
    - Careful soil mixing and layering techniques using a topsoil mix or composted organic material can be used as an effective measure to reduce herbicide use and watering.
5. Properly manage fertilizer use.
    - Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers.
    - Follow manufacturers' recommendations and label directions.
    - Employ techniques to minimize off-target application (e.g. spray drift) of fertilizer, including consideration of alternative application techniques. Calibrate fertilizer distributors to avoid excessive application.
    - Periodically test soils for determining proper fertilizer use.
    - Whenever feasible, spread out applications of controlled-release fertilizers and use split applications of soluble fertilizers over the growing season.
    - Work fertilizers into the soil rather than dumping or broadcasting them.
    - Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
    - Transition from the use of soluble fertilizers to controlled-release fertilizers. Use slow release fertilizers whenever possible to minimize leaching.
    - Reduce or eliminate routine leaching of crops.

6. Incorporate the following integrated pest management techniques where appropriate:
    - Remove insects by hand and place in soapy water or vegetable oil. Alternatively, remove insects with water or vacuum them off the plants.
    - Use species-specific traps (e.g. pheromone-based traps or colored sticky cards).
    - Sprinkle the ground surface with abrasive diatomaceous earth to prevent infestations by soft-bodied insects and slugs. Slugs also can be trapped in small cups filled with beer that are set in the ground so the slugs can get in easily.
    - In cases where microscopic parasites, such as bacteria and fungi, are causing damage to plants, the affected plant material can be removed and disposed of (pruning equipment should be disinfected with bleach to prevent spreading the disease organism).
    - Small mammals and birds can be excluded using fences, netting, and tree trunk guards.
    - Promote beneficial organisms, such as bats, birds, green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seedhead weevils, and spiders that prey on detrimental pest species.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Educate and train employees on the use of pesticides and pesticide application techniques.
3. Train and encourage maintenance crews to use integrated pest management techniques.
4. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
5. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
6. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

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California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

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IC9. OUTDOOR DRAINAGE FROM INDOOR AREAS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Utilize dry cleanup methods such as sweeping for removal of litter and debris, or use of rags and absorbents for leaks and spills.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	X
Nutrients	X
Floatable Materials	X
Metals	X
Bacteria	X
Oil & Grease	X
Organics & Toxicants	X
Pesticides	X
Oxygen Demanding	X

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Design operating areas to minimize stormwater exposure.
    - Construct a berm or intercept trench at doorways.
    - Install a collection system for pretreatment and sewer disposal under permit.
2. Utilize dry cleanup methods such as sweeping for removal of litter and debris, or use of rags and absorbents for leaks and spills. Properly dispose of collected wastes.
3. Use secondary containment or protective barriers for indoor liquid storage.
4. Install a fire sprinkler containment system for hazardous material storage.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

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IC10. OUTDOOR LOADING/UNLOADING OF MATERIALS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Park vehicles and conduct loading/unloading only in designated loading/unloading areas so that spills or leaks can be contained.
- Clean loading/unloading areas regularly to remove potential sources of pollutants.
- Reduce exposure of materials to rain.
- Use drip pans underneath hose and pipe connections and other leak-prone spots during liquid transfer operations, and when making and breaking connections.
- Inspect equipment regularly.
- If possible, conduct loading and unloading in dry weather.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Properly design loading/unloading areas to prevent storm water runon, runoff of spills, etc.
    - Grade and/or berm the area to prevent runon.
    - Position roof downspouts to direct stormwater away from the area.
    - Grade and/or berm the loading/unloading area to a drain that is connected to a dead-end.
    - The area where truck transfers take place should be paved. If the liquid is reactive with the asphalt, Portland cement should be used to pave the area.
    - Avoid placing loading/unloading areas near storm drains.
2. Park vehicles and conduct loading/unloading only in designated loading/unloading areas so that spills or leaks can be contained.
3. Clean loading/unloading areas regularly to remove potential sources of pollutants. This includes outside areas that are regularly covered by containers or other materials.
4. Reduce exposure of materials to rain.
    - Cover the loading/unloading areas.
    - If a cover is unfeasible, use overhangs, or seals or door skirts to enclose areas.
5. Use drip pans underneath hose and pipe connections and other leak-prone spots during liquid transfer operations, and when making and breaking connections.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

6. Inspect equipment regularly
    - Designate a responsible party to check under delivery vehicles for leaking fluids, spilled materials, debris, or other foreign materials.
    - Check loading/unloading equipment regularly for leaks.
7. If possible, conduct loading and unloading in dry weather.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Train employees on the proper techniques used during liquid transfers to avoid leaks and spills.
4. Train forklift operators on the proper loading and unloading procedures.
5. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
6. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

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IC11. OUTDOOR PROCESS EQUIPMENT OPERATIONS AND MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Conduct activities indoors and/or under covered areas
- Inspect equipment regularly.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Alter activities to prevent exposure of pollutants to stormwater.
    - Perform activities during dry periods.
    - Move activities indoors.
    - Replace toxic materials with benign materials.
2. Cover process equipment/area with a permanent roof.
3. Design process area to prevent stormwater runon.
    - Grade and/or berm the area to prevent runon.
    - Position roof downspouts to direct stormwater away from the area.
4. Design process area to contain spills.
    - Place equipment on an impervious surface, or install a drip pan under potential leak points.
    - Construct a berm around the process equipment to contain spills.
    - Install drains connected to the public sewer or the facility's process wastewater system within these contained areas. DO NOT discharge to a public sewer until contacting the local sewer authority to find out if pretreatment is required. If discharge to the sanitary sewer is not allowed, pump water to a tank and dispose of properly.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

5. Inspect equipment regularly.
    - Conduct regular and frequent inspection of equipment for leaks, malfunctions, staining on and around equipment, and other evidence of leaks.
    - Develop a standard methodology for reporting inspection results.
    - Develop a procedure for taking action on items in the report, responding to leaks, cleaning up spills, and completing repairs to prevent future leaks.
6. If possible, eliminate or reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous material:
    - Use non-caustic detergents instead of caustic cleaning for parts cleaning.
    - Use a water-based cleaning service and have tank cleaned. Use detergent-based or water-based cleaning systems in place of organic solvent degreasers.
    - Replace chlorinated organic solvents with non-chlorinated solvents. Non-chlorinated solvents like kerosene or mineral spirits are less toxic and less expensive to dispose of properly. Check list of active ingredients to see whether it contains chlorinated solvents.
    - Choose cleaning agents that can be recycled.
7. Recycled wastes whenever possible
    - Recycling is always preferable to disposal of unwanted materials.
    - Separate wastes for easier recycling. Keep hazardous and non-hazardous wastes separate, do not mix used oil and solvents, and keep chlorinated solvents separate from non-chlorinated solvents.
    - Label and track the recycling of waste material (e.g. used oil, spent solvents, batteries). Purchase recycled products to support the market for recycled materials.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

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IC12. OUTDOOR STORAGE OF RAW MATERIALS, PRODUCTS, AND CONTAINERS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Store materials indoors, if feasible.
- Store materials on paved or impervious surfaces.
- Protect materials stored outside from rainfall and wind dispersal.
- Protect materials stored outside from stormwater runon.
- Properly store and handle chemical materials.
- Keep outdoor storage containers in good condition.
- Conduct regular inspections of storage areas.
- If drums are stored in an area where unauthorized persons may gain access secure them in such a manner as to prevent accidental spillage, pilferage, or any unauthorized use.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Store materials indoors, if feasible.
2. Store materials on paved or impervious surfaces.
3. Protect materials stored outside from rainfall and wind dispersal.
    - Cover materials with a fixed roof or a temporary waterproof covering made of polyethylene, polypropylene, or hypalon.
    - Keep covers in place at all times when work is not occurring.
    - If areas are so large that they cannot feasibly be covered and contained, implement erosion control practices at the perimeter of the area and at any catch basins to prevent dispersion of the stockpiled material.
4. Protect materials stored outside from stormwater runon. Construct a berm around the perimeter of the material storage area to prevent the runon of uncontaminated stormwater from adjacent areas as well as runoff of stormwater from the material.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

5. Minimize pooling of water. Slope paved areas to minimize the pooling of water on the site, particularly with materials that may leach pollutants into stormwater and/or groundwater, such as compost, logs, and wood chips. A minimum slope of 1.5 percent is recommended.
6. All materials stored outside should have a secondary containment system.
    - Surround storage tanks with a berm or other secondary containment system.
    - Slope the area inside the berm to a drain.
    - Drain liquids to the sanitary sewer if available.
    - DO NOT discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required. If discharge to the sanitary sewer is not allowed, pump water to a tank and dispose of properly.
    - Pass accumulated stormwater in petroleum storage areas through an oil/water separator.
7. Properly store and handle chemical materials.
    - Designate a secure material storage area that is paved with Portland cement concrete, free of cracks and gaps, and impervious in order to contain leaks and spills.
    - Do not store chemicals, drums, or bagged materials directly on the ground. Place these items in secondary containers.
    - Liquid materials should be stored in UL approved double walled tanks or surrounded by a curb or dike to provide the volume to contain 10 percent of the volume of all the containers or 110 percent of the volume of the largest container, whichever is greater.
    - Keep chemicals in their original containers, if feasible, and keep them well labeled.
8. Keep outdoor storage containers in good condition.
    - Keep storage areas clean and dry.
    - Sweep and maintain routes to and from storage areas.
9. Conduct regular inspections of storage areas.
    - Check for external corrosion of material containers, structural failures, spills and overfills due to operator error, failure of piping system, etc.
    - Inspect tank foundations, connections, coatings, tank walls, and piping system.
    - Look for corrosion, leaks, cracks, scratches, and other physical damage that may weaken tanks or container systems.
10. If drums are stored in an area where unauthorized persons may gain access secure them in such a manner as to prevent accidental spillage, pilferage, or any unauthorized use.
11. Storage of portable toilets
    - Clean the portable toilets preferably at sanitation district facilities
    - Remove paper trash before washing.
    - Drain wash water to the sanitary sewer or to a holding tank.
    - Maintain wash area pavement in good condition and sloped to a grated floor drain.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Train forklift operators on the proper loading and unloading procedures.
4. Establish a regular training schedule, train all new employees, and conduct annual refresher training.

5. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read “No Dumping Drains to Ocean”.

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

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IC13. OVER WATER ACTIVITIES

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	x

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Move maintenance and repair activities on-shore, if feasible.
- Use ground cloths and/or secondary containment when painting boats on land.
- Shelter any blasting and spray painting activities.
- Post signs to indicate proper use and disposal of residual paints, rags, used oil, and other engine fluids.
- Keep boat motors well-tuned to prevent fuel and lubricant leaks.
- Recycle used motor oil, diesel oil, and other fluids and parts whenever possible.
- Maintain a clean working environment.
- Properly dispose of bilge water, ballast water, and wastewater.

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Move maintenance and repair activities on-shore if feasible.
    - Perform paint and solvent mixing, fuel mixing, and similar handling of liquids on-shore, to avoid spillage directly to surface water bodies.
    - Major hull resurfacing should occur on land.
2. Use ground cloths and/or secondary containment when painting boats on land.
3. Shelter any blasting and spray painting activities.
    - Hang wind-blocking tarps to prevent blasting dust and overspray from escaping.
    - Do not conduct these activities when wind conditions are such that containment is rendered ineffective.
4. Post signs to indicate proper use and disposal of residual paints, rags, used oil, and other engine fluids.
5. Boats with inboard engines should have oil absorption pads in bilge areas that are changed when no longer useful or at least once a year.
6. Keep boat motors well-tuned to prevent fuel and lubricant leaks.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

7. Recycle used motor oil, diesel oil, and other fluids and parts whenever possible.
8. Maintain a clean working environment.
    - Utilize dry cleaning methods (e.g. sweeping). If washing is unavoidable, collect wash water for treatment and/or proper disposal.
    - Vacuum loose paint chips and paint dust to prevent paint and other chemical substances from entering waters.
    - Properly dispose of surface chips, used blasting sand, residual paints, and other materials. Use temporary storage containment that is not exposed to rain.
9. Properly dispose of bilge water, ballast water, and wastewater.
    - Collect bilge and ballast water that has an oily sheen for proper disposal.
    - Collect and properly dispose of wash water from washing painted boat hulls.
    - Pump bilge water into storage tanks on shore for analysis, treatment and proper disposal.
    - DO NOT discharge treated or untreated sewage from vessels to harbors.
    - Empty portable toilets into approved shore side waste handling facilities and MSDs should be discharged into approved pump out stations.
    - Use as fine a filter as is practical on the ballast water intake ports to eliminate as many organisms and as much particulate matter as possible.
    - Carry out physical or chemical sterilization or neutralization of ballast water *in situ*, and subsequent neutralization of the sterilant, if required, before discharge.
    - Dump estuarine or harbor ballast water at sea and take in fresh high salinity water to eliminate both pollutants and estuarine organisms.
10. Minimize impacts of cleaning products.
    - Clean parts without using solvents whenever possible.
    - Use nontoxic chemicals that do not harm humans or aquatic life.
    - Use phosphate-free and biodegradable detergents for hull washing.
    - Choose cleaning agents that can be recycled.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

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Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

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IC14. PAINTING, FINISHING, AND COATINGS OF VEHICLES, BOATS, BUILDINGS, AND EQUIPMENT

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.
The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Use drop/ground cloths.
- Shelter any blasting and spray painting activities.
- Maintain a clean working environment.
- Cover and seal nearby storm drain inlets.
- Properly clean, store, and dispose of painting, finishing, and coating materials.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Use drop/ground cloths.
    - Underneath outdoor painting, scraping, and sandblasting work.
    - Underneath outdoor mixing of paints, solvents, and tool cleaning.
2. Shelter any blasting and spray painting activities.
    - Hang wind-blocking tarps to prevent sand blasting dust and overspray from escaping.
    - Do not conduct these activities when wind conditions are such that containment is ineffective.
    - Do not conduct these activities over open water.
3. Maintain a clean working environment.
    - Utilize dry cleaning methods (e.g. sweeping). If washing is unavoidable, collect wash water for treatment and/or proper disposal.
    - Vacuum loose paint chips and paint dust to prevent discharges
    - Properly dispose of surface chips, used blasting sand, residual paints, and other materials. Use temporary storage containment that is not exposed to rain.
    -

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

4. Cover and seal nearby storm drain inlets.
    - Cover and seal nearby storm drain inlets with waterproof material, mesh, or other runoff control device.
    - Leave covers in place until job is complete.
    - Clean covers daily and remove any debris for proper disposal.
5. Properly clean, store, and dispose of painting, finishing, and coating materials.
    - Do not dispose of toxic substances or liquid wastes on the pavement, ground, or storm drain.
    - Cover materials with a temporary waterproof covering made of polyethylene, polypropylene or hypalon.
    - Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be poured into a sanitary sewer drain.
    - Clean paint brushes and tools covered with non-water-based paints, finishes, or other materials such that used solvents (e.g., paint thinner, turpentine, etc.) can be collected for recycling or proper disposal.
    - Recycle paint, paint thinner, solvents, and other recyclable materials whenever possible.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

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King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

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IC15. PARKING AND STORAGE AREA MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Conduct regular cleaning.
- Properly collect and dispose of wash water.
- Keep the parking and storage areas clean and orderly.
- Use absorbent materials and properly dispose of them when cleaning heavy oily deposits.
- When conducting surface repair work cover materials and clean paintbrushes and tools appropriately.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Conduct regular cleaning.
    - Sweeping or vacuuming the parking facility is encouraged over other methods.
    - Sweep all parking lots at least once before the onset of the wet season.
    - Establish frequency of sweeping based on usage and field observations of waste accumulation.
2. Properly collect and dispose of wash water.
    - Block the storm drain or contain runoff.
    - Wash water should be collected and pumped to the sanitary sewer or discharged to a pervious surface, do not allow wash water to enter storm drains. DO NOT discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
    - Dispose of parking lot sweeping debris and dirt at a landfill.
3. Consider use of source treatment BMPs to treat runoff.
    - Allow sheet runoff to flow into biofilters (vegetated strip and swale) and/or infiltration devices.
    - Utilize sand filters or oleophilic collectors for oily waste in low quantities.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

4. Keep the parking and storage areas clean and orderly.
    - Clean out and cover litter receptacles frequently to prevent spillage.
    - Remove debris in a timely fashion.

    OPTIONAL:
    - Post "No Littering" signs.
5. When cleaning heavy oily deposits:
    - If possible, clean oily spots with absorbent materials.
    - Do not allow discharges to the storm drain.
    - Appropriately dispose of spilled materials and absorbents.
6. When conducting surface repair work:
    - Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
    - Conduct surface repair work during dry weather to prevent contamination from contacting stormwater runoff.
    - Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and clean any debris for proper disposal.
    - To avoid runoff, use only as much water as necessary for dust control.
    - Use drip pans or absorbent material to catch drips from paving equipment that is not in use. Dispose of collected material and absorbents properly.
7. Conduct inspections on a regular basis.
    - Designate personnel to conduct inspections of the parking facilities and stormwater conveyance systems associated with them.
    - Inspect cleaning equipment/sweepers for leaks on a regular basis.
8. Keep accurate maintenance logs to evaluate materials removed/stored and improvements made.
9. Arrange rooftop drains to prevent drainage directly onto paved surfaces.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Provide regular training to field employees and/or contractors regarding cleaning of paved areas and proper operation of equipment.
4. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
5. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

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Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

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IC16. POOL AND FOUNTAIN CLEANING

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Prevent algae problems with regular cleaning, consistent adequate chlorine levels, and well-maintained water filtration and circulation systems.
- Discharge pool and fountain water properly.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	x
Metals	
Bacteria	x
Oil & Grease	
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Prevent algae problems with regular cleaning, consistent adequate chlorine levels, and well-maintained water filtration and circulation systems.
    - Do not use copper-based algaecides.
    - Control algae with chlorine or other alternatives, such as sodium bromide.
2. Manage pH and water hardness to minimize corrosion of copper pipes.
3. Discharge pool and fountain water properly. Consider hiring a professional pool-draining service to collect all pool water for off-site disposal. If this is not feasible, adhere to the following:
    - When draining pools or fountains never discharge water to a street or storm drain, discharge to the sanitary sewer if permitted to do so.
    - If draining a pool to the sanitary sewer, prevent backflow by maintaining an "air gap" between the discharge line and the sewer line (do not seal the connection between the hose and sewer line). Be sure to call the local sewer authority for guidance on flow rate restrictions, backflow prevention, and handling special cleaning waste (such as acid wash). Keep discharge flows to the low levels. Higher flow rates may be prohibited by local ordinance.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

- If water is dechlroinated with a neutralizing chemical or by allowing chlorine to dissipate for a few days (do not use the facility during this time), the water may be recycled/reused by draining it gradually onto a landscaped area. Water must be tested prior to discharge to ensure that chlorine is not present.
- Provide drip pans or buckets beneath drain pipe connections to catch leaks. This will be especially pertinent if pool or spa water that has not been dechlorinated is pumped through piping to a discharge location.

4. Properly clean and/or dispose of filters.
    - Never clean a filter in the street or near a storm drain.
    - Rinse cartridge filters onto a dirt area, and work filter residue into soil.
    - Backwash diatomaceous earth filters onto dirt. Dispose of spent diatomaceous earth in the garbage. Diatomaceous earth cannot be discharged to surface waters, storm drainage systems, septic systems, or on the ground.
    - If there is not a suitable dirt area, discharge filter backwash or rinsewater to the sanitary sewer if permitted to do so by the local sewering agency.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Train maintenance personnel on the proper techniques for testing chlorine levels and applying neutralizing chemicals.
4. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
5. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. 1995. King County Surface Water Management. July. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Los Angeles County Stormwater Quality. Public Agency Activities Model Program. On-line: http://ladpw.org/wmd/npdes/public_TC.cfm

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Santa Clara Valley Urban Runoff Pollution Prevention Program. Maintenance Best Management Practices for the Construction Industry. Brochures: Landscaping, Gardening, and Pool; Roadwork and Paving; and Fresh Concrete and Mortar Application. June 2001.

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IC17. SPILL PREVENTION AND CLEANUP

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Develop procedures to prevent/mitigate spills to storm drain systems.
- Post "No Dumping" signs with a phone number for reporting illegal dumping and disposal.
- Conduct routine cleaning, inspections, and maintenance.ftp://dnr.metrokc.gov/wlr/dss/spcm/Chapter 3.PDF
- Properly store and handle chemical materials.
- Protect materials stored outside from stormwater runon.
- Secure drums stored in an area where unauthorized persons may gain access to prevent accidental spillage, pilferage, or any unauthorized use.
- Identify key spill response personnel.
- Clean up leaks and spills immediately.
- Report and track spills.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

Spill Prevention

1. Develop procedures to prevent/mitigate spills to storm drain systems.
   Standardize reporting procedures, containment, storage, and disposal activities, documentation, and follow-up procedures.
2. Post "No Dumping" signs with a phone number for reporting illegal dumping and disposal.
3. Conduct routine cleaning, inspections, and maintenance.
   ftp://dnr.metrokc.gov/wlr/dss/spcm/Chapter 3.PDF
   - Sweep and clean storage areas consistently at a designated frequency (e.g. weekly, monthly). DO NOT hose down areas to storm drains.
   - Place drip pans or absorbent materials beneath all mounted taps, and at all potential drip and spill locations during filling and unloading of tanks. Reuse, recycle, or properly dispose of any collected liquids or soiled absorbent materials.
   - Check tanks (and any containment sumps) frequently for leaks and spills. Replace tanks that are leaking, corroded, or otherwise deteriorating with tanks in good condition. Collect all spilled liquids and properly dispose of them.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

- Check for external corrosion of material containers, structural failures, spills and overfills due to operator error, failure of piping system, etc.
- Inspect tank foundations, connections, coatings, and tank walls and piping system.

4. Properly store and handle chemical materials.
    - Designate a secure material storage area that is paved with Portland cement concrete, free of cracks and gaps, and impervious in order to contain leaks and spills.
    - Do not store chemicals, drums, or bagged materials directly on the ground. Place these items in secondary containers.
    - Keep chemicals in their original containers, if feasible.
    - Keep containers well labeled according to their contents (e.g., solvent, gasoline).
    - Label hazardous substances regarding the potential hazard (corrosive, radioactive, flammable, explosive, poisonous).
    - Prominently display required labels on transported hazardous and toxic materials (per US DOT regulations).
5. Utilize secondary containment systems for liquid materials.
    - Surround storage tanks with a berm or other secondary containment system.
    - Slope the area inside the berm to a drain.
    - Drain liquids to the sanitary sewer if available. DO NOT discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required
    - Pass accumulated stormwater in petroleum storage areas through an oil/water separator.
    - Use catch basin filtration inserts.
6. Protect materials stored outside from stormwater runon. Construct a berm around the perimeter of the material storage area to prevent the runon of uncontaminated stormwater from adjacent areas as well as runoff of stormwater from the material.
7. Secure drums stored in an area where unauthorized persons may gain access to prevent accidental spillage, pilferage, or any unauthorized use.

Spill Control and Cleanup Activities

8. Identify key spill response personnel.
9. Adopt the Orange County Hazardous Materials Area Plan or an equivalent plan, which includes a set of planned responses to hazardous materials emergencies. The plan should include:
    - Description of the facility, owner and address, activities and chemicals present
    - Facility map
    - Notification and evacuation procedures
    - Cleanup instructions
    - Identification of responsible departments
10. Clean up leaks and spills immediately.
    - Place a stockpile of spill cleanup materials where they will be readily accessible (e.g. near storage and maintenance areas).
    - Utilize dry cleaning methods to clean up spills to minimize the use of water. Use a rag for small spills, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then used cleanup materials are also hazardous and must be sent to a certified laundry (rags) or disposed of as hazardous waste. Physical methods for the cleanup of dry chemicals include the use brooms, shovels, sweepers, or plows.
    - Never hose down or bury dry material spills. Sweep up the material and dispose of properly.
    - Clean up chemical materials with absorbents, gels, and foams. Use adsorbent materials on small spills rather than hosing down the spill. Remove the adsorbent materials promptly and dispose of properly.
    - For larger spills, a private spill cleanup company or Hazmat team may be necessary.

11. Reporting
    1. Report spills that pose an immediate threat to human health or the environment to local agencies, such as the fire department, and the Regional Water Quality Control Board.
    2. Establish a system for tracking incidents. The system should be designed to identify the following:
        - Types and quantities (in some cases) of wastes
        - Patterns in time of occurrence (time of day/night, month, or year)
        - Mode of dumping (abandoned containers, "midnight dumping" from moving vehicles, direct dumping of materials, accidents/spills)
        - Responsible parties
    3. Federal regulations require that any oil spill into a water body or onto an adjoining shoreline be reported to the National Response Center (NRC) at 800-424-8802 (24 hour).

Training
1. Educate employees about spill prevention and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Educate employees on aboveground storage tank requirements.
    - Train all employees upon hiring and conduct annual refresher training.
2. Train employees responsible for aboveground storage tanks and liquid transfers on the Spill Prevention Control and Countermeasure Plan.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

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IC18. VEHICLE AND EQUIPMENT FUELING

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Maintain clean fuel-dispensing areas.
- Utilize fueling safeguards.
- Conduct regular inspections of fueling equipment.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	
Floatable Materials	x
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Use properly maintained off-site fueling stations whenever possible. These businesses are better equipped to handle fueling and spills.
2. Maintain clean fuel-dispensing areas.
    - Use dry cleanup methods such as sweeping for removal of litter and debris, or use of rags and absorbents for leaks and spills.
    - If cleaning by washing, place a temporary plug in the downstream storm drain and pump out the accumulated water. Properly dispose of the water. DO NOT discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
3. Design fueling areas to minimize stormwater exposure.
    - Cover the fuel dispensing area such that the cover's minimum dimensions are equal to or greater than the area within the grade break or fuel dispensing area. Position roof downspouts to direct water away from fueling areas.
    - Pave fuel area with Portland cement concrete or equivalent smooth impervious surface. Grade with a 2 to 4 percent slope to prevent ponding.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

- Use secondary containment. Construct a berm around the perimeter of the material storage area to prevent the runon of uncontaminated stormwater from adjacent areas as well as stormwater runoff.

4. Minimize pooling of water.
    - Use a perimeter drain or slope pavement inward with drainage to sump. A minimum slope of 1.5 percent is recommended.
    - Install inlet catch basin equipped with a small sedimentation basin or grit chamber to remove large particles from stormwater in impervious areas.
    - During the wet season, release accumulated stormwater frequently.
5. If conducting mobile fueling, designate mobile fueling areas and bring equipment to these areas.
    - Use secondary containment when conducting mobile fueling.
    - Cover storm drains in the vicinity during transfer.
6. Utilize fueling safeguards.
    - Use overflow protection devices on tank systems to warn the operator to automatically shutdown transfer pumps when the tank reaches full capacity.
    - Install protective guards around tanks and piping to prevent vehicle or forklift damage.
    - Clearly tag or label all valves to reduce human error.
    - Place spill kits at fueling areas and/or on vehicles.
    - Install vapor recovery nozzles to help control drips as well as air pollution.
    - Eliminate or post hose bibs.
    - Fit fuel dispensing nozzles with "hold-open latches" (automatic shutoffs) except where prohibited by local fire departments.
7. Conduct regular inspections of fueling equipment.
    - Check fueling equipment for external corrosion and structural failure.
    - Check for spills and overfills due to operator error.
    - Check for failure of piping system.
    - Check for leaks or spills during pumping of liquids or gases from truck or rail car to a storage facility or visa versa.
    - Visually inspect new tank or container installation for loose fittings, poor welding, and/or improper or poorly fitting gaskets.
    - Inspect tank foundations, connections, leaks, cracks, scratches, and other physical damage that may weaken the tank or container system.
    - Report leaking vehicles to fleet maintenance.
    - Periodically, have a qualified professional conduct integrity testing.
8. Use secondary containment when transferring fuel from the tank truck to the fuel tank and cover storm drains in the vicinity during transfer.
9. Fit underground storage tanks (USTs) with spill containment and overfill prevention systems meeting the requirements of Section 2635(b) of Title 23 of the California Code of Regulations.
10. Equip USTs with spill and overfill protection.
11. Install required AQMD equipment and post a notice.
12. Post signs to remind employees and customers not to top off the fuel tank when filling and signs that ban customers and employees from changing engine oil or other fluids at that location.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper fueling and cleanup procedures.
3. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
4. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
5. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

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IC19. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Utilize dry cleanup methods such as sweeping try to avoid washing down work areas.
- Use drip pans and/or containers where needed.
- Inspect vehicles and equipment for leaks.
- Dispose of all waste products properly and recycle whenever possible.
- Clean storm drain inlet(s) on a regular schedule and after large storms.
- Store idle equipment under cover.
- Keep equipment clean and free of excess oil and grease.
- Remove all fluids from retired, wrecked, or salvaged vehicles.
- Dispose of solvents per instructions on the container.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	x
Pesticides	
Oxygen Demanding	

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Only conduct maintenance or repair work in designated areas.
    - Conduct maintenance and repair work in a designated area with spill containment.
    - Construct a berm or intercept trench at doorways to prevent the runon of uncontaminated stormwater from adjacent areas as well as stormwater runoff.
2. Utilize dry cleanup methods such as sweeping, try to avoid washing down work areas.
    - If work areas are washed and if discharge to the sanitary sewer is allowed, treat water with an appropriate treatment device (e.g. clarifier) before discharging. DO NOT discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
    - If discharge to the sanitary sewer is not permitted, pump water to a tank and dispose of properly.
3. Use drip pans and/or containers where needed. Keep a drip pan or container under equipment or vehicles when unclipping hoses, unscrewing filters, or conducting other maintenance and repair work that may result in fluids dripping or splattering onto the shop floor or ground.
4. Inspect vehicles and equipment for leaks.
    - Inspect incoming vehicles and equipment for leaks.
    - Inspect vehicles and equipment during regular maintenance; keep records.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

5. Dispose of all waste products properly and recycle whenever possible.
    - Promptly transfer waste materials to the proper waste or recycling drums.
    - Store waste and/or recycling drums in designated areas with spill containment.
    - Separate hazardous and non-hazardous wastes, do not mix used oil and solvents and keep chlorinated solvents separate from non-chlorinated solvents.
    - Store cracked batteries in a non-leaking secondary container and dispose of properly at recycling or household hazardous waste facilities.
    - Recycle greases, used oils, oil filters, antifreeze, cleaning solutions, batteries, and hydraulic and transmission fluids whenever possible.
    - Label and track the recycling of waste material (e.g. used oil, spent solvents, batteries). Purchase recycled products to support the market for recycled materials.
    - Separate wastes for easier recycling. Keep hazardous and non-hazardous wastes separate, do not mix used oil and solvents, and keep chlorinated solvents separate from non-chlorinated solvents.
6. Paint signs near outdoor drains and post signs at sinks to remind employees and others not to pour wastes down drains.
7. Clean storm drain inlet(s) on a regular schedule and after large storms.
8. Store idle equipment under cover.
9. Keep equipment clean and free of excess oil and grease.
10. Completely drain oil filters before recycling/disposal.
11. Remove all fluids from retired, wrecked, or salvaged vehicles.
12. Dispose of solvents per instructions on the container.
13. Use non-toxic chemicals for maintenance when possible.
    - Use non-caustic detergents instead of caustic cleaning for parts cleaning.
    - Use a water-based cleaning service and have tank cleaned. Use detergent-based or water-based cleaning systems in place of organic solvent degreasers.
    - Replace chlorinated organic solvents with non-chlorinated solvents. Non-chlorinated solvents like kerosene or mineral spirits are less toxic and less expensive to dispose of properly. Check list of active ingredients to see whether it contains chlorinated solvents.
    - Choose cleaning agents that can be recycled.
14. Reduce or eliminate use of solvents when feasible

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July 1998 (Revised February 2002 by the California Coastal Commission).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

For additional information contact:

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IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	
Pesticides	
Oxygen Demanding	x

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Consider using off-site commercial washing and/or steam cleaning businesses, if feasible.
- Use on-site commercial washing and/or steam cleaning businesses capable of disposing of wastewater off-site.
- Designate an impervious indoor or outdoor area to be used solely for vehicle and equipment washing/steam cleaning.
- Clearly mark the vehicle and equipment washing/steam cleaning area.
- If the area is outdoors, cover the wash area when not in use to prevent contact with rainwater.
- Provide trash containers in wash area and empty on a regular basis.
- Use hoses with nozzles that automatically turn off when left unattended.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Use off-site commercial washing and/or steam cleaning businesses. These businesses are better equipped to handle and properly dispose of the wash waters.
2. Use on-site commercial washing and/or steam cleaning businesses capable of disposing of wastewater off-site. Mobile cleaning businesses must use a leak proof cover device that will catch and contain all contaminated (i.e. chemical additives such as soaps, solvents, or degreasers are used) wastewater runoff for later disposal in a manner that complies with all city, county, state, and federal codes.

   If washing must occur on-site:

3. Designate an impervious indoor or outdoor area to be used solely for vehicle and equipment washing/steam cleaning. Do not conduct oil changes and other engine maintenance in the designated washing area.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

4. Clearly mark the vehicle and equipment washing/steam cleaning area. Design wash area to properly collect and dispose of wash water and/or effluent generated.
    - Install sumps or drain lines to collect wash water.
    - Construct a berm around the designated area and grade to collect wash water as well as to prevent storm water runon.
    - Use portable containment (such as ground cover devices) and vacuum collection of wastewater.
    - Inspect and maintain equipment (such as ground cover devices) regularly to ensure proper and effective functioning.
5. If the area is outdoors, cover the wash area when not in use to prevent contact with rainwater.
6. Provide trash containers in wash area and empty on a regular basis.
7. Use hoses with nozzles that automatically turn off when left unattended.
8. Use biodegradable, phosphate-free detergents if possible.
9. Recycle waste materials, whenever possible
    - Recycling is always preferable to disposal of unwanted materials.
    - Separate wastes for easier recycling. Keep hazardous and non-hazardous wastes separate, do not mix used oil and solvents, and keep chlorinated solvents separate from non-chlorinated solvents.
    - Label and track the recycling of waste material (e.g. used oil, spent solvents, batteries).
    - Purchase recycled products to support the market for recycled materials.
10. If possible, eliminate or reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous material:
    - Use non-caustic detergents instead of caustic cleaning for parts cleaning.
    - Use a water-based cleaning service and have tank cleaned. Use detergent-based or water-based cleaning systems in place of organic solvent degreasers.
    - Replace chlorinated organic solvents with non-chlorinated solvents. Non-chlorinated solvents like kerosene or mineral spirits are less toxic and less expensive to dispose of properly. Check list of active ingredients to see whether it contains chlorinated solvents.
    - Choose cleaning agents that can be recycled.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train staff on the proper maintenance of the wash area.
3. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
4. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
5. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

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IC21. WASTE HANDLING AND DISPOSAL

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Prevent waste materials from coming in direct contact with wind or rain. .
- Keep waste collection areas clean.
- Secure solid waste containers when not in use.
- Regularly inspect, repair, and/or replace waste containers.
- Use all of a product before disposing of the container.
- Label and store hazardous wastes according to hazardous waste regulations.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Portable Toilet Transport

- Empty prior to transport
- Fasten securely when transporting
- Use dollies and power gates whenever possile

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Prevent waste materials from coming in direct contact with wind or rain.
    - Cover the waste management area with a permanent roof.
    - If this is not feasible, cover waste piles with temporary covering material such as reinforced tarpaulin, polyethylene, polyurethane, polypropylene, or hypalon.
    - Cover dumpsters to prevent rain from washing out waste materials.
2. Design waste handling and disposal area to prevent stormwater runon.
    - Enclose the waste handling and disposal area or build a berm around it.
    - Position roof downspouts to direct stormwater away from waste handling and disposal area.
3. Design waste handling and disposal area to contain spills.
    - Place dumpsters or other waste receptacles on an impervious surface.
    - Construct a berm around the area to contain spills.
    - Install drains connected to the public sewer or the facility's process wastewater system within these contained areas. DO NOT discharge to a public sewer until contacting the local sewer authority to find out if pretreatment is required.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

4. Keep waste collection areas clean.
    - When cleaning around waste handling and disposal areas use dry methods when possible (e.g. sweeping, use of absorbents).
    - If water must be used, collect water and discharge to the sewer if permitted to do so. DO NOT discharge to a public sewer until contacting the local sewer authority to find out if pretreatment is required. If discharge to the sanitary sewer is not allowed, pump water to a tank and dispose of properly.
    - Post "No Littering" signs.
5. Secure solid waste containers when not in use.
6. Regularly inspect, repair, and/or replace waste containers.
7. Do not fill waste containers with washout water or any other liquid.
8. Use all of a product before disposing of the container.
9. Segregate wastes by type and label and date wastes.
    - Do not mix wastes; this can cause chemical reactions, make recycling impossible, and complicate disposal.
    - Ensure that only appropriate solid wastes are added to solid waste containers.
    - Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be disposed of in solid waste containers.
10. Label and store hazardous wastes according to hazardous waste regulations.
    - Consult your local hazardous waste agency or Fire Department for details.
    - Obtain a hazardous waste generator license or permit if necessary.
12. Minimize waste.
    - Recycle materials whenever possible.
    - Modify processes or equipment to increase efficiency.
    - Identify and promote use of non-hazardous alternatives.
    - Reduction in the amount of waste generated can be accomplished using many different types of source controls such as:
        - Production planning and sequencing
        - Process or equipment modification
        - Raw material substitution or elimination
        - Loss prevention and housekeeping
        - Waste segregation and separation
        - Close loop recycling
    - Establish a material tracking system to increase awareness about material usage. This may reduce spills and minimize contamination, thus reducing the amount of waste produced.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees in proper waste handling and disposal.
3. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.

4. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
5. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read “No Dumping Drains to Ocean”.

References

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California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

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IC22. EATING AND DRINKING ESTABLISHMENTS

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Use dry cleaning methods instead of water
- Clean equipment (floor mats, grease filters, grills, garbage cans, etc.) indoors or in a covered outdoor wash area that is plumbed to the sanitary sewer or in an area that will contain the wash water.
- Recycle and/or properly dispose of grease and oil.
- Block the storm drain when hosing or steam/pressure washing outside dumpster areas, sidewalks, and common areas.

Stencil storm drains

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	x
Floatable Materials	x
Metals	
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

1. Practice good housekeeping.
    - Conduct regular sweeping or vacuuming of outdoor areas: Dry sweep pavement areas including "drive-thru" areas, parking lots, sidewalks, outdoor eating areas and dumpster storage areas frequently.
    - Keep outside areas free of trash & debris.
    - Do not hose out dumpsters or fill them with liquid waste.
    - Regularly inspect, repair, and/or replace dumpsters.
2. Clean equipment (floor mats, grease filters, grills, garbage cans, etc.) indoors or in a covered outdoor wash area that is plumbed to the sanitary sewer.
    - Clean equipment in a mop sink if possible (never in a food preparation sink). If there is no mop sink, dedicate an indoor cleaning area where a drain is plumbed to the sanitary sewer.
    - Dispose mop water from cleaning floors in a mop sink, toilet or other drain that is plumbed to the sanitary sewer.
    - Do not pour wash water outside or into a street, gutter, or storm drain.
    - Dispose of all wastewater containing oil and grease in a grease trap or interceptor.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

3. Recycle and/or properly dispose of grease and oil. Collect and dispose of concentrated waste oil and grease and disposed of by a certified waste grease hauler. NEVER pour grease or oil into a sink, floor drain, storm drain or dumpster.
4. Block storm drain(s) when cleaning (hosing or steam/pressure washing) outside dumpster areas, sidewalks, and common areas with hot water, soap, or other cleaning agent. Collect water/waste and discharge to the sanitary sewer (with approval of the local sanitation district).
    - Prior to washing clean and/or sweep all large debris from the area.
    - Clean any fluid spills with an appropriate dry method, such as kitty litter or other absorbent, and dispose of appropriately.

Training

1. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
2. Train employees on proper spill containment and cleanup.
    - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
    - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.
    - BMP IC17 discusses Spill Prevention and Control in detail.
3. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
4. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003. www.cabmphandbooks.com

Carlsbad Jurisdictional Urban Runoff Management Plan. Best Management Practices for Restaurants. City of Carlsbad. February 2002. On-line: http://www.ci.carlsbad.ca.us/cserv/jurmp.html

Orange County Stormwater Program. 2001. Water Quality Guidelines for Exterior Restaurant Cleaning Operations. Brochure. June.

Orange County Stormwater Program. Good Cleaning Practices Food & Restaurant Industry. Poster. Courtesy of the City and County of LA.

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IC23. FIRE SPRINKLER TESTING/MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner[1]. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

Provided below are specific procedures associated with this activity. In order to meet the requirements for medium and high priority facilities, the owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Conduct activity on non-rainy days and for the shortest duration possible to minimize discharge volume.
- Inspect flow path and remove all debris and materials prior to testing or maintenance.

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	
Nutrients	
Floatable Materials	
Metals	x
Bacteria	
Oil & Grease	x
Organics & Toxicants	
Pesticides	
Oxygen Demanding	

Best Management Practices

1. Contain flows onsite and/or direct the water flows to landscaped or green areas whenever possible and safe to do so without causing damage or erosion.
2. Divert sprinkler system flows to the sewer, when practicable and with the permission of the local sewer agency.
3. Training
   a. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
   b. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
   c. Use a training log or similar method to document training.

References

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser& McKee, Larry Walker Associates for California Stormwater Quality Association. January 2003.

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[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

IC24. DISPOSAL OF WASTEWATER GENERATED BY MOBILE BUSINESSES & OUTDOOR ACTIVITIES

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner.[1] The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Dispose of wastewater according to the instructions below. No wastewater shall be disposed of into the stormdrain system.

Training

- Train employees on these BMPs, stormwater discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Toxic Organic	x
Pesticides	x
Oxygen Demanding	x

Purpose of this BMP:

Orange County cities and the County of Orange are mandated under NPDES Permits issued by the California Regional Water Quality Control Boards to prohibit the discharge of pollutants and non-stormwater runoff into the stormdrain system. Therefore, untreated wastewater (including wastewater from mobile detailing, pressure washing, steam cleaning, carpet cleaning, or similar activities) shall not be discharged to the stormdrain system.

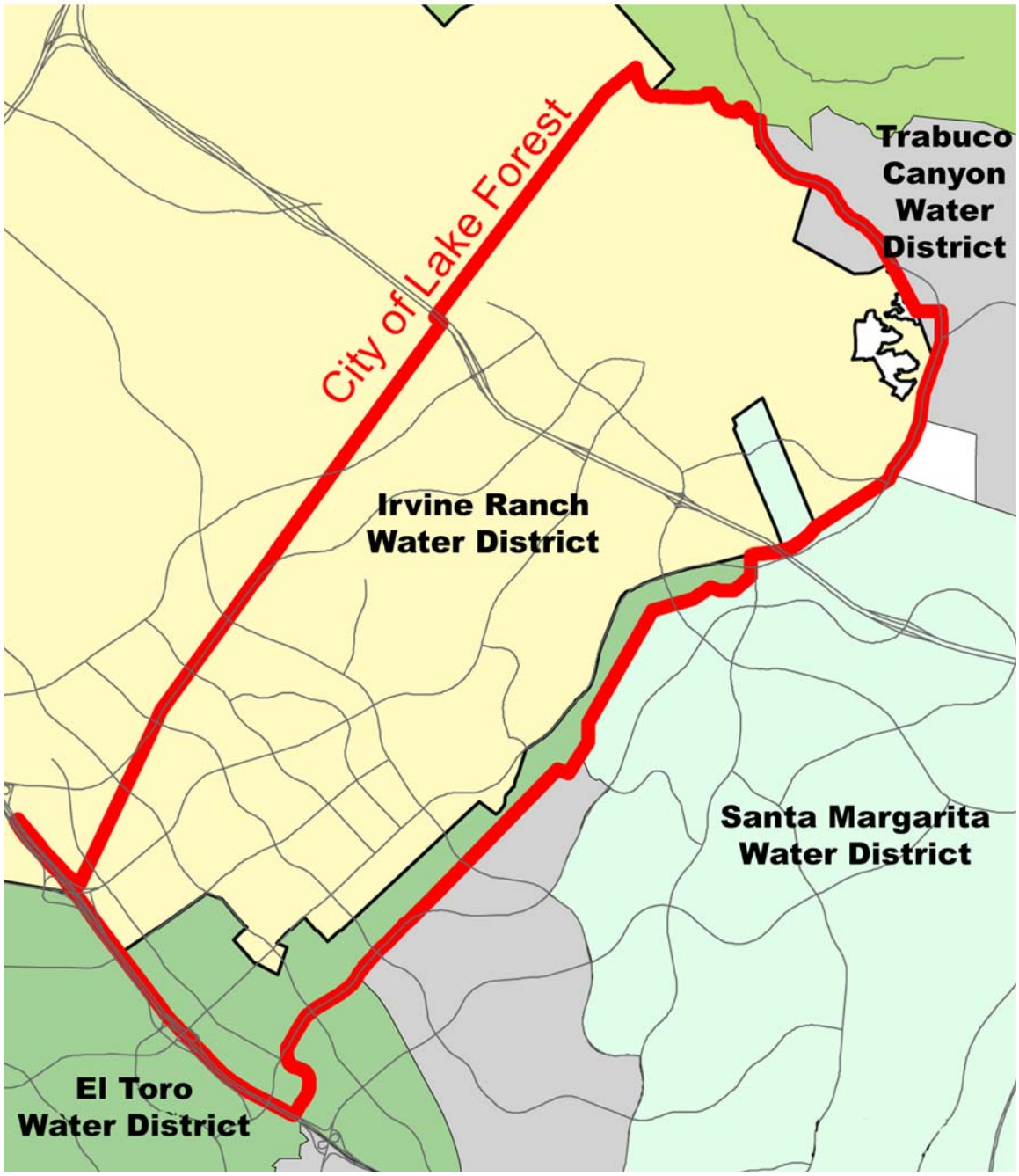
In an effort to help businesses comply with the NPDES Permit, the cities of Orange County, County of Orange, South Orange County Wastewater Authority, Orange County Sanitation District, and Irvine Ranch Water District have developed the following best management practices (BMPs) for the proper disposal of wastewater generated by mobile business operations and outdoor activities.

[1] EPA " *Preliminary Data Summary of Urban Stormwater Best Management Practices"*

If you have specific questions regarding any of the BMPs herein, please call your local sewering agency or your City's NPDES Coordinator. The telephone numbers are listed at the end of this document.

Attached is a map delineating the various sewer district boundaries for your reference.

Water District Boundary Map



1. General Best Management Practices (BMPs) and Preparation of Work Area

What should I do prior to conducting a job?

The BMPs presented below are intended to help you comply with local and state regulations that prohibit wastewater from entering the stormdrain system. The following BMPs must be followed by all mobile businesses or outdoor activities of a fixed business that generate wastewater, regardless of the type of surface to be cleaned or cleaning operation to be performed:

- Evaluate the chemicals and compounds used for cleaning and reduce or eliminate the use of those that contain solvents, heavy metals, high levels of phosphates, or very high/very low pH that exceeds the local sewering agency requirements.

- Walk through the area where the cleaning will occur prior to the start of the job and identify all area drains, yard drains, and catch basins where wastewater could potentially enter the stormdrain system.

- Block/seal off identified drains or catch basins using sand bags, plugs, rubber mats, or temporary berms.

- Collect all trash and debris from the project area and place them in a trash bin for disposal.

- Sweep all surface areas prior to cleaning to minimize the amount of suspended solids, soil, and grit in wastewater.

- Identify the wastewater disposal option that will be used. Whether you are discharging to landscaping or the sanitary sewer, it is necessary that you meet all the requirements identified below.

- Conduct mobile washing in accordance with all operating instructions provided by the equipment supplier. Maintain equipment in good working order and routinely check and test all safety features.

What methods can be used to collect wastewater at a site?

There is no specific containment method that must be used for wastewater collection/diversion. However, the system must be adequately designed so that the wastewater does not flow into an on-site or off-site stormdrain inlet. All mobile and existing businesses should use one of the following methods, regardless of the surface to be cleaned or the type of cleaning operation to be performed:

- Portable containment areas can be made from waterproof tarps, heavy-duty plastic, or rubber matting equipped with berms to prevent wastewater from running into stormdrain inlets or discharge off-site. Materials that can be used for berms include sand bags or water-filled tubing. Whatever containment material is used, it must seal tightly to the ground so that no wastewater can pass under or over the berms.

- When power washing smaller pieces of equipment, containment devices to use may include portable vinyl swimming pools, plastic 55-gallon drums on casters, and flat metal or plastic containment pads.

- Depending on the volume of wastewater generated, it may be necessary to use a pump system, which may range in size from a wet-dry vacuum to a sump pump. A natural basin from which to pump can also be set up by establishing a slightly sloped containment area.

- Stationary or more permanent containment areas can be constructed with cement. Berms and pump systems may be used to contain wastewater and divert it to a holding tank.

- Commercial wastewater collection systems are also available for power washing. These systems can range from portable wash pits to self-contained water recycling systems. A list of companies selling this type of equipment can usually be found in the telephone book under "Pressure Washing Services and Equipment".

- Stormdrain inlet covers can be made of an impermeable barrier such as a heavy-duty vinyl or plastic secured in place with materials such as concrete blocks, gravel bags, or sand bags. Stormdrain inlet covers may also be available though commercial vendors.

Note: Blocking stormdrain catch basin inlets in the public right-of-way (i.e. public street, or other publicly owned facility) is prohibited as a method of containment, unless expressly permitted by the municipality typically through an encroachment permit process. Wastewater should be contained on-site prior to entering the public right-of-way. Contact the local municipality for more information.

2. Wastewater Disposal Options

How can I dispose of my wastewater?

Wastewater is not allowed in the stormdrain or street. However, the wastewater may be discharged to landscaping or the sanitary sewer, or it may be picked up and disposed of by a waste hauler. Please note that if you are unsure of the types of pollutants in the wastewater, laboratory analysis may be required to establish the proper disposal method.

Choose one of the three wastewater disposal options listed below based upon the following conditions:

Option 1: Discharge Wastewater to a Landscaped Area

The wastewater must meet the following requirements if discharging to landscaping:

- The pH must be between 6.5 and 8.5. This can be checked quickly and easily through the use of pH paper test strips.

- The wastewater should not contain large volumes or concentrations of:

    - Toxic materials.
    - Degreasers.
    - Pollutants that may create a fire or explosion hazard (e.g., gasoline, diesel).
    - Solid or viscous pollutants in amounts sufficient to cause obstruction or blockage of flow.
    - Petroleum oil, or other products of mineral oil origin.
    - Paint.

  Prior to surface washing, you must exercise any reasonable means to eliminate large volumes or concentrations of the above listed pollutants. Common methods to eliminate standing pools of pollutants include the placement of absorbent to adsorb the pollutant, dry-sweeping the absorbent, and disposing of the absorbent properly.

- In addition, wastewater from cleaning food-related vehicles or areas, vehicle exteriors or engines, and buildings with lead- or mercury-based paint should not be discharged to landscaping.

- Filter the wastewater if it contains debris, fibers, or other suspended solids.

- Ensure that the wastewater is fully contained within the landscaped area and will fully infiltrate into the ground prior to leaving the job site.

Option 2: Discharge Wastewater to the Sanitary Sewer

The wastewater must comply with the following conditions if disposed of into the sanitary sewer system:

- The wastewater temperature must be less than 140°F (60°C).

- The pH must be between 6.0 and 12.0. This can be checked quickly and easily through the use of pH paper test strips. Adjust the wastewater to a pH that is between 6.0 and 12.0. Dilution is not an effective or acceptable pretreatment.

- The wastewater quality must comply with the local sanitary sewer district's discharge limits and requirements. The wastewater should not contain large volumes or concentrations of:

    - Pollutants that may create a fire or explosion hazard (e.g., gasoline, diesel).
    - Solid or viscous pollutants in amounts sufficient to cause obstruction or blockage of flow.
    - Petroleum oil, non-biodegradable cutting oil, or other products of mineral oil origin.
    - Oil based paint.

    Prior to surface washing, you must exercise any reasonable means to eliminate large volumes or concentrations of the above listed pollutants. Common methods to eliminate standing pools of pollutants include the placement of absorbent to adsorb the pollutant, dry-sweeping the absorbent, and disposing of the absorbent properly.

- No wastewater shall be discharged into any publicly owned sewer manholes without the sewer agency's written authorization.

- Filter the wastewater if it contains debris, fibers, or other suspended solids.

- If chemicals (e.g., solvents or acids) are used during the cleaning process, additional precautions may be needed. Contact your local sanitation district to learn if wastewater containing these chemicals requires pretreatment before discharge to the sanitary sewer or if it needs to be treated as hazardous waste.

- Ensure that the wastewater is released at a flow rate and/or concentration, which will not cause problems, pass through, or interference with the sewerage facilities. Generally, if you are using a privately owned cleanout, sink, toilet, or floor drain at a client's property, and the flow does not backup, the flow amount will not cause problems, pass through, or interference with the sewerage facilities.

- Utilize an approved discharge point such as:

    - Privately owned cleanout (or sink, toilet or floor drain), oil/water separator, or below ground clarifier at the client's property where the wash water is generated;
    - Privately owned industrial sewer connection at the client's property where the wash water is generated;
    - Waste hauler station at sanitary sewer facility; and
    - Any other disposal points approved by the sanitary sewer facility.

- Maintain a logbook of all discharges.

Option 3: Dispose of Wastewater Using a Professional Hazardous Waste Hauler

Wastewater that can be characterized in any of the following ways must be disposed of using a hazardous waste hauler:

- Is corrosive (as indicated by a pH value of less than 5.5) or caustic (as indicated by a pH value of greater than 10.0).
- Contains a pollutant that may create a fire or explosion hazard (e.g., gasoline, diesel fuel).
- Contains solid or viscous pollutants in amounts sufficient to cause obstruction or blockage of flow.
- Contains petroleum oil, non-biodegradable cutting oil, or other products of mineral oil origin.
- Contains other potential hazardous wastes. Examples of other potential hazardous wastes include:
    - Wastewater generated from power washing old paint off a building. Paint chips need to be collected, evaluated, and disposed of properly. Paint chips cannot be left on the ground at the job site. Old paint stripped off commercial buildings may contain metals (e.g., lead, chromium, cadmium, and mercury), causing it to be a regulated hazardous waste.
    - Wastewater used in conjunction with certain solvents and degreasing agents, which may cause the wastewater to be classified as a listed or characteristic hazardous waste.

You must comply with the following conditions if a hazardous waste hauler is used:

- Ensure that the waste hauler is certified by the appropriate sanitary sewering agency and the Orange County Health Care Agency, is Hazardous Waste DOT certified, and is complying with applicable discharge regulations, which may include obtaining necessary permits and conducting water quality monitoring requirements. Please contact the Orange County Health Care Agency and/or your local fire department for specific requirements.
- Identify the wastes involved and determine if a hazardous waste has been generated.
- Maintain a logbook of all discharges and hazardous waste manifests, if applicable.

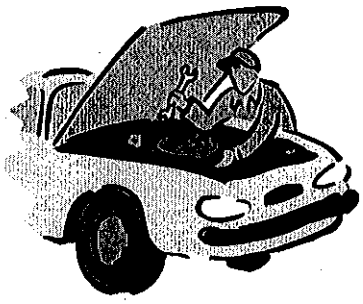
For additional information contact:

City of Lake Forest
Public Works Department
25550 Commercentre Drive
Lake Forest, California 92630
(949) 461-3480
www.city-lakeforest.com

El Toro Water District
24251 Los Alisos Boulevard
Lake Forest, California 92630
(949) 837-0660
www.etwd.com

Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618
(949) 453-5300
www.irwd.com

Trabuco Canyon Water District
32003 Dove Canyon Drive
Trabuco Canyon, California 92679
(949) 858-0277
www.tcwd.ca.gov



R-1
AUTOMOBILE REPAIR AND MAINTENANCE

Automobile repair and maintenance activities have the potential to contribute directly to storm drain systems primarily through spills or the dumping of waste fluids being conveyed to the storm drain. Automotive fluids, such as oils, greases, and solvents, are hydrocarbon based, and may contain metals, chlorinated hydrocarbons, and other toxic compounds. Removal of caked dirt and grime from an automobile increases the sediment load to the storm drain system. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	
Bacteria	
Foaming Agents	
Metals	x
Hydrocarbons	x
Hazardous Materials	x
Pesticides and Herbicides	
Other	

Think before conducting automobile repair and maintenance activities. Remember - The ocean starts at your front door.

Required Activities

- Recycle used oil and antifreeze by taking them to service stations and other recycling centers. Never pour oil in storm drains or other areas.
- Do not perform repair and maintenance activities during rain events.
- Immediately clean up and contain any spills. Dispose of all waste and adsorbent materials properly.
- Store hazardous materials and wastes (including, but not limited to, fluids, solvents, parts containing fluids, batteries) indoors, under cover, or in watertight containers.
- Perform automobile maintenance and repairs over impervious surfaces such as concrete, so spills and waste material should be readily cleaned up. Use drip pans, plastic sheeting, etc. to contain spills and waste material.
- Dispose of cleaning solvents at the designated hazardous waste center.

Recommended Activities

- Conduct auto repair activities at a commercial repair facility
- Perform automobile repair and maintenance activities under a covered area.
- Do not buy fluids containing target pollutants (e.g. degreasers containing PERC).
- Monitor parked or stored vehicles and equipment for leaks and place pans under leaks to collect fluids for proper disposal or recycling.

For additional information contact:
City of Lake Forest – Public Works Department
(949)461-3480 or visit our website at: www.lakeforestca.gov

R-2
AUTOMOBILE WASHING

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	X
Bacteria	
Foaming Agents	X
Metals	X
Hydrocarbons	X
Hazardous Materials	x
Pesticides and Herbicides	
Other	

Automobile washing activities have the potential to contribute pollutants because road dust washed from vehicles may contain metals and hydrocarbons. Any leaking fluids washed from the automobile may be carried to the storm drain by the wash water. Detergents used for automobile washing may also contain phosphorus and foaming agents, which contribute to the eutrophication of receiving waterbodies. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before conducting automobile washing activities. Remember - The ocean starts at your front door.

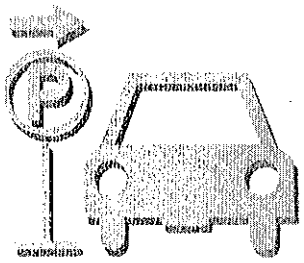
Required Activities

- Shake floor mats into trashcan or vacuum to clean. Do not shake over ground.
- If using cleaners (such as acid based wheel cleaners) use a rag to wipe them on and off, do not rinse them off with water.
- If possible, divert runoff from automobile washing to a grassy surface large enough to contain and allow complete infiltration
- Dispose of excess wash water into the sanitary sewer (i.e. via sink, or toilet) or onto a landscaped area that will allow for complete infiltration.
- Conduct engine degreasing at a commercial facility that is set up to handle that type of waste.

Recommended Activities

- When possible, use commercial wash facilities
- Wash vehicles over pervious surfaces such as lawns and gravel areas
- Choose soaps, cleaners, or detergents labeled "non-toxic", "phosphate free", or "biodegradable". Vegetable and citrus-based products are typically safest for the environment.
- Turn off water when not actively washing down automobile.
- If available, use established neighborhood wash areas, where runoff is properly controlled and managed.

For additional information contact:
City of Lake Forest – Public Works Department
(949)461-3480 or visit our website at: www.ci.lake-forest.ca.us.com



R-3
AUTOMOBILE PARKING

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	
Bacteria	
Foaming Agents	
Metals	X
Hydrocarbons	X
Hazardous Materials	x
Pesticides and Herbicides	
Other	

Parked automobiles may contribute pollutants to the storm drain because poorly maintained vehicles may leak fluids containing hydrocarbons, metals, and other pollutants. In addition, heavily soiled automobiles may drop clods of dirt onto the parking surface, contributing to the sediment load when runoff is present. During rain events, or wash-down activities, the pollutants may be carried into the storm drain system. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before parking your car. Remember - The ocean starts at your front door.

Required Activities

- If required, vehicles have to be removed from the street during designated street sweeping/cleaning times.
- If the automobile is leaking, place a pan or similar collection device under the automobile, until such time as the leak may be repaired.
- Use dry cleaning methods to remove any materials deposited by vehicles (e.g. adsorbents for fluid leaks, sweeping for soil clod deposits).

Recommended Activities

- Park automobiles over permeable surfaces (e.g. gravel, or porous cement).
- Limit vehicle parking to covered areas.
- Perform routine maintenance to minimize fluid leaks, and maximize fuel efficiency.

For additional information contact:
City of Lake Forest – Public Works Department
(949)461-3480 or visit our website at: www.lakeforestca.gov

R-4
HOME AND GARDEN CARE ACTIVITIES

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	
Bacteria	x
Foaming Agents	x
Metals	x
Hydrocarbons	x
Hazardous Materials	x
Pesticides and Herbicides	
Other	x

HOME CARE

Many hazardous materials may be used in and around residences during routine maintenance activities (such as: oils, paints, cleaners, bleaches, pesticides, glues, solvents, and other products). Improper or excessive use of these products can increase the potential for pollutants to be transported to the storm drain by runoff. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before conducting home care activities. Remember - The ocean starts at your front door.

Required Activities

- Clean out painting equipment in an area where the waste can be contained and properly disposed of (latex – sewer, oil based – household hazardous waste center).
- Rinse off cement mixers and cement laden tools in a contained washout area. Dispose of dried concrete waste in household trash.
- If safe, contain, clean up, and properly dispose all household hazardous waste spills. If an unsafe condition exists, call 911 to activate the proper response team.
- Household hazardous materials must be stored indoors or under cover, and in closed and labeled containers. Dispose of them at a household hazardous waste center.
- Household wash waters (e.g. washer machine effluent, mop water, etc.) must be disposed of in the sanitary sewer.
- Pool and spa water may be discharged to the storm drain if residual chlorine is less than 0.1 mg/L, the pH is between 6.5 and 8.5, and the water is free from any unusual coloration. (Call 714-834-6107 to obtain information on a pool drain permit). Pool filter media must be contained and disposed of properly.

Recommended Activities

- Only purchase the types and amounts of materials needed.

For additional information contact:
City of Lake Forest – Public Works Department
(949)461-3480 or visit our website at: www.lakeforestca.gov

- Share unused portions of products with neighbors or community programs (latex paint)

For additional information contact:
City of Lake Forest – Public Works Department
(949)461-3480 or visit our website at: www.lakeforestca.gov

GARDEN CARE

Garden activities may contribute pollutants via soil erosion, green waste, fertilizer and pesticide use. Plant and garden care activities such as landscape maintenance, fertilization, and pesticide application have the potential to discharge significant quantities of pollutants to the storm drain system. Nonvegetated surfaces may allow for significant erosion leading to high sediment loads. Other pollutants such as pesticides may adsorb onto the soil particles and be transported off site. Excess fertilizer and pesticide pollutants from over application may be carried to the storm drain by dissolving in irrigation runoff or rainwater. Green wastes may also contain organic matter and may have adsorbed fertilizers and pesticides.

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	x
Bacteria	x
Foaming Agents	
Metals	
Hydrocarbons	
Hazardous Materials	
Pesticides and Herbicides	x
Other	x

Excessive irrigation is often the most significant factor in home and garden care activities. Pollutants may dissolve in irrigation water and then be transported to the storm drain, or particles and materials coated with fertilizers and pesticides may be suspended in the irrigation flow and carried to the storm drain. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before conducting garden care activities. Remember - The ocean starts at your front door.

Required Activities

- Irrigation systems must be properly adjusted to reflect seasonal water needs.
- Minimize the use of pesticides and fertilizers. Read the labels and follow directions to avoid improper use. Do not apply chemicals if it is windy or about to rain.
- Properly clean up and dispose of spills of gardening chemicals, fertilizes, or soils. If possible, return the spilled material to the container for future use.
- Lawn and garden care products must be stored in closed labeled containers, in covered areas, or off-ground and under protective tarps.
- Household hazardous waste must be properly disposed at a household hazardous waste center.
- Cover nonvegetated surfaces to prevent erosion.

Recommended Activities

- Utilize xeroscaping and use of drought and insect resistant landscaping.
- Cultivate garden often to control weeds
- Use integrated pest management (IPM). Planting pest repelling plants (e.g. Marigolds) or using pest eating insects (e.g. ladybugs) may reduce the need for pesticides.
- Do not leave food (human or pet) outside overnight
- Remove fruit and garden waste

For additional information contact:
City of Lake Forest – Public Works Department
(949)461-3480 or visit our website at: www.lakeforestca.gov

R-5
DISPOSAL OF PET WASTES

Pet wastes left in the environment may introduce solids, bacteria, and nutrients to the storm drain. The type and quantity of waste will dictate the proper disposal method. Small quantities of waste are best disposed with regular trash or flushed down a toilet. Large quantities of wastes from herbivore animals may be composted for subsequent use or disposal to landfill.

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	x
Bacteria	x
Foaming Agents	
Metals	
Hydrocarbons	
Hazardous Materials	
Pesticides and Herbicides	
Other	

Pick up after your pet! It's as easy as 1-2-3. 1) Bring a bag. 2) Clean it up. 3) Dispose of it properly (toilet or trash). The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before you dispose of any pet wastes. Remember - The ocean starts at your front door.

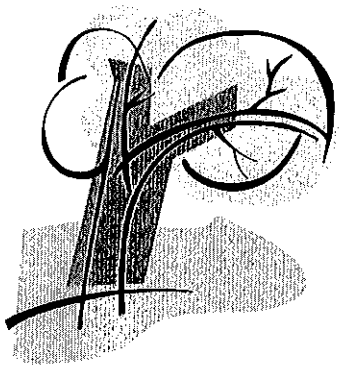
Required Activities

- All pet wastes must be picked up and properly disposed of. Pet waste should be disposed of in the regular trash, flushed down a toilet, or composted as type and quantities dictate.
- Properly dispose of unused flea control products (shampoo, sprays, or collars).
- Manure produced by livestock in uncovered areas should be removed at least daily for composting, or storage in water-tight container prior to disposal. Never hose down to stream or storm drain. Composting or storage areas should be configured and maintained so as not to allow contact with runoff. Compost may be donated to greenhouses, nurseries, and botanical parks. Topsoil companies and composting centers may also accept composted manure.
- Line waste pits or trenches with an impermeable layer, such as thick plastic sheeting.
- When possible, allow wash water to infiltrate into the ground, or collect in an area that is routed to the sanitary sewer.
- Confine livestock in fenced in areas except during exercise and grazing times. Restrict animal access to creeks and streams, preferably by fencing.
- Install gutters that will divert roof runoff away from livestock areas.

Recommended Activities

- In order to properly dispose of pet waste, carry bags, pooper-scooper, or equivalent to safely pick up pet wastes while walking with pets.
- Bathe pets indoors and use less toxic shampoos. When possible, have pets professionally groomed.
- Properly inoculate your pet in order to maintain their health and reduce the possibility of pathogens in pet wastes.
- Maintain healthy and vigorous pastures with at least three inches of leafy material.
- Consider indoor feeding of livestock during heavy rainfall, to minimize manure exposed to potential runoff.
- Locate barns, corrals, and other high use areas on portions of property that either drain away from or are located distant form nearby creeks or storm drains.

For additional information contact:
City of Lake Forest – Public Works Department
(949)461-3480 or visit our website at: www.lakeforestca.gov



R-6
DISPOSAL OF GREEN WASTES

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	x
Bacteria	x
Foaming Agents	
Metals	
Hydrocarbons	
Hazardous Materials	x
Pesticides and Herbicides	x
Other	

Green wastes entering the storm drain may clog the system creating flooding problems. Green wastes washed into receiving waters create an oxygen demand as they are decomposed, reducing the available oxygen for aquatic life. Pesticide and nutrient residues may be carried to the receiving water with the green wastes. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before disposing of any green wastes - Remember - The ocean starts at your front door.

Required Activities

- Green wastes can not be disposed of in the street, gutter, public right-of-way, storm drain, or receiving water. Dispose of green wastes as a part of the household trash. If the quantities are too large, arrange a pick up with the local waste hauler.

- After conducting yard or garden activities sweep the area and properly dispose of the clippings and waste. Do not sweep or blow out into the street or gutter.

Recommended Activities

- Utilize a commercial landscape company to conduct the landscape activities and waste disposal.

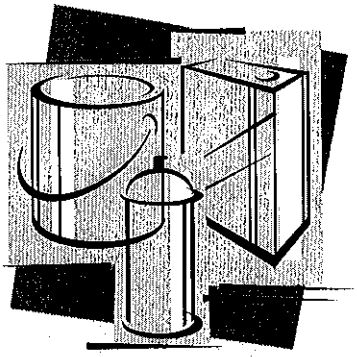
- Utilize native plants and drought tolerant species to reduce the water use and green waste produced.

- Use a lawn mower that has a mulcher so that the grass clippings remain on the lawn and do not have to be collected and disposed of.

- Compost materials in a designated area within the yard.

- Recycle lawn clippings and greenery waste through local programs if available.

For additional information contact:
City of Lake Forest – Public Works Department
(949)461-3480 or visit our website at: www.lakeforestca.gov



R-7
HOUSEHOLD HAZARDOUS WASTE

Household hazardous wastes (HHW) are defined as waste materials which are typically found in homes or similar sources, which exhibit characteristics such as: corrosivity, ignitability, reactivity, and/or toxicity, or are listed as hazardous materials by EPA.

The activities outlined in this fact sheet target the following pollutants:	
Sediment	
Nutrients	
Bacteria	
Foaming Agents	x
Metals	x
Hydrocarbons	x
Hazardous Materials	x
Pesticides and Herbicides	x
Other	x

List of most common HHW products:

- Drain openers
- Oven cleaners
- Wood and metal cleaners and polishes
- Automotive oil and fuel additives
- Grease and rust solvents
- Carburetor and fuel injection cleaners
- Starter fluids
- Batteries
- Paint Thinners
- Paint strippers and removers
- Adhesives
- Herbicides
- Pesticides
- Fungicides/wood preservatives

Many types of waste can be recycled, however options for each waste type are limited. Recycling is always preferable to disposal of unwanted materials. All gasoline, antifreeze, waste oil, and lead-acid batteries can be recycled. Latex and oil-based paint can be reused, as well as recycled. Materials that cannot be reused or recycled should be disposed of at a properly permitted landfill.

Think before disposing of any household hazardous waste. Remember - The ocean starts at your front door.

RECYCLE USED OIL

Required Activities

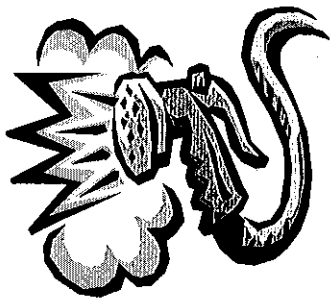
- Dispose of HHW at a local collection facility. Call (714) 834-6752 for the household hazardous waste center closest to your area.
- Household hazardous materials must be stored indoors or under cover, and in closed and labeled containers.
- If safe, contain, clean up, and properly dispose all household hazardous waste spills. If an unsafe condition exists, call 911 to activate the proper response team.

Recommended Activities

- Use non-hazardous or less-hazardous products.
- Participate in HHW reuse and recycling. Call (714) 834-6752 for the participating household hazardous waste centers.

The California Integrated Waste Management Board has a Recycling Hotline (800) 553-2962, that provides information and recycling locations for used oil.

City of Lake Forest – Public Works Department
(949)461-3480 or visit our website at: www.lakeforestca.gov



R-8
WATER CONSERVATION

Excessive irrigation and/or the overuse of water is often the most significant factor in transporting pollutants to the storm drain system. Pollutants from a wide variety of sources including automobile repair and maintenance, automobile washing, automobile parking, home and garden care activities and pet care may dissolve in the water and be transported to the storm drain. In addition, particles and materials coated with fertilizers and pesticides may be suspended in the flow and be transported to the storm drain.

The activities outlined in this fact sheet target the following pollutants:	
Sediment	x
Nutrients	x
Bacteria	x
Foaming Agents	x
Metals	x
Hydrocarbons	x
Hazardous Materials	x
Pesticides and Herbicides	x
Other	x

Hosing off outside areas to wash them down not only consumes large quantities of water, but also transports any pollutants, sediments, and waste to the storm drain system. The pollution prevention activities outlined in this fact sheets are used to prevent the discharge of pollutants to the storm drain system.

Think before using water. Remember - The ocean starts at your front door.

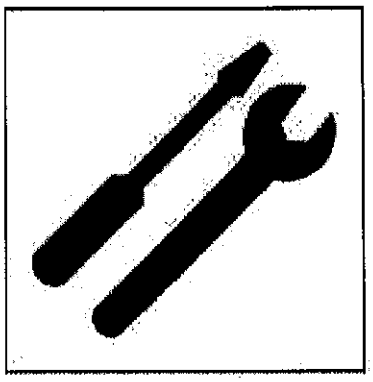
Required Activities

- Irrigation systems must be properly adjusted to reflect seasonal water needs.
- Do not hose off outside surfaces to clean, sweep with a broom instead.

Recommended Activities

- Fix any leaking faucets and eliminate unnecessary water sources.
- Use xeroscaping and drought tolerant landscaping to reduce the watering needs.
- Do not over watering lawns or gardens. Over watering wastes water and promotes diseases.
- Use a bucket to re-soak sponges/rags while washing automobiles and other items outdoors. Use hose only for rinsing.
- Wash automobiles at a commercial car wash employing water recycling.

For additional information contact:
City of Lake Forest – Public Works Department
(949)461-3480 or visit our website at: www.lakeforestca.gov



FF-3

EQUIPMENT MAINTENANCE AND REPAIR

Vehicle or equipment maintenance has the potential to be a significant source of stormwater pollution. Engine repair and service (parts cleaning, spilled fuel, oil, etc.), replacement of fluids, and outdoor equipment storage and parking (dripping engines) can all contaminate stormwater. Conducting the following activities in a controlled manner will reduce the potential for stormwater contamination:

1. **General Maintenance and Repair**
2. **Vehicle and Machine Repair**
3. **Waste Handling/Disposal**

Related vehicle maintenance activities are covered under the following program headings in this manual: "Vehicle and Equipment Cleaning", "Vehicle and Equipment Storage", and "Vehicle Fueling".

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for equipment maintenance and repair include:

- Review maintenance activities to verify that they minimize the amount of pollutants discharged to receiving waters. Keep accurate maintenance logs to evaluate materials removed and improvements made.
- Switch to non-toxic chemicals for maintenance when possible.
- Choose cleaning agents that can be recycled.
- Minimize use of solvents. Clean parts without using solvents whenever possible. Recycle used motor oil, diesel oil, and other vehicle fluids and parts whenever possible.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. General Maintenance and Repair

General Guidelines

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

- ✓ Review maintenance activities to verify that they minimize the amount of pollutants discharged to receiving waters. Keep accurate maintenance logs to evaluate materials removed and improvements made.
- ✓ Regularly inspect vehicles and equipment for leaks.
- ✓ Move activity indoors or cover repair area with a permanent roof if feasible.
- ✓ Minimize contact of stormwater with outside operations through berming and drainage routing.
- ✓ Place curbs around the immediate boundaries of the process equipment.
- ✓ Clean yard storm drain inlets regularly and stencil them.

Good Housekeeping

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

- ✓ Avoid hosing down work areas. If work areas are washed and if discharge to the sanitary sewer is allowed, treat water with an appropriate treatment device (e.g. clarifier) before discharging. If discharge to the sanitary sewer is not permitted, pump water to a tank and dispose of properly.
- ✓ Collect leaking or dripping fluids in drip pans or containers. Fluids are easier to recycle or dispose of properly if kept separate.
- ✓ Keep a drip pan under the vehicle while you unclip hoses, unscrew filters, or remove other parts. Place a drip pan under any vehicle that might leak while you work on it to keep splatters or drips off the shop floor.
- ✓ Educate employees on proper handling and disposal of engine fluids.
- ✓ Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
- ✓ Do not pour liquid waste to floor drains, sinks, outdoor storm drain inlets, or other storm drains or sewer connections.
- ✓ Post signs at sinks and stencil outdoor storm drain inlets.

2. Vehicle Repair

General Guidelines

Also see Waste Handling procedure sheet

- ✓ Perform vehicle fluid removal or changing inside or under cover where feasible to prevent the run-on of stormwater and the runoff of spills.
- ✓ Regularly inspect vehicles and equipment for leaks, and repair as needed.
- ✓ Use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- ✓ Immediately drain all fluids from wrecked vehicles. Ensure that the drain pan or drip pan is large enough to contain drained fluids (e.g. larger pans are needed to contain antifreeze, which may gush from some vehicles).

- ✓ Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
- ✓ Recycle used motor oil, diesel oil, and other vehicle fluids and parts whenever possible.
- ✓ Oil filters disposed of in trash cans or dumpsters can leak oil. Place the oil filter in a funnel over a waste oil recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask your oil supplier or recycler about recycling oil filters.
- ✓ Store cracked batteries in a non-leaking secondary container and dispose of properly at recycling or household hazardous waste facilities.

Vehicle Leak and Spill Control

- ✓ Use absorbent materials on small spills. Remove the absorbent materials promptly and dispose of properly.
- ✓ Place a stockpile of spill cleanup materials where it will be readily accessible.
- ✓ Sweep floor using dry absorbent material.

3. Machine Repair

Also see the Spill Prevention and Control procedure sheet

- ✓ Keep equipment clean; don't allow excessive build-up of oil or grease.
- ✓ Minimize use of solvents.
- ✓ Use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- ✓ Perform major equipment repairs at the corporation yard, when practical.
- ✓ Following good housekeeping measures in *Vehicle Repair* section.

4. Waste Handling/Disposal

Waste Reduction

- ✓ Prevent spills and drips of solvents and cleansers to the shop floor.
- ✓ Do liquid cleaning at a centralized station so the solvents and residues stay in one area. Recycle liquid cleaners when feasible.
- ✓ Locate drip pans, drain boards, and drying racks to direct drips back into a solvent sink or fluid holding tank for reuse.

Safer Alternatives

OPTIONAL:

- If possible, eliminate or reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous material:
  - Use non-caustic detergents instead of caustic cleaning for parts cleaning.

- Use a water-based cleaning service and have tank cleaned. Use detergent-based or water-based cleaning systems in place of organic solvent degreasers.
- Replace chlorinated organic solvents with non-chlorinated solvents. Non-chlorinated solvents like kerosene or mineral spirits are less toxic and less expensive to dispose of properly. Check list of active ingredients to see whether it contains chlorinated solvents.
- Choose cleaning agents that can be recycled.

Recycling

Also see Waste Handling procedure sheet

OPTIONAL:

- Separate wastes for easier recycling. Keep hazardous and non-hazardous wastes separate, do not mix used oil and solvents, and keep chlorinated solvents separate from non-chlorinated solvents.
- Label and track the recycling of waste material (e.g. used oil, spent solvents, batteries).
- Purchase recycled products to support the market for recycled materials.

LIMITATIONS:

Space and time limitations may preclude all work being conducted indoors. It may not be possible to contain and clean up spills from vehicles/equipment brought on-site after working hours. Dry floor cleaning methods may not be sufficient for some spills – see spill prevention and control procedures sheet. Identification of engine leaks may require some use of solvents.

REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. 1995. King County Surface Water Management. July. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

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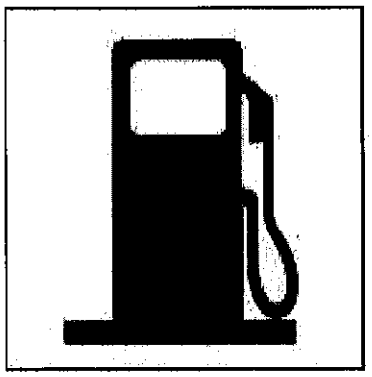

FF-4

FUELING

Spills and leaks that may occur during equipment and vehicle fueling can contribute hydrocarbons, oils and greases, and heavy metals to stormwater runoff. Implementation of the following procedures can help prevent fuel spills and leaks and thereby reduce their impacts to stormwater.

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POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for fueling include:

- Fuel vehicles and equipment at off-site commercial fueling stations when feasible.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

General Guidelines

✓ If refueling must be done on site, use a location away from storm drains and creeks.

✓ If re-developing the fueling are, design the area to prevent the run-on of stormwater and the runoff of spills:

- Pave fueling area with Portland cement concrete (or equivalent smooth impervious surface), with a 2% to 4% slope to prevent ponding.
- Separate the dispensing area from the rest of the site by a grade break that prevents run-on of storm water to the extent practicable. The fuel dispensing area is defined as extending 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly area may be operated plus 1 foot, whichever is less. The paving around the fuel dispensing area

may exceed the minimum dimensions of the "fuel dispensing area" stated above.

- Cover the fuel dispensing area. The cover's minimum dimensions must be equal to or greater than the area within the grade break or the fuel dispensing area.
- Design the cover so that is does not drain onto the fuel dispensing area.

✓ Install vapor recovery nozzles to help control drips as well as air pollution.

✓ Discourage "topping off" of fuel tanks.

✓ Use secondary containment such as curbs, berms, etc. when transferring fuel from the tank truck to the fuel tank.

✓ If the facility has large numbers of mobile equipment working throughout the site and they are fueled with a mobile fuel truck, establish a designated area for fueling. With the exception of racked equipment such as bulldozers and perhaps small forklifts, most vehicles should be able to travel to a designated area with little lost time. Place temporary "caps" over nearby storm drain inlets so that if a spill occurs it is prevented from entering the storm drain.

✓ Ensure compliance with all Federal and State requirements regarding underground storage tanks, or install above ground tanks.

✓ Use dry methods to clean the fueling area whenever possible. If you periodically clean by pressure washing, place a temporary plug in the downstream drain and pump out the accumulated water. Properly dispose of the water.

✓ Train employees on proper fueling and cleanup procedures

✓ Ensure the following safeguards are in place:

- Overflow protection devices on tank systems to warn the operator to automatically shutdown transfer pumps when the tank reaches full capacity
- Protective guards around tanks and piping to prevent vehicle or forklift damage
- Clearly tagging or labeling all valves to reduce human error
- Placement of spill kits at fueling areas and/or on vehicles.

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

✓ Stencil storm drain inlets within the facility boundary, by paint/stencil (or equivalent), to indicate whether they flow to an oil/water separator, directly to the sewer, or to a storm drain. Labels are not necessary for plumbing fixtures directly connected to the sanitary sewer.

Spill Response

See Spill Prevention and Control procedures sheet

✓ Use absorbent materials on small spills and general cleaning rather than hosing down the area. Remove the absorbent materials promptly.

✓ Place a stockpile of spill cleanup materials where it will be readily accessible.

✓ Aboveground tank leak and spill control (not applicable to propane):

- Check for external corrosion and structural failure
- Check for spills and overfills due to operator error
- Check for failure of piping system
- Check for leaks or spills during pumping of liquids or gases from truck or rail car to a storage facility or vice versa
- Visually inspect new tank or container installation for loose fittings, poor welding, and improper or poorly fitted gaskets
- Inspect tank foundations, connections, coatings, and tank walls and piping system. Look for corrosion, leaks, cracks, scratches, and other physical damage that may weaken the tank or container system.

OPTIONAL:

- Periodically, integrity testing should be conducted by a qualified professional.

LIMITATIONS:

REFERENCES:

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King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. 1995. King County Surface Water Management. July. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

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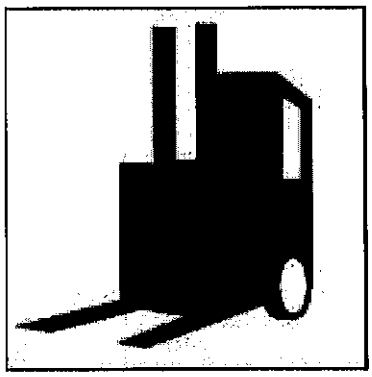

FF-6

MATERIAL LOADING AND UNLOADING

The loading/unloading of materials usually takes place outside; therefore, materials spilled, leaked, or lost during loading/unloading have the potential to collect in the soil or on other surfaces and be carried away by runoff or when the area is cleaned. Additionally, rainfall may wash pollutants from machinery used to unload or move materials. Material loading and unloading involves the following activities:

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for material loading and unloading include:

- Check loading and unloading equipment regularly for leaks.
- Cover loading docks.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

General Guidelines

- ✓ Regularly clean work areas to remove materials such as debris, sandblasting material, etc.
- ✓ Design loading/unloading area to prevent stormwater runon that would include grading or berming the area, and positioning roof downspouts so they direct stormwater away from loading/unloading areas.
- ✓ Use overhangs or door skirts that enclose the trailer.
- ✓ Park tank trucks or delivery vehicles so that spills or leaks can be contained.
- ✓ Avoid loading and exposing materials during rain events unless the loading dock is covered and protected from rain. A seal or door skirt between the trailer and the building may also prevent exposure to rain.
- ✓ Shipboard cooling and process water discharges should be directed to minimize contact with spent abrasives, paint, and other debris.

Tank truck transfers

- ✓ The area where the transfer takes place should be paved. If the liquid is reactive with the asphalt, Portland cement should be used to pave the area.
- ✓ Transfer area should be designed to prevent runon of stormwater from adjacent areas. Sloping the pad and using a berm around the uphill side of the transfer area should reduce runon.
- ✓ Transfer area should be designed to prevent runoff of spilled liquids from the area. Sloping the area to a drain should prevent runoff. The drain should be connected to a dead-end sump. A positive control valve should be installed on the drain.

Spill Control

Also see Spill Prevention and Control procedures sheet

- ✓ Contain leaks during transfer.
- ✓ Use drip pans under hoses.
- ✓ Have an emergency spill cleanup plan readily available.
- ✓ Place spill kits and materials next to or near each loading/unloading area.
- ✓ Use drip pans or comparable devices when transferring oils, solvents, and paints.

Training

- ✓ Make sure forklift operators are properly trained.
- ✓ Train employees regarding spill containment and cleanup.
- ✓ Employees trained in spill containment and cleanup should be present during the loading/unloading.
- ✓ Use a written operations plan that describes procedures for loading and/or unloading.

Inspection

Also see Spill Prevention and Control procedures sheet

- ✓ Check loading and unloading equipment regularly for leaks, including valves, pumps, flanges and connections.
- ✓ Inspect regularly for leaking valves, pipes, hoses, or soil chutes carrying either water or wastewater.
- ✓ Look for dust or fumes during loading or unloading operations.

LIMITATIONS:

Space and time limitations may preclude all transfers from being performed indoors or under cover. It may not be possible to conduct transfers only during dry weather.

REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook.

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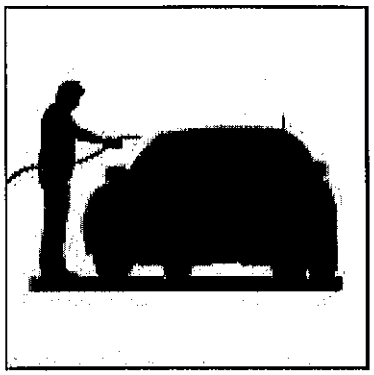

FF-11

VEHICLE AND EQUIPMENT CLEANING

Vehicle and equipment cleaning activities can contribute toxic hydrocarbons and other organic compounds, oils and greases, nutrients, heavy metals, and suspended solids to stormwater runoff. Use of the procedures outlined below can prevent or reduce the discharge of pollutants to stormwater during vehicle and equipment cleaning.

1. **Inspection and Cleaning of Stormwater Conveyance Structures**
2. **Controlling Illicit Connections and Discharges**
3. **Controlling Illegal Dumping**

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for vehicle and equipment cleaning include:

- Use outside service agencies to clean vehicles and equipment.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

If your facility washes or steam cleans a large number of vehicles or pieces of equipment, consider contracting out this work to a commercial business. These businesses are better equipped to handle and dispose of the wash waters properly. Contracting out this work can also be economical by eliminating the need for a separate washing/cleaning operation at your facility.

If washing/cleaning must occur on-site follow these procedures:

- ✓ Use designated, covered, wash areas to prevent contact with stormwater and bermed to contain wash water.
- ✓ Designated wash areas must be well marked with signs indicating where and how washing must be done.
- ✓ Water may be discharged to the sanitary sewer after flowing through a clarifier. If the above conditions are not met, other pre-treatment may be

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

required.

✓ Do not permit steam cleaning or engine degreasing at the wash out area.

✓ Washing operations should be conducted in a designated wash area having the following characteristics:

- Paved with Portland cement concrete
- Covered or bermed to prevent contact with storm water
- Sloped for wash water collection
- Connected to the sanitary sewer – upon approval.
- Clearly designated

OPTIONAL:

- Consider filtering and recycling wash water.
- Equip wash areas with oil/water separators.

LIMITATIONS

Steam cleaning can generate significant pollutant concentrations requiring permitting, monitoring, pretreatment, and inspections. The measures outlined in this procedure sheet are insufficient to address all the environmental impacts and compliance issues related to steam cleaning.

REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

The Stormwater Mangers Resource Center (http://www.stormwatercenter.net/)

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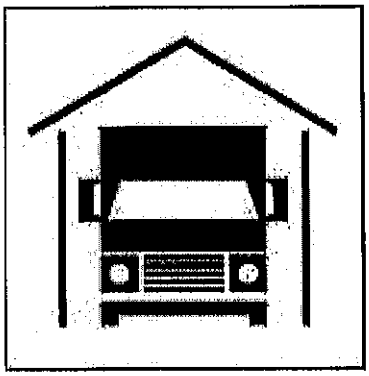

FF-12

VEHICLE AND EQUIPMENT STORAGE

Stormwater runoff from vehicle and equipment storage areas can be contaminated with toxic hydrocarbons and other organic compounds, oils and greases, heavy metals, nutrients, and suspended solids. Activities associated with vehicle and equipment storage may involve one or more of the following:

1. **Storing Vehicles and Equipment**
2. **Wrecked Vehicle Storage**
3. **Cleaning Storage Areas**

Related vehicle maintenance activities are covered under the following program headings in this manual: "Vehicle and Equipment Cleaning", "Equipment Maintenance and Repair", and "Vehicle Fueling".

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for vehicle and equipment storage include:

- Use outside service agencies to clean vehicle storage areas and collect water for off-site disposal.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Storing Vehicles and Equipment

General Guidelines

- ✓ Place drip pans or absorbent materials under vehicles and heavy equipment when not in use.
- ✓ Inspect the storage yard for filling drip pans and other problems (leaking equipment) regularly.
- ✓ Train employees on procedures for storage and inspection items.

Batteries

- ✓ Store batteries that have been dropped or are cracked in a secondary container even if it appears that the acid has already drained.

2. Wrecked Vehicle Storage

- ✓ As the vehicles arrive, place drip pans under them immediately, even if the fluids have leaked out before the car arrives.
- ✓ Drain all fluids from wrecked vehicles and "part" cars. Also drain engines, transmission, and other used parts.
- ✓ Promptly transfer used fluids to the proper container; do not leave full drip pans or other open containers lying around.
- ✓ Do not store vehicles near storm drain inlets.
- ✓ Comply with all applicable State and Federal regulations regarding storage, handling, and transport of petroleum products.

3. Cleaning Vehicle Storage Areas

- ✓ Dry sweep parking lots, storage areas, and driveways at least once per month to collect dirt, waste, and debris, do not hose down the area to a storm drain.
- ✓ Considering using an outside service to clean vehicle storage areas and collect water for off-site disposal.

LIMITATIONS:

It may not be possible to contain and clean up spills from vehicles/equipment brought on-site after working hours.

REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. 1995. King County Surface Water Management. July. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Los Angeles County Stormwater Quality Model Programs. Public Agency Activities
http://ladpw.org/wmd/npdes/model_links.cfm

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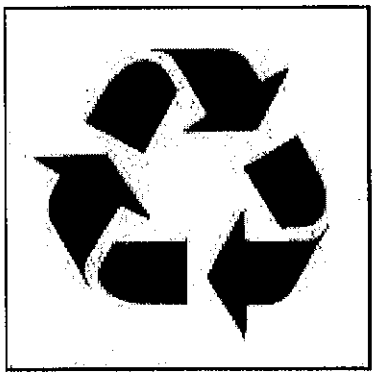

FF-13

WASTE HANDLING AND DISPOSAL

Improper storage of solid wastes can allow toxic compounds, oils and greases, heavy metals, nutrients, suspended solids, and other pollutants to enter stormwater runoff. The discharge of pollutants to stormwater from waste handling and disposal can be prevented and reduced by tracking waste generation, storage, and disposal; reducing waste generation and disposal through source reduction and recycling; and preventing run-on and runoff. Proper waste handling and disposal activities include the following:

1. **Litter Control**
2. **Waste Collection**
3. **Spill/Leak Control**
4. **Run-on/Runoff Prevention**

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for waste handling and disposal include:

- Reuse products when possible.
- Recycle leftover products that are recyclable.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Litter Control

General Guidelines

✓ Enforce anti-litter laws.

✓ Provide a sufficient number of litter receptacles at each fixed facility.

✓ Clean out and cover litter receptacles frequently to prevent spillage.

OPTIONAL:

- Post "No Littering" signs.
- Place trash receptacles at transit stops and maintain as necessary

2. Waste Collection

General Guidelines

- ✓ Keep waste collection areas clean.
- ✓ Regularly inspect solid waste containers for structural damage. Repair or replace damaged containers as necessary.
- ✓ Secure solid waste containers; containers should be closed tightly when not in use.
- ✓ Do not fill waste containers with washout water or any other liquid.
- ✓ Ensure that only appropriate solid wastes are added to the solid waste container. Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be disposed of in solid waste containers (see chemical/ hazardous waste collection section below).
- ✓ Do not mix liquid wastes; this can cause chemical reactions, make recycling impossible, and complicate disposal.

Good Housekeeping

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

- ✓ Use the entire product before disposing of the container.
- ✓ The waste management area should be kept clean by sweeping and cleaning up spills immediately.
- ✓ When cleaning around dumpster areas use dry methods when possible (e.g. sweeping, use of absorbents). If water must be used after sweeping/using absorbents, collect water and discharge to landscaped area or discharge through grease interceptor to the sewer if permitted to do so.

Chemical/Hazardous Waste Management

- ✓ All hazardous waste must be labeled according to hazardous waste regulations. Consult your Fire Department or your local hazardous waste agency for details.
- ✓ Educate/train employees and subcontractors in proper hazardous waste handling management practices.
- ✓ Handle hazardous materials as infrequently as possible. Only properly trained personnel should handle hazardous waste.
- ✓ Select designated hazardous waste collection areas on-site and make sure that hazardous waste is collected, removed, and disposed of only at these authorized disposal areas.
- ✓ Hazardous wastes may only be stored for 90 days or less, unless the facility obtains a permit.

✓ Hazardous materials and wastes should be stored in covered containers and protected from vandalism.

✓ Place hazardous waste containers in secondary containment.

✓ Stencil storm drains on the facility's property

Waste Reduction/ Recycling

✓ Recycle materials whenever possible.

OPTIONAL:

- Reduce the amount of waste generated by using source controls such as:
  - Production planning and sequencing
  - Process or equipment modification
  - Raw material substitution or elimination
  - Loss prevention and housekeeping
  - Waste segregation and separation
  - Close loop recycling
- Establish a material tracking system to increase awareness about material usage. This may reduce spills and minimize contamination, thus reducing the amount of waste produced.

3. Spill/Leak Control:

Also see Spill Prevention and Control procedure sheet

✓ Clean up spills immediately.

✓ Spill cleanup materials should be placed where they are easily accessible.

✓ Minimize spillage/leaking from solid waste containers. For larger solid waste containers (especially compactors) that utilize a hydraulic fluid pump system, regularly inspect and replace faulty pumps or hoses to minimize the potential of releases and spills.

✓ Check waste management areas for leaking containers or spills.

✓ Leaking equipment including valves, lines, seals, or pumps should be repaired promptly.

✓ Transfer waste from damaged containers into safe containers.

✓ Vehicles transporting waste should have spill prevention equipment that can prevent spills during transport. The spill prevention equipment includes:

- Vehicles equipped with baffles for liquid waste
- Trucks with sealed gates and spill guards for solid waste

✓ Special care should be taken when loading or unloading wastes *See Loading and Unloading procedure sheet.*

4. Run-on/Runoff Prevention

- ✓ Prevent stormwater run-on from entering waste management areas by enclosing the area or building a berm around the area.
- ✓ Prevent the waste materials from directly contacting rain.
- ✓ Cover waste areas with a permanent roof if feasible. If not feasible, cover waste piles with temporary covering material such as reinforced tarpaulin, polyethylene, polyurethane, polypropylene or hypalon.
- ✓ If possible, move the activity indoors; ensuring first that all safety concerns such as fire hazard and ventilation are addressed.
- ✓ Dumpsters should be covered to prevent rain from washing waste out of holes or cracks in the bottom of the dumpster.

OPTIONAL:

- Minimize the runoff of stormwater for land application by:
  - Choosing a site where slopes are under 6%, the soil is permeable, there is a low water table, it is located away from wetlands or marshes, there is a closed drainage system.
  - Avoiding application of waste to the site when it is raining or when the ground is saturated with water.
  - Growing vegetation on land disposal areas to stabilize soils and reduce the volume of surface water runoff from the site.
  - Maintaining adequate barriers between the land application site and the receiving waters. Planted strips are particularly good.
  - Using erosion control techniques such as mulching and matting, filter fences, straw bales, diversion terracing, and sediment basins.
  - Performing routine maintenance to ensure the erosion control or site stabilization measures are working.

LIMITATIONS:

Hazardous waste cannot be re-used or recycled; it must be disposed of by a licensed hazardous waste hauler.

REFERENCES:

Bay Area Stormwater Management Agencies Association. 1996. Pollution From Surface Cleaning.

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning

Associates for Stormwater Quality Task Force. March 1993.

Harvard University. 2002. Solid Waste Container Best Management Practices – Fact Sheet On-Line Resources – Environmental Health and Safety.

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FP-3

ROADS, STREETS, AND HIGHWAYS OPERATION AND MAINTENANCE

Streets, roads, and highways are significant sources of pollutants in storm water discharges, and operation and maintenance (O&M) practices, if not conducted properly, can contribute to the problem. O&M practices may involve one or more of the following activities:

1. **Sweeping & Cleaning**
2. **Street Repair & Maintenance**
3. **Bridge and Structure Maintenance**

Streets, roads, and highways are significant sources of pollutants in storm water discharges, and operation and maintenance (O&M) practices, if not conducted properly, can contribute to the problem. O&M practices may involve one or more of the following activities:

Pollution prevention measures that should be consider and the minimum required and optional model procedures for each performance standard are provided below.

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measure for roads, streets, and highways operation and maintenance include:

- Use the least toxic materials available (e.g. water based paints, gels or sprays for graffiti removal)
- Recycle paint and other materials whenever possible.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Sweeping & Cleaning

Sweeping Frequency and Timing

- ✓ Maintain a consistent sweeping schedule. Provide minimum monthly sweeping of streets.
- ✓ Perform street cleaning during dry weather if possible.
- ✓ Avoid wet cleaning or flushing of streets, and utilize dry methods where possible.
- ✓ If flushing of a street is absolutely necessary, sweep and remove debris before flushing. Do not let wash water enter storm drain inlets. Collect wash water and direct to a dirt or vegetated area, pump into a vacuum truck and dispose of properly.

OPTIONAL:

- Consider increasing sweeping frequency based on factors such as traffic volume, land use, field observations of sediment and trash accumulation, proximity to water courses, etc.

Equipment Operation and Selection

- ✓ Maintain cleaning equipment in good working condition and purchase replacement equipment as needed. Old sweepers should be replaced as needed with new technologically advanced sweepers (preferably regenerative air sweepers) that maximize pollutant removal.
- ✓ Operate sweepers at manufacturer requested optimal speed levels to increase effectiveness.
- ✓ Clean sweepers at a wash rack that drains to the sanitary sewer. The wash rack area should be covered and bermed and wash water should drain to a clarifier prior to entering the sanitary sewer.
- ✓ Regularly inspect vehicles and equipment for leaks, and repair immediately.

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

OPTIONAL:

- If available use vacuum or regenerative air sweepers in the high sediment and trash areas (typically industrial/commercial).

Management of Material Removed by Sweeping

- ✓ Dispose of street sweeping debris and dirt at a landfill.
- ✓ Do not store swept material along the side of the street or near a storm drain inlet.
- ✓ If dewatering of saturated materials is necessary it should be conducted in a designated area away from storm drain inlets and the water contained for proper disposal.

✓ If authorized by the local sanitation agency, water may be discharged to the sanitary sewer only after passing through a clarifier. As an alternative, dewatering can be conducted in a containment area in which saturated materials are placed on a tarp and allowed to dry. Dry debris is then disposed of properly.

✓ Keep debris storage to a minimum during the wet season or make sure debris piles are contained (e.g. by berming the area) or covered (e.g. with tarps or permanent covers).

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

Maximize Access for Sweepers

✓ Keep accurate operation logs to track program.

✓ Properly maintain and operate equipment; which will increase efficiency.

✓ Sweeping should be conducted as close to the curb line as possible.

OPTIONAL:

- Institute a parking policy to restrict parking in problematic areas during periods of street sweeping.
- Post permanent street sweeping signs in problematic areas; use temporary signs if installation of permanent signs is not possible.
- Develop and distribute flyers notifying residents of street sweeping schedules.

2. Repair and Maintenance

Pavement Marking

✓ Develop paint handling procedures for proper use, storage, and disposal of paints.

✓ Transfer and load paint and hot thermoplastic away from storm drain inlets.

✓ Street or hand sweep thermoplastic grindings. Yellow thermoplastic grindings may require special handling as they may contain lead.

✓ Replace paints containing lead and tributyltin with less toxic alternatives.

✓ Use water based paints. Clean application equipment in a sink that is connected to the sanitary sewer.

✓ Properly store leftover paints if they are to be kept for the next job, or dispose of properly.

✓ See *Spill Control procedure sheet* for guidance on the proper cleanup of paint spills.

Concrete Installation and Repair

✓ Avoid mixing excess amounts of fresh concrete or cement mortar on-site. Only mix what is needed for the job.

✓ Wash concrete trucks off site or in designated areas on site, such that there is no discharge of concrete wash water into storm drain inlets, open ditches, streets, or other stormwater conveyance structures.

- ✓ Store concrete materials under cover, away from drainage areas.
- ✓ Return leftover materials to the transit mixer. Dispose of small amounts of hardened excess concrete, grout, and mortar in the trash.
- ✓ Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.
- ✓ When washing poured concrete areas to remove fine particles and expose the aggregate, contain the wash water for proper disposal; do not discharge water to the storm drain system.
- ✓ Do not allow excess concrete to be dumped on-site, except in designated areas.
- ✓ Apply concrete, asphalt, and seal coat during dry weather to allow the material to adequately dry prior to a rain event.
- ✓ When making saw cuts in pavement, use as little water as possible and perform during dry weather. Cover each nearby or appropriate storm drain inlet completely with filter fabric or plastic during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and remove from site. Alternatively, a small on-site vacuum may be used to pick up the slurry as this will prohibit slurry from reaching storm drain inlets.

Patching, Resurfacing, and Surface Sealing

- ✓ Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
- ✓ Apply concrete, asphalt, and seal coat during dry weather to allow the material to adequately dry prior to a rain event.
- ✓ Where applicable, cover and seal each nearby or appropriate storm drain inlet (with waterproof material, plastic or mesh) and maintenance holes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from covered man holes and storm drain inlets when the job is complete.
- ✓ Use only as much water as necessary for dust control, to avoid runoff.
- ✓ Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.
- ✓ Prior to a rain event or at the completion of a project, sweep the project area by hand or with a street sweeper.

Equipment Cleaning, Maintenance, and Storage

Also see Equipment Repair & Maintenance procedure sheet.

- ✓ Clean equipment including sprayers, sprayer paint supply lines, patch and paving equipment, and mudjacking equipment at the end of each day. If equipment can be cleaned and materials reapplied at the job site, do so in compliance with the laws and regulations. Clean in a sink or other area (e.g. vehicle wash area) that is connected to the sanitary sewer.

- ✓ If refueling or repairing vehicles and equipment must be done on-site, conduct the activity away from storm drain inlets and watercourses.
- ✓ Place drip pans or absorbent materials under heavy equipment when not in use.
- ✓ Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

OPTIONAL:

- Conduct cleaning at a corporation or maintenance yard if possible.
- When practical, perform major equipment repairs at the corporation yard.

→ *In addition to the procedures above, review and apply general procedures outlined for Minor Construction activities when conducting street, road, and highway repair and maintenance activities.*

3. Bridge and Structure Maintenance

Painting and Paint Removal

- ✓ Transport paint and materials to and from job sites in containers with secure lids and tied down to the transport vehicle.
- ✓ Do not transfer or load paint near storm drain inlets or watercourses.
- ✓ Test and inspect spray equipment prior to starting to paint. Tighten all hoses and connections and do not overfill paint container.
- ✓ If sand blasting is used to remove paint, cover nearby storm drain inlets prior to starting work.
- ✓ If the bridge crosses a watercourse, perform work on a maintenance traveler or platform, or use suspended netting or tarps to capture paint, rust, paint removing agents, or other materials, to prevent discharge of materials to surface waters. If sanding, use a sander with a vacuum filter bag.
- ✓ Recycle paint when possible (e.g. paint may be used for graffiti removal activities). Dispose of paint at an appropriate household hazardous waste facility.
- ✓ See Spill Control procedure sheet for guidance on the proper cleanup of paint spills.

Graffiti Removal

- ✓ Avoid graffiti abatement activities during rain events.
- ✓ Protect nearby storm drain inlets prior to removing graffiti from walls, signs, sidewalks, or other structures needing graffiti abatement. Clean up

afterwards by sweeping or vacuuming thoroughly, and/or by using absorbent and properly disposing of the absorbent.

✓ Note that care should be taken when disposing of waste since it may need to be disposed of as hazardous waste.

✓ When graffiti is removed by painting over, implement the procedures under Painting and Paint Removal above.

✓ Direct runoff from sand blasting and high pressure washing (with no cleaning agents) into a landscaped or dirt area.

✓ If a graffiti abatement method generates wash water containing a cleaning compound (such as high pressure washing with a cleaning compound), plug nearby storm drains and collect wash water and dispose of properly.

OPTIONAL:

- Consider using a waterless and non-toxic chemical cleaning method for graffiti removal (e.g. gels or spray compounds).

Guardrail and Fence Repair

✓ When cleaning guardrails or fences follow the appropriate surface cleaning methods (depending on the type of surface) outlined in the *Sidewalk, Plaza, and Fountain Maintenance and Cleaning* procedure sheet.

✓ If painting is conducted, follow the *Painting and Paint Removal* procedures above.

✓ If graffiti removal is conducted, follow the *Graffiti Removal* procedures above.

✓ If construction takes place, see the procedure sheet for *Minor Construction*.

✓ Recycle materials whenever possible.

LIMITATIONS:

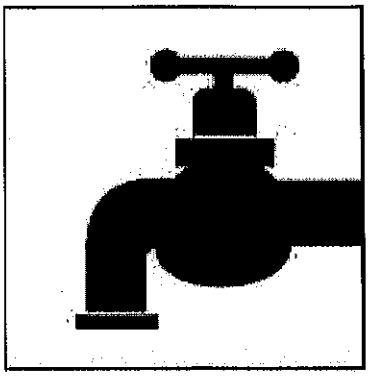
Limitations related to street sweeping may include high equipment costs, the potential inability to restrict parking in urban areas, the need for sweeper operator training, the inability of current sweeper technology to remove oil and grease, and the lack of scientific evidence regarding the expected levels of pollutant removal.

REFERENCES:

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.



FP-6

WATER AND SEWER UTILITY OPERATION AND MAINTENANCE

Although the operation and maintenance of public utilities are not considered themselves a chronic source of stormwater pollution, some activities and accidents can result in the discharge of pollutants that can pose a threat to both human health and the quality of receiving waters if they enter the storm drain system. Activities associated with the operation and maintenance of water and sewer utilities to prevent and handle such incidents include the following:

1. **Water Line Maintenance**
2. **Sanitary Sewer Maintenance**
3. **Spill/Leak/Overflow Control, Response, and Containment**

Cities that do not provide maintenance of water and sewer utilities should coordinate with the contracting agency responsible for these activities and ensure that these model procedures are followed.

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for water and sewer utility operation and maintenance include:

- Inspect potential non-storm water discharge flow paths and clear/cleanup any debris or pollutants found (i.e. remove trash, leaves, sediment, and wipe up liquids, including oil spills).
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Water Line Maintenance

Procedures can be employed to reduce pollutants from discharges associated with water utility operation and maintenance activities. Planned discharges may include fire hydrant testing, flushing water supply mains after new construction, flushing lines due to complaints of taste and odor, dewatering mains for maintenance work. Unplanned discharges from treated, recycled water, raw water, and groundwater systems operation and maintenance activities can occur from water main breaks, sheared fire hydrants, equipment malfunction, and operator error.

Planned Discharges

✓ For planned discharges use one of the following options:

- Reuse water for dust suppression, irrigation, or construction compaction
- Discharge to the sanitary sewer system with approval
- Discharge to the storm drain system or to a creek using applicable pollution control measures listed below (this option is ONLY applicable to uncontaminated pumped ground water, water line flushing, fire hydrant testing and flushing, discharges from potable water sources other than water main breaks) and may require a permit from the Regional Water Quality Control Board.

✓ If water is discharged to a storm drain inlet (catch basin), control measures must be put in place to control potential pollutants (i.e. sediment, chlorine, etc.). Examples of some storm drain inlet protection options include:

- Silt fence – appropriate where the inlet drains a relatively flat area.
- Gravel and wire mesh sediment filter – Appropriate where concentrated flows are expected.
- Wooden weir and fabric – use at curb inlets where a compact installation is desired.

✓ Prior to discharge, inspect discharge flow path and clear/cleanup any debris or pollutants found (i.e. remove trash, leaves, sediment, and wipe up liquids, including oil spills).

✓ Select appropriate pollution control measure(s) considering the receiving system (i.e. curb inlet, drop inlet, culvert, creek, etc.) and ensure that the control device(s) fit properly.

✓ General design considerations for inlet protection devices include the following:

- The device should be constructed such that cleaning and disposal of trapped sediment is made easy, while minimizing interference with discharge activities.
- Devices should be constructed so that any standing water resulting from the discharge will not cause excessive inconvenience or flooding/damage to adjacent land or structures.

✓ The effectiveness of control devices must be monitored during the discharge period and any necessary repairs or modifications made as needed.

OPTIONAL:

- Sediment removal may be enhanced by placing filter fabric, gravel bags, etc. at storm drain inlets.

Unplanned Discharges

✓ Stop the discharge as quickly as possible by turning off water source.

✓ Inspect flow path of the discharged water:

- Control erosion along the flow path.
- Identify areas that may produce significant sediment or gullies, use sandbags to redirect the flow.
- Identify erodible areas which may need to be repaired or protected during subsequent repairs or corrective actions

✓ If repairs or corrective action will cause additional discharges of water, select the appropriate procedures for erosion control, chlorine residual, turbidity, and chemical additives. Prevent potential pollutants from entering the flow path and ensure that no additional discharged water enters storm drain inlets.

2. Sanitary Sewer Maintenance

Applicable to municipalities who own and operated a sewage collection system. Facilities that are covered under this program include sanitary sewer pipes and pump stations owned and operated by the Permittee. The owner of the sanitary sewer facilities is the entity responsible for carrying out this prevention and response program.

Sewer System Cleaning

- ✓ Sewer lines should be cleaned on a regular basis to remove grease, grit, and other debris that may lead to sewer backups.
- ✓ Establish routine maintenance program. Cleaning should be conducted at an established minimum frequency and more frequently for problem areas such as restaurants that are identified
- ✓ Cleaning activities may require removal of tree roots and other identified obstructions.

Preventative and Corrective Maintenance

- ✓ During routine maintenance and inspection note the condition of sanitary sewer structures and identify areas that need repair or maintenance. Items to note may include the following:
  - cracked/deteriorating pipes
  - leaking joints/seals at manhole
  - frequent line plugs
  - line generally flows at or near capacity
  - suspected infiltration or exfiltration
- ✓ Document suggestions and requests for repair and report the information to the appropriate manager or supervisor.
- ✓ Prioritize repairs based on the nature and severity of the problem. Immediate clearing of blockage or repair is required where an overflow is currently occurring or for urgent problems that may cause an imminent overflow (e.g. pump station failures, sewer line ruptures, sewer line blockages). These repairs may be temporary until scheduled or capital improvements can be completed.
- ✓ Review previous sewer maintenance records to help identify "hot spots" or areas with frequent maintenance problems and locations of potential system failure.

3. Spill/Leak/Overflow Control, Response, and Containment

Control

Also see Drainage System procedures sheet

- ✓ Refer to countywide *Illicit Discharge Detection and Elimination Program.* Components of this program include:
  - Investigation/inspection and follow-up
  - Elimination of illicit discharges and connections
  - Enforcement of ordinances
  - Respond to sewage spills

- Facilitate public reporting of illicit discharges and connections. A citizen's hotline for reporting observed overflow conditions should be established to supplement the field screening efforts being conducted by the Principal Permittee.

Response and Containment

- ✓ Establish lead department/agency responsible for spill response and containment. Provide coordination within departments.
- ✓ When a spill, leak, and/or overflow occurs, keep sewage from entering the storm drain system to the maximum extent practicable by covering or blocking storm drain inlets or by containing and diverting the sewage away from open channels and other storm drain facilities (using sandbags, inflatable dams, etc.).
- ✓ If a spill reaches the storm drain notify County of Orange Health Care Agency through Control One at (714) 628-7208.
- ✓ Remove the sewage using vacuum equipment or use other measures to divert it back to the sanitary sewer system.
- ✓ Record required information at the spill site.
- ✓ Perform field tests as necessary to determine the source of the spill.
- ✓ Develop additional notification procedures regarding spill reporting as needed.

LIMITATIONS:

Private property access rights needed to perform testing along storm drain right-of-ways. Requirements of municipal ordinance authority for suspected source verification testing necessary for guaranteed rights of entry.

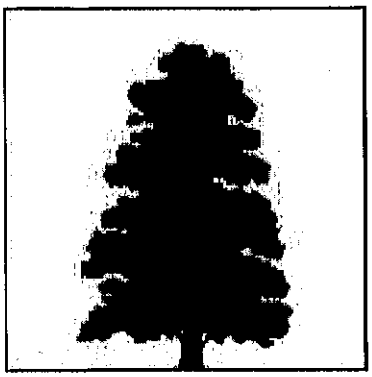
REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Los Angeles County Stormwater Quality. Public Agency Activities Model Program. On-line: http://ladpw.org/wmd/npdes/public_TC.cfm

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

Santa Clara Valley Urban Runoff Pollution Prevention Program. Water Utility Pollution Prevention Plan.



FP-2

LANDSCAPE MAINTENANCE

The model procedures described below focus on minimizing the discharge of pesticides and fertilizers, landscape waste, trash, debris, and other pollutants to the storm drain system and receiving waters. Landscape maintenance practices may involve one or more of the following activities:

1. **Mowing, Trimming/Weeding, and Planting**
2. **Irrigation**
3. **Fertilizer and Pesticide Management**
4. **Managing Landscape Waste**
5. **Erosion Control**

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for landscape maintenance include:

- Implement an integrated pest management (IPM) program. IPM is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools. Refer to Appendix D, Fertilizer and Pesticide Management Guidance for further details.
- Choose low water using flowers, trees, shrubs, and groundcover.
- Appropriate maintenance (i.e. properly timed fertilizing, weeding, pest control, and pruning) will preserve the landscapes water efficiency.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Mowing, Trimming/Weeding, and Planting

Mowing, Trimming/Weeding

✓ Whenever possible, use mechanical methods of vegetation removal rather than applying herbicides. Use hand weeding where practical.

- ✓ When conducting mechanical or manual weed control, avoid loosening the soil, which could erode into streams or storm drains.
- ✓ Use coarse textured mulches or geotextiles to suppress weed growth and reduce the use of herbicides.
- ✓ Do not blow or rake leaves, etc. into the street or place yard waste in gutters or on dirt shoulders. Sweep up any leaves, litter or residue in gutters or on street.
- ✓ Collect lawn and garden clippings, pruning waste, tree trimmings, and weeds. Chip if necessary, and compost or dispose of at a landfill (see waste management section of this procedure sheet).
- ✓ Place temporarily stockpiled material away from watercourses, and berm or cover stockpiles to prevent material releases to storm drains.

Planting

- ✓ Where feasible, retain and/or plant selected native vegetation whose features are determined to be beneficial. Native vegetation usually requires less maintenance (e.g., irrigation, fertilizer) than planting ornamental vegetation.
- ✓ When planting or replanting consider using low water use groundcovers.

OPTIONAL:

- Careful soil mixing and layering techniques using a topsoil mix or composted organic material can be used as an effective measure to reduce herbicide use and watering.

2. Irrigation

- ✓ Utilize water delivery rates that do not exceed the infiltration rate of the soil.
- ✓ Use timers appropriately or a drip system to prevent runoff and then only irrigate as much as is needed.
- ✓ Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering, and repair leaks in the irrigation system as soon as they are observed.
- ✓ Where practical, use automatic timers to minimize runoff.
- ✓ Use popup sprinkler heads in areas with a lot of activity or where there is a chance the pipes may be broken. Consider the use of mechanisms that reduce water flow to sprinkler heads if broken.
- ✓ If re-claimed water is used for irrigation, ensure that there is no runoff from the landscaped area(s).
- ✓ If bailing of muddy water is required (e.g. when repairing a water line leak), do not put it in the storm drain; pour over landscaped areas.

3. Fertilizer and Pesticide Management

Usage

- ✓ Utilize a comprehensive management system that incorporates integrated pest management techniques.
- ✓ Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers and pesticides and training of applicators and pest control advisors.
- ✓ Educate and train employees on use of pesticides and in pesticide application techniques to prevent pollution.
- ✓ Pesticide application must be under the supervision of a California qualified pesticide applicator.
- ✓ When applicable use the least toxic pesticides that will do the job. Avoid use of copper-based pesticides if possible.
- ✓ Do not mix or prepare pesticides or fertilizers for application near storm drains.
- ✓ Prepare the minimum amount of pesticide needed for the job and use the lowest rate that will effectively control the pest.
- ✓ Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.
- ✓ Calibrate fertilizer and pesticide application equipment to avoid excessive application.
- ✓ Periodically test soils for determining proper fertilizer use.
- ✓ Sweep pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
- ✓ Inspect pesticide/fertilizer equipment and transportation vehicles daily.
- ✓ Refer to Appendix D for further guidance on Fertilizer and Pesticide management

OPTIONAL:

- Work fertilizers into the soil rather than dumping or broadcasting them onto the surface.
- Use beneficial insects where possible to control pests (green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seedhead weevils, and spiders prey on detrimental pest species).
- Use slow release fertilizers whenever possible to minimize leaching.

Scheduling

- ✓ Do not use pesticides if rain is expected within 24 hours.
- ✓ Apply pesticides only when wind speeds are low (less than 5 mph).

Disposal

- ✓ Purchase only the amount of pesticide that you can reasonably use in a given time period (month or year depending on the product).
- ✓ Triple rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- ✓ Dispose of empty pesticide containers according to the instructions on the container label.

4. Managing Landscape Waste

Also see Waste Handling and Disposal procedure sheet

- ✓ Compost leaves, sticks, or other collected vegetation or dispose of at a permitted landfill. Do not dispose of collected vegetation into waterways or storm drainage systems.
- ✓ Place temporarily stockpiled material away from watercourses and storm drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system.
- ✓ Reduce the use of high nitrogen fertilizers that produce excess growth requiring more frequent mowing or trimming.
- ✓ Inspection of drainage facilities should be conducted to detect illegal dumping of clippings/cuttings in or near these facilities. Materials found should be picked up and properly disposed of.
- ✓ Landscape wastes in and around storm drain inlets should be avoided by either using bagging equipment or by manually picking up the material.

5. Erosion Control

Also see Waste Handling and Disposal procedure sheet

- ✓ Maintain vegetative cover on medians and embankments to prevent soil erosion. Apply mulch or leave clippings to serve as additional cover for soil stabilization and to reduce the velocity of storm water runoff.
- ✓ Minimize the use of disking as a means of vegetation management because the practice may result in erodable barren soil.
- ✓ Confine excavated materials to pervious surfaces away from storm drain inlets, sidewalks, pavement, and ditches. Material must be covered if rain is expected.

LIMITATIONS:

Alternative pest/weed controls may not be available, suitable, or effective in every case.

REFERENCES:

California Storm Water Best Management Practice Handbooks. Industrial/Commercial Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. July 1993.

County of Orange. 2000. Public Facilities and Resources Department, Management Guidelines for the Use of Fertilizers and Pesticides. September.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. 1995. King County Surface Water Management. July. On-line: http://dnr.metrokc.gov/wlr/dss/spcm.htm

Los Angeles County Stormwater Quality Model Programs. Public Agency Activities
http://ladpw.org/wmd/npdes/model_links.cfm

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

FP-4

SIDEWALK, PLAZA, AND FOUNTAIN MAINTENANCE AND CLEANING

Pollutants on sidewalks and other pedestrian traffic areas and plazas are typically due to littering and vehicle use. Fountain water containing chlorine and copper-based algaecides is toxic to aquatic life. Proper inspection, cleaning, and repair of pedestrian areas and city surfaces and structures can reduce pollutant runoff from these areas. Maintaining these areas may involve one or more of the following activities:

1. **Surface Cleaning**
2. **Graffiti Cleaning**
3. **Sidewalk Repair**
4. **Controlling Litter**
5. **Fountain Maintenance**

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for sidewalk, plaza, and fountain maintenance and cleaning include:

- Use dry cleaning methods whenever practical for surface cleaning activities.
- Use the least toxic materials available (e.g. water based paints, gels or sprays for graffiti removal).
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. Surface Cleaning

Discharges of wash water to the sto rm water drainage system from cleaning or hosing of impervious surfaces is prohibited.

Sidewalks, Plazas

- ✓ Use dry methods (e.g. sweeping, backpack blowers, vacuuming) whenever practical to clean sidewalks and plazas rather than hosing, pressure washing, or steam cleaning. DO NOT sweep or blow material into curb; use devices that contain the materials.
- ✓ If water must be used, block storm drain inlets and contain runoff. Discharge wash water to landscaping or contain and dispose of properly.

Parking Areas, Driveways, Drive-thru

- ✓ Parking facilities should be swept/vacuumed on a regular basis. Establish frequency of public parking lot sweeping based on usage and field observations of waste accumulation.
- ✓ If water must be used, block storm drain inlets and contain runoff. Discharge wash water to landscaping or contain and dispose of properly.
- ✓ Sweep all parking lots at least once before the onset of the wet season.
- ✓ Use absorbents to pick up oil; then dry sweep.
- ✓ Appropriately dispose of spilled materials and absorbents.

OPTIONAL:

- Consider increasing sweeping frequency based on factors such as traffic volume, land use, field observations of sediment and trash accumulation, proximity to water courses, etc.

Building Surfaces, Decks, etc., without loose paint

- ✓ Use high-pressure water, no soap.
- ✓ If water must be used, block storm drain inlets and contain runoff. Discharge wash water to landscaping or contain and dispose of properly.

Unpainted Building Surfaces, Wood Decks, etc.

- ✓ If water must be used, block storm drain inlets and contain runoff. Discharge wash water to landscaping or contain and dispose of properly.
- ✓ Use a biodegradable cleaning agent or acid wash to remove deposits, wood restorer, or other chemicals. Screen wash water using an appropriate filtering device (e.g. filter fabric), if needed, to catch debris.
- ✓ Make sure pH is between 6.5 and 8.5 THEN discharge to landscaping (if cold water without a cleaning agent) otherwise dispose of properly.

2. Graffiti Cleaning

Graffiti Removal

See Roads, Streets, and Highways Operation and Maintenance procedure sheet.

- ✓ Avoid graffiti abatement activities during rain events.
- ✓ When graffiti is removed by painting over, implement the procedures under Painting and Paint Removal in the *Roads, Streets*, and *Highway Operation and Maintenance* procedure sheet.

✓ Protect nearby storm drain inlets prior to removing graffiti from walls, signs, sidewalks, or other structures needing graffiti abatement. Clean up afterwards by sweeping or vacuuming thoroughly, and/or by using absorbent and properly disposing of the absorbent.

✓ Note that care should be taken when disposing of waste since it may need to be disposed of as hazardous waste.

OPTIONAL:

- Consider using a waterless and non-toxic chemical cleaning method for graffiti removal (e.g. gels or spray compounds).

3. Sidewalk Repair

Surface Removal and Repair

✓ Schedule surface removal activities for dry weather if possible.

✓ Avoid creating excess dust when breaking asphalt or concrete.

✓ Take measures to protect nearby storm drain inlets prior to breaking up asphalt or concrete (e.g. place hay bales or sand bags around inlets). Clean afterwards by sweeping up material.

✓ Designate an area for clean up and proper disposal of excess materials.

✓ Remove and recycle as much of the broken pavement as possible.

✓ When making saw cuts in pavement, use as little water as possible. Cover each storm drain inlet with filter fabric during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. After the liquid drains shovel or vacuum the slurry, remove from site and dispose of properly.

Also see the street sweeping section of the Roads, Streets, and Highways Operation and Maintenance procedure sheet.

✓ Always dry sweep first to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquid in storm drains. Once dry sweeping is complete, the area may be hosed down if needed. Discharge wash water to landscaping, pump to the sanitary sewer if permitted to do so or contain and dispose of properly.

Concrete Installation and Repair

✓ Avoid mixing excess amounts of fresh concrete or cement mortar on-site. Only mix what is needed for the job.

✓ Wash concrete trucks off-site or in designated areas on-site, such that there is no discharge of concrete wash water into storm drain inlets, open ditches, streets, or other storm water conveyance structures.

See Roads, Streets, and Highways Operation and Maintenance procedure sheet.

✓ Store dry and wet concrete materials under cover, protected from rainfall and runoff and away from drainage areas. After job is complete remove temporary stockpiles (asphalt materials, sand, etc.) and other materials as soon as possible.

✓ Return leftover materials to the transit mixer. Dispose of small amounts of

excess concrete, grout, and mortar in the trash.

- ✓ When washing concrete to remove fine particles and expose the aggregate, contain the wash water for proper disposal.
- ✓ Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stock pile, or dispose in the trash.
- ✓ Protect applications of fresh concrete from rainfall and runoff until the material has hardened.

4. Litter Control

- ✓ Enforce anti-litter laws.
- ✓ Provide litter receptacles in busy, high pedestrian traffic areas of the community, at recreational facilities, and at community events.
- ✓ Cover litter receptacles and clean out frequently to prevent leaking/spillage or overflow.

OPTIONAL:

- Post "No Littering" signs.

5. Fountain Maintenance

- ✓ Do not use copper-based algaecides. Control algae with chlorine or other alternatives, such as sodium bromide.
- ✓ When draining fountains, never discharge water to a street or storm drain; discharge to the sanitary sewer
- ✓ Allow chlorine to dissipate for a few days and then recycle/reuse water by draining it gradually onto a landscaped area. Water must be tested prior to discharge to ensure that chlorine is not present (concentration must be less than 0.1 ppm).

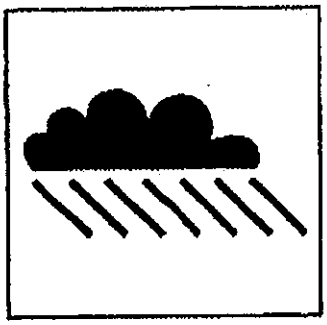
LIMITATIONS:

Surface cleaning activities that require discharges to the local sanitation agency will require coordination with the agency.

REFERENCES:

Bay Area Stormwater Management Agencies Association. 1996. Pollution From Surface Cleaning.

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality



DF-1

DRAINAGE FACILITY OPERATION AND MAINTENANCE

As a consequence of its function, the stormwater conveyance system collects and transports urban runoff and storm water that may contain certain pollutants. Consequently these pollutants may accumulate in the system and must be removed periodically. In addition, the systems must also be maintained to function properly hydraulically to avoid flooding. Maintaining the system may involve the following activities:

Inspection and Cleaning of Stormwater Conveyance Structures

Controlling Illicit Connections and Discharges

Controlling Illegal Dumping

MODEL PROCEDURES:

1. Inspection and Cleaning of Drainage Facilities

General Guidelines

- ✓ Annually inspect and clean drainage facilities as needed. Maintain appropriate records. This information should be used to determine problem areas that may need to be checked more often.
- ✓ Remove trash and debris as needed from open channels and properly dispose of these materials (at an approved landfill or recycling facility). It should be noted that major debris removal may require other regulatory permits prior to completing the work.
- ✓ Conduct annual visual inspections during the dry season to determine if there are problem inlets where sediment/trash or other pollutants accumulate.
- ✓ Eliminate any discharges that may occur while maintaining and cleaning any municipal drainage facilities.
- ✓ Train crews in proper maintenance activities, including record keeping and disposal.
- ✓ Provide energy dissipaters (e.g. riprap) below culvert outfalls to minimize potential for erosion.

Storm Drain Flushing

- ✓ Flushing of storm drains or storm drain inlets should only be done in emergencies.
- ✓ If flushed, the material should be collected (vacuumed), treated with an appropriate filtering device to remove sand and debris and disposed of properly.

Waste Management

- ✓ Store wastes collected from cleaning activities of the drainage facilities in appropriate containers or temporary storage sites in a manner that prevents discharge to the storm drain.
- ✓ Dewater the wastes if necessary with outflow into the sanitary sewer if permitted. Water should be treated with an appropriate filtering device to remove the sand and debris prior to discharge to the sanitary sewer. If discharge to the sanitary sewer is not permitted, water should be pumped or vacuumed to a tank and properly disposed of. Do not dewater near a storm drain or stream.

→ *Note: Permission must be obtained for any discharge of wash water to the sanitary sewer from the local sewering agency.*

OPTIONAL:

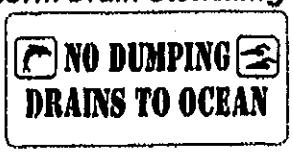
- Provide for laboratory analysis of at least one randomly collected sediment (less the debris) sample per year from the storm drain inlet cleaning program to ensure that it does not meet the EPA criteria for hazardous waste. If the sample is determined to be hazardous, the sediment must be disposed of as hazardous waste.

2. Controlling Illicit Connections and Discharges

Improper physical connections to the storm drain system can occur in a number of ways, such as overflow cross-connects from sanitary sewers and floor drains from businesses like auto shops and restaurants. Illicit discharges and illegal connections can generally be detected and investigated through a combination of programs and approaches that target a variety of pollutants and sources.

- ✓ Report prohibited discharges such as dumping, paint spills, abandoned oil containers, etc. observed during the course of normal daily activities so they can be investigated, contained, and cleaned up.
- ✓ Conduct field investigations to detect and eliminate existing illicit connections and improper disposal of pollutants into the storm drain (i.e. identify problem areas where discharges or illegal connections may occur and follow up stream to determine the source(s)).
- ✓ Report all observed illicit connections and discharges to the 24-hour water pollution problem reporting hotline (714) 567-6363.
- ✓ Encourage public reporting of improper waste disposal by distributing public education materials and advertising the 24-hour water pollution problem reporting hotline.

Storm Drain Stenciling



Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets.

✓ Implement a storm drain stenciling program.

OPTIONAL:

- Create a volunteer work force to stencil storm drain inlets; municipal staff must organize, market, and provide training to initiate the volunteer program:
  - Promote volunteer services through radio/television and mail-out campaigns.
  - Educate businesses and residents about storm water pollution, the storm drain system, and the watershed and provide information on alternatives such as recycling, household hazardous waste disposal, and safer products.

3. Controlling Illegal Dumping

Illegally dumped wastes can cause storm water and receiving water quality problems as well as clog the storm drain system itself. Non-hazardous solid wastes may include garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes and other discarded solid or semi-solid waste provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentration which exceed applicable water quality objectives or could cause degradation of waters of the state.

Field Investigation

✓ Report prohibited discharges such as dumpings observed during the course of normal daily activities so they can be investigated, contained and cleaned up.

✓ Conduct field investigations to detect and eliminate improper disposal of pollutants into the storm drain (i.e. identify problem areas where discharges or illegal connections may occur and follow up stream to determine the source(s)).

✓ Report all observed illicit connections and discharges to the 24-hour water pollution problem reporting hotline (714) 567-6363.

✓ Encourage public reporting of improper waste disposal by distributing public education materials and advertising the 24-hour water pollution problem reporting hotline.

OPTIONAL:

- Post "No Dumping" signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.

Training/Education/ Outreach

✓ Annually train municipal employees to recognize and report illegal dumping.

✓ Encourage public reporting of illegal dumping by advertising the 24-hour water pollution problem reporting hotline (714) 567-6363.

OPTIONAL:

- Educate the public with public education materials such as a hotline and/or door hanger (door hangers are placed on the front doors in neighborhoods where illegal dumping has occurred to inform the reader why illegal dumping is a problem, and that illegal dumping carries a significant financial penalty).
- Educate the public through volunteer water quality monitoring programs. Volunteers can be trained to notice and report the presence and suspected source of an observed pollutant to the appropriate public agency.

LIMITATIONS:

Clean-up activities may create a slight disturbance for local aquatic species. Access to items and material on private property may be limited. Trade-offs may exist between channel hydraulics and water quality/riparian habitat. If storm channels or basins are recognized as wetlands, many activities, including maintenance, may be subject to regulation and permitting.

REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

Harvard University. 2002. Solid Waste Container Best Management Practices – Fact Sheet On-Line Resources – Environmental Health and Safety.

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

Exhibit A-9.III

Inspection Forms

Industrial/Commercial Inspection Form

Public Works Department
25550 Commercentre Dr., Ste 100
Lake Forest, California 92630
(949) 461-3480

Page _____ of _____

Inspector Name: _____

Inspection Date: _____ Time: _____

☐ Routine Inspection ☐ Response to Complaint ☐ Follow-up Inspection | Business Type: ☐ Industrial ☐ Commercial

Facility Name: _____ Contact Name: _____

Site Address: _____ Phone: _____

PRIORITIZATION VERIFICATION:

Percent of Activities Outdoors and Uncovered: ☐ <25% ☐ 25-50% ☐ 50-75% ☐ >75%

Approximate Impervious Area: ☐ <5,000 sq. ft. ☐ 5,000-100,000 sq. ft. ☐ >100,000 sq. ft.

Amount of Raw Material Kept Indoors or Properly Covered Outdoors: ☐ ALL ☐ SOME ☐ NONE

Watershed: _____

SIC Code: _____

SIC Description: _____

Observed Business Type: _____

Is the facility covered under a stormwater permit? (Check all that apply)

☐ Does not need coverage ☐ No, but may need to refer to Regional Board ☐ Individual NPDES Permit ☐ General Industrial Permit (filed NOI)

SWPPP on site? ☐ Yes ☐ No Facility's WDID #: _____ Business License #: _____

ACTIVITIES (FACT SHEET)	COMMENTS AND CORRECTIVE ACTIONS REQUIRED
Landscape Maintenance (IC7)	
Outdoor Drainage from Indoor Areas (IC9)	
Outdoor Loading/Unloading of Materials (IC10)	
Outdoor Process Equipment Operations and Maintenance (IC11)	
Outdoor Storage of Raw Materials, Products, and Containers (IC12)	
Parking and Storage Area Maintenance (IC15)	
Spill Prevention and Cleanup (IC17)	
Vehicle and Equipment Fueling (IC18)	
Vehicle and Equipment Maintenance and Repair (IC19)	
Vehicle and Equipment Washing and Steam Cleaning (IC20)	
Waste Handling and Disposal (IC21)	

☐ ADDITIONAL INFORMATION PROVIDED ON SUPPLEMENTAL PAGE ☐ PHOTOS TAKEN ☐ BMP INFORMATION PROVIDED

CORRECTIVE ACTION ☐ NONE ☐ CORRECT DEFICIENCIES – Fact Sheets _____

FOLLOW UP INSPECTION REQUIRED ☐ NO ☐ YES BY _____

DEFICIENCIES CORRECTED ☐ YES ☐ NO RESULT _____

This report is furnished to the facility representative as a measure to evaluate the implemented BMPs at your facility to prevent stormwater pollution. Your facility may be subject to an enforcement action if the noted deficiencies are not corrected by _____. To request a re-inspection to review the correction of deficiencies noted above, please contact the inspector noted below; otherwise, one will be scheduled prior to the above date.

Facility Representative Signature*: _____ Printed Name: _____ Date: _____

Inspector Signature: _____ Date: _____

*Signature indicates that the above items were discussed and a copy of the Inspection Report was received.

Distribution: Top – File Copy Bottom – Facility Copy

Industrial/Commercial Inspection Form- Activities/BMP Checklist

ACTIVITIES (EACH SHEET)	BMP ASSESSMENT	CONCLUSION
General Activities	Outside areas kept neat and clean?	Yes ☐ No ☐ N/A ☐
	Are storm drains inlets labeled and maintained?	Yes ☐ No ☐ N/A ☐
	Does pavement sweeping occur?	Yes ☐ No ☐ N/A ☐
	Is wash water contained and disposed of?	Yes ☐ No ☐ N/A ☐
	Are unpaved outdoor areas protected from water and wind erosion?	Yes ☐ No ☐ N/A ☐
	Are employees trained on an on-going basis?	Yes ☐ No ☐ N/A ☐
Landscape Maintenance (IC7)	Efficient irrigation (i.e. no site runoff)?	Yes ☐ No ☐ N/A ☐
	Are pesticides/fertilizers used and stored properly?	Yes ☐ No ☐ N/A ☐
	Is the dirt/debris from landscaped areas contained?	Yes ☐ No ☐ N/A ☐
Outdoor Drainage from Indoor Areas (IC9)	Materials prevented from being tracked from inside areas?	Yes ☐ No ☐ N/A ☐
	Are materials/wastes stored away from doors/docks?	Yes ☐ No ☐ N/A ☐
Outdoor Loading/Unloading of Materials (IC10)	Are storm drain inlets blocked during loading/un-loading?	Yes ☐ No ☐ N/A ☐
	Are the loading dock areas maintained?	Yes ☐ No ☐ N/A ☐
Outdoor Process Equipment Operations and Maintenance (IC11)	Exposed equipment covered?	Yes ☐ No ☐ N/A ☐
Outdoor Storage of Raw Materials, Products, and Containers (IC12)	Exposed materials covered?	Yes ☐ No ☐ N/A ☐
	Are materials stored off the ground (pallets, etc.)	Yes ☐ No ☐ N/A ☐
	Do materials/containers have secondary containment?	Yes ☐ No ☐ N/A ☐
Parking and Storage Area Maintenance (IC15)	Are parking/storage areas maintained?	Yes ☐ No ☐ N/A ☐
	Excessive oil stains prevented?	Yes ☐ No ☐ N/A ☐
Spill Prevention and Cleanup (IC17)	Are spill containment and cleanup materials readily available?	Yes ☐ No ☐ N/A ☐
	Are absorbent materials removed and properly disposed of in a timely manner?	Yes ☐ No ☐ N/A ☐
Vehicle and Equipment Fueling (IC18)	Is the fueling area designed to prevent run-on of stormwater and run-off of spills?	Yes ☐ No ☐ N/A ☐
	Is vehicle fueling contained in a designated area to prevent accidental discharges?	Yes ☐ No ☐ N/A ☐
	Is fueling area regularly inspected?	Yes ☐ No ☐ N/A ☐
	Are leaks and drips cleaned in a timely manner?	Yes ☐ No ☐ N/A ☐
Vehicle and Equipment Maintenance and Repair (IC19)	Are vehicle/equipment maintenance activities indoors or contained in a designated area?	Yes ☐ No ☐ N/A ☐
	Are drip pans/containers used?	Yes ☐ No ☐ N/A ☐
	Is clarifier/oil-water separator maintained regularly?	Yes ☐ No ☐ N/A ☐
	Are leaks and drips from equipment cleaned in a timely manner?	Yes ☐ No ☐ N/A ☐
Vehicle and Equipment Washing and Steam Cleaning (IC20)	Is vehicle/equipment washing done in designated area?	Yes ☐ No ☐ N/A ☐
	Is wash area equipped with a clarifier and connected to the sanitary sewer?	Yes ☐ No ☐ N/A ☐
	Is the wash area contained?	Yes ☐ No ☐ N/A ☐
Waste Handling and Disposal (IC21)	Is area designed to prevent run-on of stormwater and run-off of spills?	Yes ☐ No ☐ N/A ☐
	Is there evidence of outdoor use of hose bibs for cleaning?	Yes ☐ No ☐ N/A ☐
	Are trash receptacles covered?	Yes ☐ No ☐ N/A ☐
	Do materials/containers have secondary containment?	Yes ☐ No ☐ N/A ☐

*A "no" answer indicates that a corrective action may be necessary

Industrial/Commercial Inspection Form- Supplemental Form

Page _____ of _____

Inspector Name: _____

Inspection Date: _____ **Time:** _____

Facility Name: _____ **Contact Name:** _____

Site Address: _____ **Phone:** _____

Supplemental information provided on this form should be clearly linked to the information from the primary form (indicate which activity required additional information)

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Exhibit A-9.V

Enforcement Forms

Citation No. 1734

CITY OF LAKE FOREST
NOTICE OF VIOLATION/ADMINISTRATIVE COMPLIANCE ORDER

Lake Forest City Hall
25550 Commercentre Drive, Suite 100
Lake Forest, CA 92630
Tel. (949) 461-3400

Date Order Issued:	Date Violation Observed:	Time of Violation: AM / PM	Day of Week:
Location of Violation (Address/Point(s) of Discharge):			
Issuing Officer: Department:		Citation Served by: ☐ mail ☐ personal service ☐ post on property	
Citation Issued to: Last First Middle			Identification/Driver's License:
Title/Relationship to the Violation (ex: Property Owner, Tenant, Contractor…):			
Business Name (if applicable):		NPDES Permit Number (if applicable):	
Mailing Address (if different from above): City/State: Zip:			Phone Number:

VIOLATION CATEGORIES AND FINE AMOUNTS

☐ Failure/refusal to provide the City with information required by Chapter 15.14 of the Lake Forest Municipal Code
- ☐ Fine amount: $_____

☐ Failure/refusal to Implement Best Management Practices required by Chapter 15.14 of the Lake Forest Municipal Code
- ☐ Fine amount: $_____

☐ Violation of Section 15.14.030 of the Lake Forest Municipal Code (Illegal discharges/Illicit connections)
- ☐ Fine amount: $_____

☐ Failure/refusal to timely comply with Previously issued Citation #_____
- ☐ Fine amount: $_____

Conditions Observed: _____

_____

_____

_____

☐ **NOTICE OF VIOLATION:** If this box is checked, you must correct the violation described above by _____/_____/20____, and you are ordered to take the remedial action(s) described below. Continued noncompliance may result in civil, criminal, or administrative enforcement actions against the owner and/or occupant.

☐ **CEASE AND DESIST ORDER:** If this box is checked, you must immediately cease any and all activities contributing to the above noted violations and clean up the area affected by the violation.

☐ **ADMINISTRATIVE COMPLIANCE ORDER AND PENALTIES:** If this box is checked, you are ordered to pay a fine in the amount of $_____, in addition to meeting the required corrective actions described below.

To correct the violation(s), you must: _____

_____

_____

Without admitting guilt, I acknowledge that I have received this citation.

_____ _____

Signature Date

The law requires that you take steps to either: (1) COMPLY with this citation; or (2) CONTEST the issuance of this citation. To COMPLY with this citation, correct the violation and pay any required fine. To CONTEST this citation, follow the procedures listed on the reverse side of this citation.