



Industrial/ Commercial Facility Inspection and BMP Training

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Prepared for: Whitewater River Region Permittees

Prepared by: CASC Engineering and Consulting

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Course Outline



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- ▶ Introduction
- ▶ Regulatory Background
 - ▶ Federal & State
 - ▶ Industrial General Permit
 - ▶ Municipal Permit & SWMP
 - ▶ Commercial/Industrial Facilities Program
 - ▶ Illicit Connections/Illegal Discharges (IC/ID)
 - ▶ Local Ordinances
- ▶ Inspection Protocols for Industrial/Commercial Facilities
- ▶ Commercial and Industrial Facility Best Management Practices (BMPs)



Common Acronym Definitions



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BMP	Best Management Practice	NPDES	National Pollutant Discharge Elimination System
IGP	Industrial General Permit	SMARTS	Storm Water Multiple Application and Report Tracking System
NEC	No Exposure Certification	SWMP	Stormwater Management Plan
NOI	Notice of Intent	SWPPP	Storm Water Pollution Prevention Plan
NONA	Notice of Non-Applicability		

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Why Are We Here?

- ▶ To comply with permit requirements for training.
- ▶ To review municipal permit requirements for commercial / industrial inspections.
- ▶ To review BMPs applicable to commercial and industrial facilities.



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What pollutants should I be concerned about?



Potential Pollutants Generated by Land Use Type

(Sources: San Bernardino and Orange County Technical Guidance Documents for Water Quality Management Plans, dated July 28, 2011 and May 19, 2011, respectively, and the Riverside County Water Quality Management Plan, Santa Ana Region, dated October 22, 2012)

Type of Development (Land Use)	General Pollutant Categories						
	Sediment/ Turbidity	Nutrients	Toxic Organic Compounds	Trash & Debris	Bacteria & Viruses (also: Pathogens)	Oil & Grease	Heavy Metals
Detached Residential Development	P	P	N	P	P	P	N
Attached Residential Development	P	P	N	P	P	P ⁽²⁾	N
Commercial/ Industrial Development	P	P ⁽¹⁾	P ⁽⁵⁾	P	P ⁽³⁾	P	P ⁽⁶⁾
Automotive Repair Shops	N	N	P ^(4,5)	P	N	P	P
Restaurants	N	N	N	P	P	P	N
Hillside Development	P	P	N	P	P	P	N
Parking Lots	P	P ⁽¹⁾	P ⁽⁴⁾	P	P	P	P
Retail Gasoline Outlets	N	N	P ⁽⁴⁾	P	N	P	P

Abbreviations:

P = Potential

N = Not potential

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Regulatory Background

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Federal Regulations

Clean Water Act (EPA)

State Regulatory Agencies

State Water Resources Control Board (SWRCB)

Regional Water Quality Control Boards (RWQCBs)

Permits

Industrial General Permit

Construction General Permit

Municipal Permits (Phase I)

Municipal Permit (Phase II Small MS4)

Regional Construction Permits

Local Laws

Ordinances, Resolutions and Codes

Municipal Staff and Municipal O&M

You!

Municipal Inspector

Public Education/ Outreach

Can the Feds issue enforcement actions?



- ▶ Yes.
 - ▶ Up to \$100,000 per day per violation, for a second time offender.
- ▶ “Any person who knowingly violates” ... shall be punished by a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or by both
- ▶ CWA Section 309(c)(2)(B)
- ▶ 40 C.F.R. 122

The Clean Water Act has other indirect impacts



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- ▶ CWA 33 U.S.C. § 1365 (a) (1) gives the public the right to sue
- ▶ Non-governmental Groups and Private Citizens
 - ▶ NRDC
 - ▶ Baykeeper
 - ▶ Other Groups



NATURAL RESOURCES DEFENSE COUNCIL



**SANTA MONICA
BAYKEEPER**

Typical Enforcement Actions Process



▶ Verbal Enforcement

- ▶ Discussion at site or over the phone

▶ Notice of Violation

- ▶ Letter stating violation
- ▶ Date when changes need to be made
- ▶ Date for written response
- ▶ Warns of further enforcement actions

▶ Notice of Non-Compliance

- ▶ \$5000 mandatory minimum penalty for failure to respond to two notifications. (CWC section 13399.25, 04/28/09)

▶ Administrative Civil Liability

- ▶ States maximum and assessed penalties
- ▶ Informs of public hearing, waiver of right to a hearing or meeting with Executive Officer

What's the magnitude of their fines?



- ▶ Under the Porter Cologne Water Quality Act:
 - ▶ \$10-\$20k per day
 - ▶ Plus \$10-\$20 per gallon
 - ▶ Plus cost of their time to inspect

What do we need to know about the IGP?



▶ General Requirements:

- ▶ Check if the facility has coverage under the IGP
 - ▶ Refer to the IGP for Categories requiring coverage
 - ▶ Report if they need to file a NOI for coverage
- ▶ Confirm that they have a Storm Water Pollution Prevention Plan (SWPPP) and a monitoring plan.
 - ▶ SWPPP must identify
 - ▶ Sources of pollutants
 - ▶ The means to manage the sources to reduce storm water pollution

What do we need to know about the IGP? (cont.)



- ▶ **Conditional Exclusion – No Exposure Certification (NEC)**
 - ▶ Conditional exclusion for any type of industry facilities that have no exposure of industrial activities and materials to storm water.
 - ▶ The previous permit required light industries to obtain coverage only if their activities were exposed to storm water.
 - ▶ For existing facilities the NEC had to be submitted electronically through the SMART system on or before October 1, 2015.

What do we need to know about the IGP? (cont.)



- ▶ **Notice of Non-Applicability (NONA)**
 - ▶ Facilities who claim “No discharge” or not connected to waters of the United States.
 - ▶ Facility is engineered and constructed to contain maximum historic precipitation event (or series of events)
 - ▶ Must prepare a No Discharge Technical Report signed by a registered Professional Engineer (P.E.)

Stormwater Management Plan (SWMP)



- ▶ **Describes the activities and programs implemented by the Permittees to manage Urban Runoff to comply with the requirements of the Whitewater River Region MS4 Permit.**
 - ▶ **Program Management**
 - ▶ **Detection and Elimination of Illicit Connections and Illegal Discharges (IC/ID)**
 - ▶ **Commercial/Industrial Facilities**
 - ▶ **New Development/Redevelopment**
 - ▶ **Private Construction Activities**
 - ▶ **Permittee Facilities and Activities**
 - ▶ **Public Education and Outreach**
 - ▶ **Monitoring**
 - ▶ **Annual Reporting, SWMP Updates, Regional Program Evaluation/Assessment**
 - ▶ **TMDL Implementation**

Commercial/Industrial Facilities Program (Whitewater River Region)



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- ▶ See SWMP Section 3.0
- ▶ Conduct source identification and outreach to reduce discharges of pollutants from targeted commercial and industrial businesses
 - ▶ Restaurant
 - ▶ Automotive Service
 - ▶ Industrial
 - ▶ Mobile Cleaning Business

What needs to be done?

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- ▶ Continue to coordinate with County Department of Health
- ▶ Continue to survey at hazardous materials permit and retail food service facilities
 - ▶ Hazardous waste permit – at least twice each permit term
 - ▶ Retail food – at least once each permit term

HAZARDOUS WASTE/ HAZARDOUS MATERIALS FACILITY STORM WATER COMPLIANCE SURVEY FORM			
FACILITY DBA	TELEPHONE	DATE	
ADDRESS	CITY, ZIP		
MAILING ADDRESS (if different from site address)	MAILING CITY, ZIP		
CONTACT	BUSINESS LICENSE FACILITY#	SEC. CODE	
COMPLIANCE AREAS			
	YES	NO	N/A
*OUTSIDE AREAS (Free of clutter & debris, gravel/sand berms/curbs, maintained in a manner to prevent runoff)			
1. CHEMICAL STORAGE * The outside storage area is properly labeled. Chemical materials are protected from precipitation through caps of leaking.			
2. DUMPSTER * No liquids are leaking from dumpster; overflows.			
3. ABOVEGROUND TANKS * No ground leakage, no spillage. Tanks are maintained to minimize the possibility of a release (see 401 CFR 172.101).			
4. ON-SITE STORM DRAIN* Protected from accidental discharge.			
5. POWER WASH OR STEAM CLEAN* (discharge to sewer) sanitary sewer and not a septic system. Steam cleaning not discharge to storm sewer.			
6. PARKING LOT/DRIVE WAY * Free of excess dirt, clutter.			
7. OTHER * Non-storm water discharge (i.e. non-hazardous process water, etc.)			
8. MOP WATER TO SANITARY SEWER VIA CLARIFIER. Is permit or other area susceptible to storm water drainage.			
9. STORM WATER EDUCATIONAL BROCHURES GIVEN TO FOR EMPLOYEES. (If Materials Provided _____) If not, what facility?			
10. IF A SWPPP IS REQUIRED, WAS IT AVAILABLE FOR ALL INDUSTRIAL FACILITIES.			
OVERALL EVALUATION COMMENTS:			
INSPECTOR:			

RETAIL FOOD FACILITY STORMWATER COMPLIANCE SURVEY			
FACILITY DBA	TELEPHONE	DATE	
ADDRESS	BUSINESS LICENSE FACILITY#		
COMPLIANCE AREAS			
	YES	NO	N/A
GREASE BARRELS INTERCEPTORS			
1. Grease pumped/removed on a regular basis; maintenance records available.			
2. Grease interceptors all grease separate licensed service facility, maintained properly.			
EQUIPMENT CLEANING:			
a. The following items are cleaned in such a manner that all wash water is discharged to the sanitary sewer or is collected for proper disposal:			
1. Grease filter:			
2. Floor mats:			
3. Floors (mop water and rinse water):			
4. Grill:			
OUTSIDE AREAS:			
a. The following areas are cleaned in such a manner that all wash water is discharged to the sanitary sewer or is collected for proper disposal:			
1. Sidewalk or outdoor seating:			
2. Drive thru:			
BUMPERS AND RECYCLING CONTAINERS:			
1. Food waste bagged and sealed before disposal.			
2. Dumpster and recycling containers are covered.			
3. Spilled materials around containers are picked up regularly.			
4. Wash water is discharged to the sanitary sewer or is collected for proper disposal.			
EMPLOYEE EDUCATION/AWARENESS:			
1. Brochures or posters displayed.			
2. BMP observed.			
OVERALL RATING:			
COMMENTS:			
Inspector:		Reviewed by:	

Inspection Procedures (Whitewater River Region)



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- ▶ Follow minimum inspection and enforcement procedures.
 - ▶ Ensure compliance with your local Stormwater Ordinance
 - ▶ Assess implementation of designated BMPs
 - ▶ Verify coverage under the IGP, as applicable
- ▶ Conduct follow-up inspections when initial survey notes “requires follow-up” or “needs improvement”
- ▶ Conduct enforcement as necessary, consistent with the SWMP. Follow criteria for characterizing the **significance of violations, prioritizing violations**, appropriate response actions and enforcement/compliance responses.
- ▶ Keep completed surveys at least three years

Prioritizing Violations



Table 1-1. Prioritization Factors for Violations

Prioritization Factor	Description
Characteristics of the Potential Pollutant	Based on chemical characteristics and potential to impact Beneficial Uses of Receiving Waters. The more toxic, hazardous, or detrimental to the Beneficial Uses of the Receiving Waters a Pollutant is, the higher the priority of the discharge.
Sensitivity of the affected Receiving Waters	The priority of the violation should be considered directly proportional to the sensitivity of the affected Receiving Waters because, for example, a more sensitive Receiving Water may suffer severe adverse effects from the discharge of a particular Pollutant whereas a less sensitive Receiving Water may suffer no adverse effects from the same Pollutant discharge. It is also important to consider that a Receiving Water may be highly sensitive to one Potential Pollutant discharge while, at the same time, completely insensitive to another Potential Pollutant. Examples of Receiving Waters that may be particularly sensitive include those designated with municipal supply or wildlife habitat designated Beneficial Uses.
Proximity of Receiving Waters	The closer a Receiving Water is to the discharge, the less chance there is for dispersion, dilution, or degradation of the Potential Pollutant. Therefore, the closer the discharge is to Receiving Waters, the higher priority of the violation.
Magnitude of discharge (volume and mass)	A larger Illegal Discharge should be of a higher priority than a smaller Illegal Discharge because as the magnitude of the Pollutant discharge increases, the extent of impact of the discharge on the environment increases as well.
Responsiveness of the discharger in taking corrective actions	A discharger who is responsive and implements a good faith effort to correct a violation is more likely to minimize adverse impacts to surface water quality than a discharger who takes no action to correct a violation. Therefore, the priority of a violation should decrease as the responsiveness of the discharger increases.
Intent of the discharger	Is the violation accidental or the result of an accident or a deliberate attempt to circumvent regulations?
Frequency of the violation	Violations of local Stormwater Ordinances and erosion control ordinances that are continuous or reoccurring should be of a higher priority than isolated occurrences of violations. The more frequent a violation, the more likely it is that the discharge will impact surface water quality.
Previous history of non-compliance of the responsible party	A poor history of non-compliance of a discharger should result in a higher prioritization of subsequent violations as compared to a discharger with a good history of compliance because a history of non-compliance is evidence of a discharger's lack of concern for complying with local Stormwater and erosion control ordinances.

Severity of Violations



Table 1-2. Severity of Violations

Factors Affecting the Severity of Violations	Severity Priority Level		
	High	Medium	Low
Pollutant characteristics	Hazardous materials (e.g., pesticides and solvents)	Metals, nutrients, Sediment, other non-Hazardous Materials	Trash and Debris
Sensitivity of Receiving Waters	Drinking water source, wildlife refuge, Illegal Discharges containing Pollutants identified as Impairing the Receiving Water.	Recreational reservoir, riparian habitat	Dry, ephemeral stream
Proximity of Receiving Waters	Adjacent	Several hundred feet away	Several hundred yards away
Discharge magnitude	1,000's gallons	100's gallons	10's gallons
Responsiveness of discharger	No action to contain or mitigate discharge	Reactive to control discharge when requested (i.e., cooperative)	Implements spill control plan at own initiative or shows good faith effort to respond
Intent of violation	Intentional	Discharge due to lack of controls or negligence	Implemented and maintained controls that failed (i.e., accident)
Frequency of violation	Continuous	Intermittent	Isolated incident
Previous history of discharger	Enforcement and cleanup historically resisted and more than one previous violation	Enforcement and cleanup performed only when threatened with enforcement or one previous violation	Enforcement and cleanup performed when requested and no previous violations

Hazardous Waste/ Materials Facilities (Whitewater River Region)



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- Verify the following BMPs:
 - Hazardous waste/materials storage areas
 - Trash bins
 - Aboveground tanks
 - Onsite storm drain inlets
 - Oil/water separators connect to sanitary sewer
 - Wash pads to sanitary sewer
 - Mop water to sanitary sewer via clarifier
 - Parking lots
 - Coverage under IGP as appropriate

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HAZARDOUS WASTE/ HAZARDOUS MATERIALS FACILITY STORM WATER COMPLIANCE SURVEY FORM

FACILITY DBA	TELEPHONE	DATE			
ADDRESS	CITY, ZIP				
MAILING ADDRESS (if different from site address)	MAILING CITY, ZIP				
CONTACT	BUSINESS LICENSE / FACILITY#	SIC CODE			
COMPLIANCE AREAS			YES	NO	N/A
*OUTSIDE AREAS (Free of staining & debris; provide good housekeeping; maintained in a manner to prevent runoff.)				Requires follow up	
1. CHEMICAL STORAGE * The outside storage area is properly managed to minimize the possibility of a release. Chemicals/materials are protected from precipitation/storm water runoff and the containers show no signs of leaking.					
2. DUMPSTER * No liquids are leaking from dumpster; surrounding area is free of trash.					
3. ABOVEGROUND TANKS * No ground staining, no spillage observed and no discharge to storm drain. Tanks are maintained to minimize the possibility of a release (secondary containment).					
4. ONSITE STORM DRAIN * Protected from accidental discharge other than water.					
5. POWER WASH OR STEAM CLEAN * (discharge to sewer) Drains to oil/water separator connected to a sanitary sewer and not a septic system. Steam cleaning not discharged to parking lot, storm drain or soil.					
6. PARKING LOT/DRIVE WAY * Free of excess trash, chemical staining or liquids other than water.					
7. OTHER * Non-storm water discharge (i.e. non-hazardous process discharge).					
8. MOP WATER TO SANITARY SEWER VIA CLARIFIER. Mop water is not dumped to the soil, parking lot, gutter, or other areas susceptible to storm water drainage.					
9. STORM WATER EDUCATIONAL BROCHURES GIVEN TO FACILITY OR POSTERS DISPLAYED FOR EMPLOYEES. (# Materials Provided _____) If no, what informational material should be sent to the facility?					
10. IF A SWPPP IS REQUIRED, WAS IT AVAILABLE FOR REVIEW? See storm water brochure for industrial facilities.					
OVERALL EVALUATION/ COMMENTS:					
INSPECTOR:			RECEIVED BY:		

Retail Food Facilities (Whitewater River Region)



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- Verify the following BMPs:
 - Oil and grease wastes
 - Trash bin areas
 - Floor mats, filters, containers wash water not discharged to MS4
 - Outdoor areas cleaned by sweeping, not hosing
 - Use dry methods for spill cleanup



RETAIL FOOD FACILITY STORMWATER COMPLIANCE SURVEY

FACILITY DBA	TELEPHONE #	DATE	
ADDRESS	BUSINESS LICENSE / FACILITY #		
COMPLIANCE AREAS	YES	NO (Follow-up Required)	N/A
GREASE BARRELS/ INTERCEPTORS			
1. Grease pumped/removed on a regular basis, maintenance records available.			
2. Grease interceptor/oil-grease separator located outside facility, maintained properly.			
EQUIPMENT CLEANING			
3. The following items are cleaned in such a manner that all wash water is discharged to the sanitary sewer or is collected for proper disposal:			
a. Grease filters:			
b. Floor mats:			
c. Floors (mop water and rinse water)			
d. Grill:			
OUTSIDE AREAS			
4. The following areas are cleaned in such a manner that all wash water is discharged to the sanitary sewer or is collected for proper disposal:			
a. Sidewalk or outdoor seating			
b. Drive thru			
DUMPSTERS AND RECYCLING CONTAINERS			
5. Food waste bagged and sealed before disposal.			
6. Dumpsters and recycling containers are covered.			
7. Spilled materials around containers are picked up regularly.			
8. Wash water is discharged to the sanitary sewer or is collected for proper disposal.			
EMPLOYEE EDUCATION/ AWARENESS			
9. Brochures or posters displayed.			
10. BMPs observed.			
OVERALL RATING	GOOD	AVERAGE	NEEDS IMPROVEMENT
COMMENTS:			
Inspector:	Received by:		

Industrial Facilities – Not Required to Re-inspect



- ▶ The Co-Permittees **NEED NOT INSPECT** Industrial facilities **ALREADY INSPECTED** by Regional Board staff if the inspection was concluded within the time period.
- ▶ Regional Board staff inspection information is available via the Storm Water Multiple Application & Report Tracking System (SMARTS).
 - ▶ <https://smarts.waterboards.ca.gov>
 - ▶ click the "View SW Data" button on the right side of the screen
 - ▶ select "Storm Water Overview Reports" to access the information.

IGP Coordination

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- ▶ **Require proof of coverage under the IGP prior to issuing a business license.**
- ▶ **Provide informational brochure on IGP requirements during survey, if they do not have a SWPPP on site.**
- ▶ **Notify RWQCB of potential non-compliance.**

Commercial/Industrial Database (Whitewater River Region)



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- Each Co-Permittee maintains a database of commercial and industrial facilities within their jurisdiction.

- Facility name
- Address
- Watershed
- Type of facility
- SIC
- Size of site
- APN
- WDID No.
- Local license/permit
- Contact information
- Status of BMPs

INDUSTRIAL and COMMERCIAL FACILITY SOURCE DATABASE FORMAT and ANNUAL REPORTING OF INSPECTIONS

FACILITY GENERAL INFORMATION											MUNICIPAL PERMITS		FACILITY CONTACT INFORMATION				Number of Stormwater Inspections	Compliance				
Facility Location							Facility SIC Code	Facility Size (sq. ft.)	APN	WQD No. (General Permit)	Business License/Stormwater Permit, etc. (if applicable)	Mailing Address (if different from street address)			Street Address	City			Zip			
Facility Name (City Site No. A)	Street Address	Cross Street	City	Zip	Watershed	Type of Facility						Contact Name	Contact Phone Number	Street Address			City	Zip				



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Inspection Protocols for Commercial/Industrial Facilities

Whitewater River Region

General Inspection Procedures



- ▶ **PREPARING FOR THE INSPECTION**
- ▶ **Review existing information and the regulatory history for each site. This would include the review of :**
 - ▶ Database of existing permitted facilities
 - ▶ Records of illegal discharges,
 - ▶ Records of violations such as Notices to Comply and Notice of Violations

General Inspection Procedures



- ▶ **GENERAL ENTRY PROCEDURES (Your agency's procedures may vary):**
 - ▶ Present your credentials to a responsible facility owner/operator, whether or not identification is requested.
 - ▶ Explain the purpose of the inspection and appropriate laws and regulations that mandate the inspection requirement.
 - ▶ The facility owner/operator must consent to the inspection. If the inspector is allowed to enter, entry is considered voluntary and consequential. The absence of an expressed denial can be considered authorization to continue the inspection.

General Inspection Procedures



- ▶ **GENERAL ENTRY PROCEDURES (Your agency's procedures may vary):**
 - ▶ Do not sign any type of "waiver", "visitor release" or document with restrictive conditions that would relieve the facility owner/operator of responsibility for injury or limit your rights to use information obtained during the inspection.
 - ▶ Explain that you cannot sign the form and request a blank sign-in sheet.

General Inspection Procedures



- ▶ **GENERAL ENTRY PROCEDURES (Your agency's procedures may vary):**
 - ▶ If the owner/operator denies entry, ask why. Tactfully probe the reason(s) for denial. In some cases, diplomacy and discussion may be sufficient to overcome the owner/operator's reluctance.
 - ▶ Be careful to avoid saying something that can be misconstrued as a threat such as discussing potential penalties. Avoid inflammatory discussions and/or deepening of misunderstandings.
 - ▶ Document all conditions and circumstances surrounding the denial for entry such as: facility name and exact address, name and title of who refused entry.

General Inspection Procedures



- ▶ **GENERAL ENTRY PROCEDURES (Your agency's procedures may vary):**
 - ▶ If the consent is withdrawn during an inspection, follow the same procedure as above. Information obtained prior to the withdrawal of consent is valid.
 - ▶ If access is denied to some parts of the facility, document the portion of the inspection that could not be performed, the reason for the denial of access, and proceed with the inspection of other areas.

Background Information Inspectors Should Be Prepared to Answer



- ▶ Inspectors need an in depth understanding of the background and requirements of the commercial/industrial site inspection program.
- ▶ Facility owners/operators will question the need for the inspection and will ask about the specific requirements of the site inspection program.
- ▶ It is essential that the inspector be prepared to clearly communicate this information, to help develop a rapport with the owner/operator and help the facility come into compliance.
- ▶ The inspector will likely be the first person to inform the facility owner/operator about the commercial/industrial facilities program; therefore, they play an essential role in promoting the credibility of the program.

Background Information Inspectors Should Be Prepared to Answer



- ▶ **Common general question:**
 - ▶ What is “stormwater” and “non-stormwater”?
 - ▶ What are allowable non-stormwater discharges?
 - ▶ What is an illicit connection?
 - ▶ What is an illegal discharge?
 - ▶ What is illegal dumping?
 - ▶ What is the difference between storm drains and sanitary sewers?
- ▶ **Be able to explain the portion of the NPDES permit and the SWMP that pertains to the commercial/industrial facilities program.**

What is “stormwater” and “non-stormwater”?



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- ▶ **Stormwater** means storm water runoff, snow melt runoff, and storm water surface runoff and drainage.
- ▶ **Non-Storm Water** consists of all discharges to and from a storm water conveyance system that do not originate from precipitation events. Non-storm water includes illegal discharges, non-prohibited discharges and NPDES permitted discharges.
- ▶ **Non-Storm Water Discharge** means any discharge to storm sewer systems that is not composed entirely of storm water.



What are Allowable Non-Storm Water Discharges?



- ▶ Discharges covered by NPDES permits or allowed by RWQCB or SWRCB.
- ▶ Air conditioning condensate
- ▶ Potable water line flushing
- ▶ Passive foundation drains
- ▶ Passive footing drains
- ▶ Water from crawl space pumps
- ▶ Discharges from landscape irrigation
- ▶ Dechlorinated swimming pool discharges
- ▶ Non-commercial vehicle washing (residential, non-profit fundraisers)
- ▶ Diverted stream flows
- ▶ Rising ground waters/springs
- ▶ Uncontaminated pumped groundwater
- ▶ Flows from riparian habitats
- ▶ Street wash water
- ▶ Emergency water flows (firefighting)

What are Illicit Connections?



- ▶ Any physical connection to a storm drain system which has not been permitted by jurisdiction
- ▶ Examples:
 - ▶ Sanitary sewer connections
 - ▶ Industrial process waters
 - ▶ Floor drains

What are Illegal Discharges?



- ▶ Discharge to the MS4 that is not composed entirely of stormwater, *except*
 - ▶ discharges pursuant to an NPDES Permit
 - ▶ authorized by the SWRCB or RWQCBs
 - ▶ allowable non-stormwater discharges
- ▶ Examples:
 - ▶ Commercial vehicle wash water
 - ▶ Boiler blowdown
 - ▶ Drainage from secondary containment or dumpsters



What is Illegal Dumping?



- ▶ Any discharge of pollutants into the MS4
 - ▶ Catch basins
 - ▶ Creeks, streams, channels
- ▶ Examples:
 - ▶ Used oil
 - ▶ Paint
 - ▶ Pet waste
 - ▶ Wash water from mobile cleaners

What is the difference between storm drains and sanitary sewers?

- ▶ Storm drain is a conveyance that goes directly to a surface water body (lake, stream, ocean, etc.) normally without treatment.
- ▶ Sanitary sewer is a conveyance that usually flows to a POTW for treatment prior to discharge to a water body.



General Inspection Procedures



- ▶ **CONDUCTING THE INSPECTION (Your agency's procedures may vary):**
- ▶ Inspect the facility layout to locate
 - ▶ the storm drain system
 - ▶ stormwater drainage path,
 - ▶ storage areas,
 - ▶ process areas,
 - ▶ heavy equipment wash and maintenance areas
 - ▶ stormwater sampling locations, if applicable.

General Inspection Procedures



- ▶ **CONDUCTING THE INSPECTION (Your agency's procedures may vary):**
- ▶ Determine the facility's impact on stormwater quality. The inspector should answer the following:
 - ▶ What is the facility's potential to impact stormwater quality from pollutant exposure and non-stormwater discharges?
 - ▶ Are BMPs effectively applied so that pollutant exposure is minimized and non-stormwater discharges are eliminated?
 - ▶ What type(s) of impact does or could the facility have on stormwater quality?



General Inspection Procedures



- ▶ **CONDUCTING THE INSPECTION (Your agency's procedures may vary):**
 - ▶ Verify SIC to ensure proper classification
 - ▶ Fill out the Inspection Form
 - ▶ Determine what follow up actions are required of the facility owner/operator and set a follow up inspection date.

General Inspection Procedures



- ▶ **CONDUCTING THE INSPECTION
(Your agency's procedures may vary):**
 - ▶ Identify and inform the facility contact about problems and violation(s), if applicable. Set a follow up inspection date with the facility to verify that necessary BMPs had been implemented to correct the identified problems.
 - ▶ Discuss and distribute appropriate BMP information, public education material. See Section on BMP Implementation.



Inspection Program



- ▶ **Example Inspector Reference Binder**
 - ▶ **Municipal Permit**
 - ▶ **Storm Water Management Plan (SWMP)**
 - ▶ **Industrial General Permit (IGP)**
 - ▶ **Ordinance**
 - ▶ **SICs**
 - ▶ **BMPs**
 - ▶ **General Inspection Procedures**

Essential Knowledge – Getting More of It!



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**California Stormwater
Quality Association**



- ▶ **Riverside NPDES/Municipal Stormwater Management Program**
 - ▶ <http://www.rcflood.org/NPDES/WhitewaterWS.aspx#WWdocs>
- ▶ **California Storm Water Quality Association Manuals (CASQA)**
 - ▶ <https://www.casqa.org/resources/bmp-handbooks>
- ▶ **California Hazardous Materials Investigators Association (CHMIA)**
 - ▶ <https://chmia.com/>
- ▶ **CalEPA Basic Inspector Academy**
 - ▶ <https://www.arb.ca.gov/training/DisplayCourse.php?SectionNumber=8446>

Brochures Offered by the District



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Stormwater Pollution
What you should know for...
Industrial & Commercial Facilities
Best Management Practices (BMPs) for:
• Industrial
• Commercial Facilities

Riverside County Stormwater Members

Flood Control District (Lead Agency) (951) 955-1350	City of Lake Elsinore (951) 674-3124
County of Riverside (951) 955-1000	City of La Quinta (760) 777-7000
City of Banning (951) 922-2130	City of Menifee (951) 672-6777
City of Beaumont (951) 769-8520	City of Moreno Valley (951) 413-3120
City of Calimesa (909) 795-9821	City of Murrieta (951) 304-2489
City of Canyon Lake (951) 244-2955	City of Norco (951) 735-3900
Cathedral City (760) 770-0349	City of Palm Desert (760) 346-0611
City of Coachella (760) 398-3502	City of Palm Springs (760) 323-8253
City of Corona (951) 736-2248	City of Perris (951) 943-6100
City of Desert Hot Springs (760) 329-6411	City of Rancho Mirage (760) 324-4511
City of Hemet (951) 765-2300	City of Riverside (951) 926-5311
City of Indian Wells (760) 346-2489	City of Temecula (951) 694-6444
City of San Jacinto (951) 487-7300	City of Wildomar (951) 627-7251
City of Indio (760) 391-4000	Coachella Valley Water District (760) 398-2651

The Riverside County "Only Rain Down the Storm Drain" Pollution Prevention Program gratefully acknowledges San Bernardino County's Stormwater Program for their contributions to this brochure.

Stormwater Pollution
What you should know for...
THE FOOD SERVICE INDUSTRY
Best Management Practices (BMPs)

For Information:
For information on "closed-loop" suppliers and recycling/disposal vendors, contact:
County of Riverside
Health Services Agency
Department of Environmental Health
at (909) 368-5055.

SPILL RESPONSE AGENCY:
H2O-MAT: (909) 368-5055
AFTER 5:00 P.M.: (909) 368-5245 OR 911
HAZARDOUS WASTE DISPOSAL: (909) 368-5055
RECYCLING INFORMATION: 1-800-368-5AVE
TO REPORT ILLEGAL DUMPING OR A CLOGGED STORM DRAIN: 1-800-506-2555

To order additional brochures or to obtain information on other pollution prevention activities, call (909) 956-1111.

The Cities and County of Riverside
Stormwater/CleanWater Protection Program
1-800-506-2555

Stormwater Pollution
What you should know for...
Outdoor Cleaning Activities and Professional Mobile Service Providers
Storm drain pollution prevention information for:
• Car Washing / Mobile Detailers
• Window and Carpet Cleaners
• Power Washers
• Waterproofer / Street Sweepers
• Equipment cleaners or degreasers and all mobile service providers

Helpful telephone numbers and links:

RIVERSIDE COUNTY WATER AGENCIES

City of Banning	(951) 922-2130
City of Beaumont/Desert Valley	(951) 769-8520
City of Blythe	(909) 922-6164
City of Coachella	(760) 398-3502
City of Corona	(951) 736-2248
City of Hemet	(951) 765-2300
City of Indio	(760) 391-4000
City of Irwindale/Redlands	(951) 510-6040
City of San Jacinto	(951) 487-7300
Coachella Valley Water District	(760) 398-2651
County Water Agency (Palm Springs)	(760) 323-8253
Eastern Municipal Water District	(951) 926-7277
Elizabet Valley Water District	(951) 414-3146
Imperial Water District	(951) 674-2568
Imperial Valley Water Company	(951) 244-1499
Midland Water District	(951) 693-2141
Johns Water Authority	(951) 391-4129
Imperial Community Services District	(951) 609-2114
San Lake Water	(951) 698-5191
Mountain Springs Water	(760) 329-6411
Rancho Caliente Water District	(951) 286-6902
Redlands City of Red	(909) 922-6164
Riverside Co. Service Area #1	(909) 272-1570
Riverside Co. Service Area #2	(951) 698-0280
Valley Sanitary District	(909) 942-0300
Western Municipal Water District	(951) 289-5020
Yuma Valley Water District	(909) 792-5111

REPORT ILLEGAL STORM DRAIN DISPOSAL
1-800-506-2555 or e-mail to enr@rcfd.org

Online resources include:
• California Storm Water Quality Assessment: www.waterboards.ca.gov
• State Water Resources Control Board: www.waterboards.ca.gov
• Storm Water of North America: www.stormwater.org

Do you know where street flows actually go?
Storm drains are NOT connected to sanitary sewer systems and treatment plants!

ONLY RAIN IN THE DRAIN

The primary purpose of storm drains is to carry rain water away from developed areas to prevent flooding. Pollutants discharged to storm drains are transported directly into rivers, lakes and streams. Soaps, degreasers, automotive fluids, litter and a host of materials are washed off buildings, sidewalks, plazas and parking areas. Vehicles and equipment must be properly managed to prevent the pollution of local waterways.

Unintentional spills by mobile service operators can flow into storm drains and pollute our waterways. Avoid mishaps. Always have a Spill Response Kit on hand to clean up unintentional spills. Only emergency Mechanical repairs should be done in City streets, using drip pans for spills. Plumbing should be done on private property. Always store chemicals in a leak-proof container and keep covered when not in use. Window Power Washing waste water shouldn't be released into the streets, but should be disposed of in a sanitary sewer, landscaped area or in the soil. Soiled Carpet Cleaning wash water should be filtered before being discharged into the sanitary sewer. Dispose of all filter debris properly. Car Washing/Detailing operators should wash cars on private property and use a regulated hose nozzle for water flow control and runoff prevention. Capture and dispose of waste water and chemicals properly. Remember, storm drains are for receiving rain water runoff only.

REPORT ILLEGAL STORM DRAIN DISPOSAL
1-800-506-2555

After the Storm

Woman's Guide to Handling Stormwater



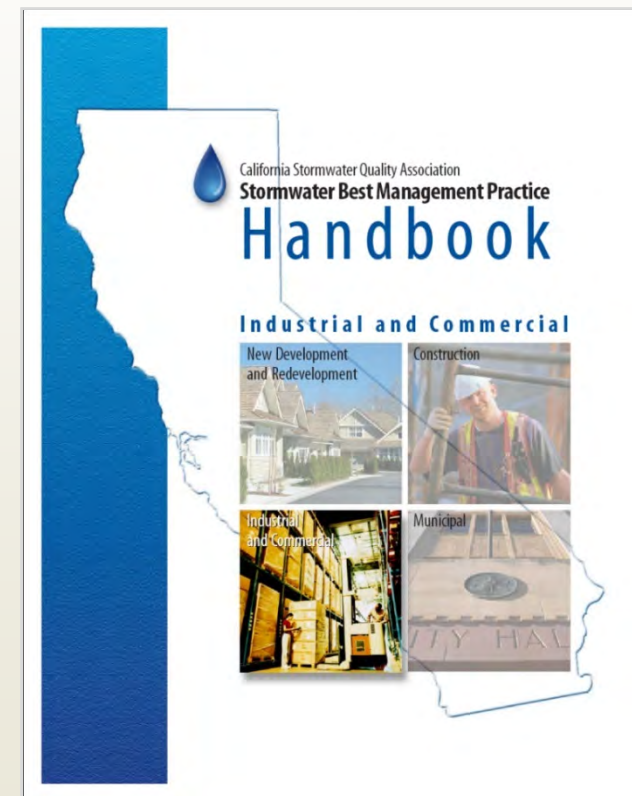
Whitewater River Region
To Order Brochures: fbmowrer@rcflood.org

Essential Knowledge – Getting More of It!



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- ▶ CASQA's 2003 and 2009 Handbooks
 - ▶ A Great Source of Stormwater Information
- ▶ The Handbooks – A 4 Volume Set
- ▶ Municipal O&M Staff use these Handbooks the most
 - ▶ Industrial and Commercial
 - ▶ Municipal
- ▶ Municipal O&M Staff may need these Handbooks too
 - ▶ New Development and Redevelopment
 - ▶ Construction
- ▶ Get them at <https://www.casqa.org/resources/bmp-handbooks>





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Break Time

Stretch Your Legs!

Back in 15 Minutes!

Whitewater River Region



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Discussion

What have you experienced?

Whitewater River Region



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Commercial and Industrial Facility BMPs

Incorporating pollution prevention into everyday activities at
commercial and industrial facilities

Inspection Program – Hazardous Facilities



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- ▶ Let's go through the Hazardous Waste/Hazardous Materials Facility form

HAZARDOUS WASTE/ HAZARDOUS MATERIALS FACILITY STORM WATER COMPLIANCE SURVEY FORM				
FACILITY DBA	TELEPHONE	DATE		
ADDRESS	CITY, ZIP			
MAILING ADDRESS (if different from site address)	MAILING CITY, ZIP			
CONTACT	FACILITY#	SIC CODE		
Compliance Areas		YES	NO	N/A
*OUTSIDE AREAS (Free of staining & debris; provides good housekeeping, maintained in a manner to prevent runoff.)			Requires follow up	
1. CHEMICAL STORAGE * The outside storage area is kept secure to minimize the possibility of a release. Chemicals / materials are protected from precipitation / stormwater runoff and the containers show no signs of leaking.				
2. DUMPSTER * Lid closed. No liquids are leaking from dumpster; surrounding area is free of trash.				
3. ABOVEGROUND TANKS * No ground staining, no spillage observed and no discharge to storm drain. Tanks are maintained to minimize the possibility of a release (secondary containment).				
4. ONSITE STORM DRAIN* Protected from accidental discharge other than stormwater.				
5. POWER WASH OR STEAM CLEAN* (discharge to sewer) Drains to oil/water separator connected to a sanitary sewer and not a septic system or storm drain. Steam cleaning not discharged to parking lot, storm drain or soil.				
6. PARKING LOT / DRIVEWAY* Free of excess trash, chemical staining or liquids other than water.				
7. OTHER* Non-storm water discharge (i.e. non-hazardous process discharge).				
8. MOP WATER TO SANITARY SEWER VIA CLARIFIER. Mop water is not dumped to the soil, parking lot, gutter, street, or other areas susceptible to storm water runoff and discharge to the storm drain.				
9. STORM WATER EDUCATIONAL BROCHURES GIVEN TO FACILITY OR POSTERS DISPLAYED FOR EMPLOYEES. If no, what informational material should be sent to the facility?				
10. IF A SWPPP IS REQUIRED, WAS IT AVAILABLE FOR REVIEW? See storm water handout for industrial facilities.				
11. NOTICE OF INTENT. Has the site obtained necessary permit coverage under the General Industrial Permit, if appropriate?				
OVERALL EVALUATION/ COMMENTS:				
RECEIVED BY:	HAZ MAT SPEC:	BADGE #		
Agency referred to as indicated on the back of this page.				



Chemical Storage



- ▶ Can materials be stored in a containment bin?



Chemical Storage



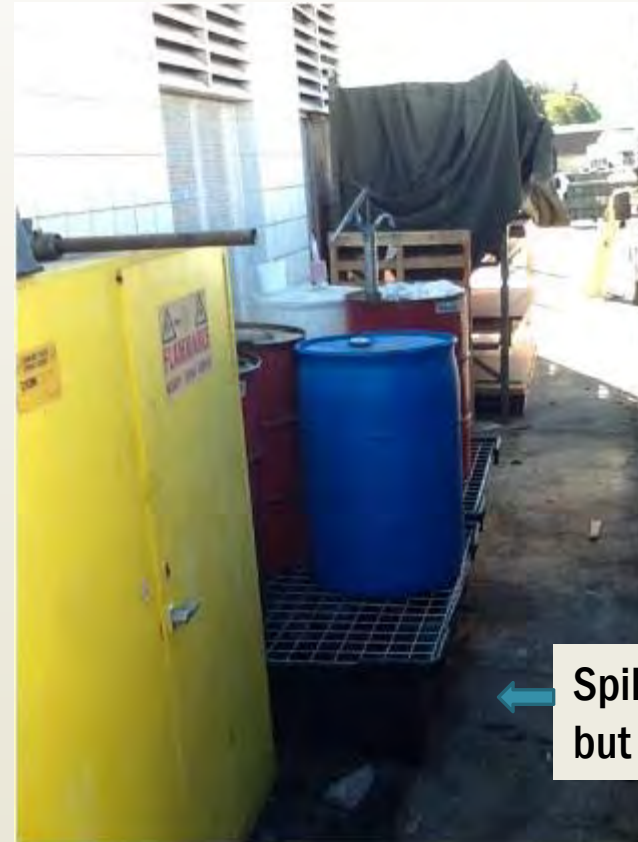
- ▶ Are containers protected from precipitation?



Chemical Storage



➤ Is there spill containment?



← Spill containment
but no cover

Chemical Storage



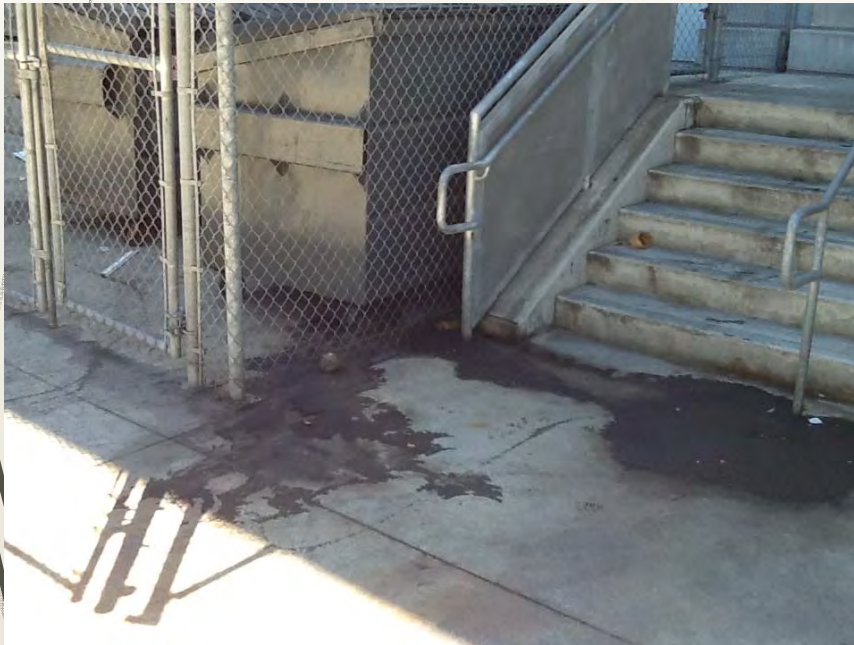
- ▶ Are drip pans, secondary containment, spill control devices implemented



Dumpster



- ▶ Is there evidence of leaks or spills?



Dumpster



- ▶ Is the surrounding area maintained clean and free of litter or debris?



Dumpster



- ▶ Is there a designated, covered and contained waste storage area?



Dumpster



- ▶ Are waste materials kept away from drainage conveyances?



Dumpster



- Nice! Designated waste storage area.



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Dumpster



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- ▶ Functioning lids. Stored under cover.



Dumpster



- ▶ Containment berm.



Aboveground Tanks



- ▶ Are containers protected from collisions?



Aboveground Tanks



- ▶ Are practices implemented to minimize contact between stormwater and vehicle fluids?



Aboveground Tanks



- ▶ Spill containment?





Onsite Storm Drain



- ▶ Are drains appropriately labeled to indicate whether they flow into a treatment system such as an oil/water separator, the sanitary sewer, or directly to the stormwater drainage system?



Onsite Storm Drain



- ▶ Are sump drains properly labeled?



Onsite Storm Drain



- ▶ Are materials stored on or near drainage system?



Onsite Storm Drain



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- ▶ Look for evidence of illegal discharges or connections.



Onsite Storm Drain



- ▶ Do storm drain inlets appear to be properly maintained and/or cleaned?



Onsite Storm Drain



- ▶ Are waste materials kept away from drainage conveyances?

- Location
- Location
- Location!



Power Wash or Steam Clean



- ▶ Does area properly collect and dispose of wash water?



Power Wash or Steam Clean



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- ▶ Does area properly collect and dispose of wash water?



Power Wash or Steam Clean



- ▶ Is the oil/water separator connected to the sanitary sewer?



Power Wash or Steam Clean



- ▶ Use dry methods when possible



Power Wash or Steam Clean



- ▶ Is wash water properly collected and disposed?



Parking Lot/Driveway



- ▶ Is there evidence of oil or chemical spills?



Parking Lot/Driveway



- ▶ Is there evidence of past accidental release of material to the storm drain?



Parking Lot/Driveway



- ▶ Is there evidence of past accidental release of material to the storm drain?



Parking Lot/Driveway



- ▶ Are storage areas free and clear of leaks or drips?



Parking Lot/Driveway



- ▶ Are drip pans placed under leaking vehicles and equipment?



Parking Lot/Driveway



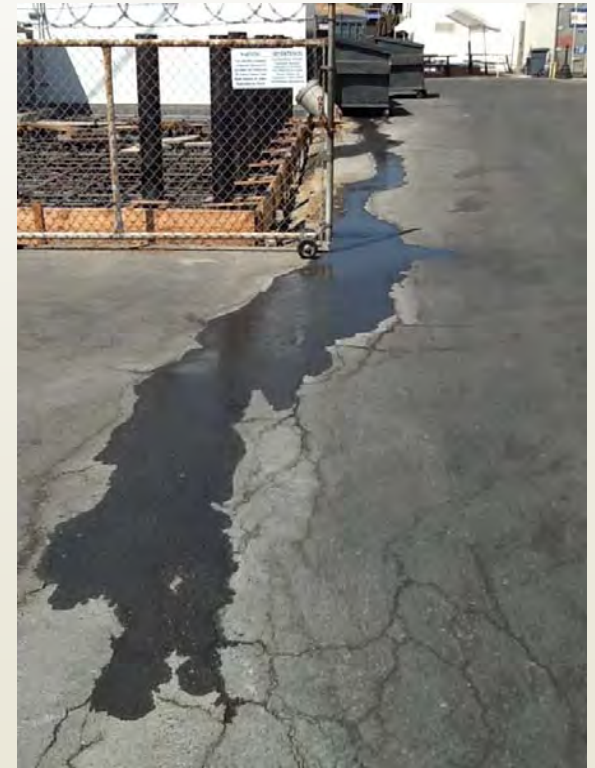
- ▶ Is idle equipment stored under cover?



Other: Non-Stormwater Discharges



- ▶ Are non-stormwater discharges occurring at the site?



Other: Outdoor Storage of Raw Materials



- ▶ Are materials stored outdoors protected from precipitation or stormwater flows?



Other: Loading / Unloading Areas



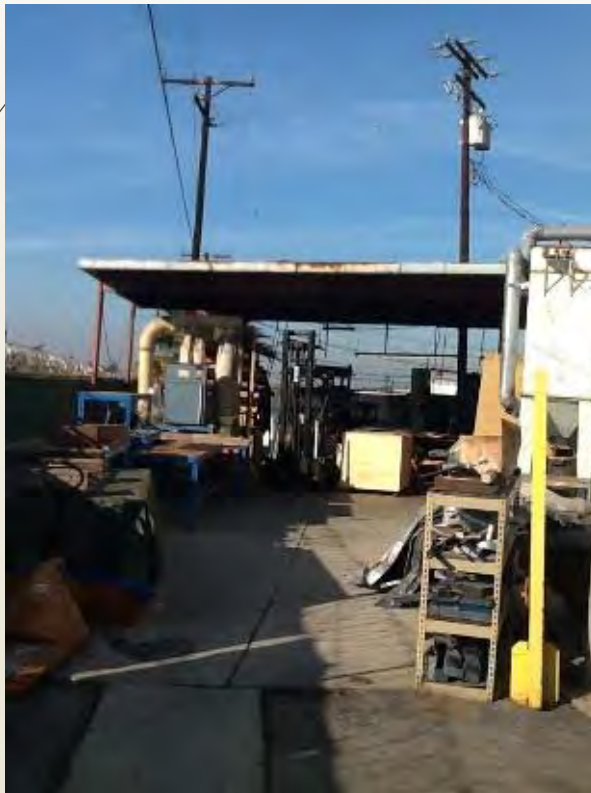
- ▶ Are loading and unloading areas regularly swept and kept clean?



Other: Outdoor Equipment Operations



- ▶ Are work areas covered with a permanent roof where possible?



Other: Outdoor Equipment Operations



- ▶ Are process areas kept clean? Are they protected from stormwater flows?



Other: Outdoor Loading/Unloading



- ▶ Is there an ample supply of spill clean-up materials readily accessible located in the vicinity of the loading/unloading area?



Wash Water Disposal



- ▶ Is mop water to sanitary sewer via clarifier?



Employee Education/ Awareness


- Brochures or posters displayed?



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StormWater Pollution
What you should know for...

**OUTDOOR CLEANING
ACTIVITIES**
NON-STORMWATER DISCHARGES



**GUIDELINES
for disposal of washwater
from:**

- Sidewalk, plaza or parking lot cleaning
- Vehicle washing or detailing
- Building exterior cleaning
- Waterproofing
- Equipment cleaning or degreasing

Industrial Facilities

- ▶ Is the SWPPP available for review?
- ▶ Has the site filed the Notice of Intent to obtain permit coverage?



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DID YOU KNOW . . .

**YOUR FACILITY MAY
NEED A STORM WATER
PERMIT?**



Many industrial facilities
and manufacturing operations
must obtain coverage under the
Industrial Activities Storm Water
General Permit

**FIND OUT
IF YOUR FACILITY
MUST OBTAIN A PERMIT**

Inspection Program – Food Facilities



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- ▶ Let's go through the Food Facility form

FOOD FACILITY STORMWATER COMPLIANCE SURVEY

FACILITY DBA	FACILITY #	DATE	
ADDRESS	ACTIVITY	SERVICE CODE: 410	
COMPLIANCE AREAS	YES	NO	N/A
GREASE BARRELS/ INTERCEPTORS			
1. Grease pumped/removed from grease interceptor on a regular basis.			
2. Grease interceptor located outside facility, maintained properly.			
3. Evidence of spillage to ground surface at grease interceptor?			
EQUIPMENT CLEANING			
4. The following items are cleaned in such a manner that all wash water is discharged to the sanitary sewer or is collected for proper disposal:			
a. Grease filters			
b. Floor mats			
c. Floors (mop water and rinse water)			
d. Grills			
OUTSIDE AREAS			
4. The following areas are cleaned in such a manner that all wash water is discharged to the sanitary sewer or is collected for proper disposal:			
a. Sidewalk or outdoor seating			
b. Drive thru and parking lot			
DUMPSTERS AND RECYCLING CONTAINERS			
5. Food/liquid waste bagged and sealed before disposal.			
6. Dumpsters and recycling containers are covered.			
7. Spilled materials around containers are picked up regularly.			
8. Wash water is discharged to the sanitary sewer or is collected for proper disposal.			
EMPLOYEE EDUCATION/ AWARENESS			
9. Brochures or posters displayed.			
10. BMPs observed.			
OVERALL RATING	GOOD	AVERAGE	NEEDS IMPROVEMENT
COMMENTS:			
Received by:	Env. Health Specialist:	Badge #	



Grease Handling



- ▶ **Is outside grease interceptor properly maintained?**
 - ▶ Grease storage is periodically inspected for leaks and spills
 - ▶ Surrounding area is maintained clean and free of residues
 - ▶ No evidence of illegal discharges



Grease Handling



Equipment Cleaning



- ▶ Is wash water from cleaning activities being properly discharged to the sanitary sewer?



Outside Area Cleaning



- ▶ Are the following areas being cleaned in such a manner that water and waste is being collected and disposed of properly?

- ▶ Sidewalk and outdoor seating
- ▶ Drive-through



Dumpsters and Recycling Containers



- ▶ Food/liquid waste bagged and sealed before disposal? Are containers equipped with functioning lids?



Dumpsters and Recycling Containers



- ▶ Spilled materials picked up regularly? Are there adequate number of trash receptacles?



Dumpsters and Recycling Containers



- ▶ Wash water discharged to the sanitary sewer or collected for proper disposal?



Dumpsters and Recycling Containers



- ▶ Are non-stormwater discharges occurring at the site?



Employee Education/ Awareness

- Brochures or posters displayed?



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StormWater Pollution

What you should know for...

THE FOOD SERVICE INDUSTRY



Best Management Practices (BMPs)

for:

- Restaurants
- Grocery Stores
- Delicatessens
- Bakeries



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Questions and Answers