

Routine Training for Performing Stormwater Inspections to Control Illicit Discharges and Maintain Compliance

San Mateo County Environmental Health
Commercial and Industrial Inspectors

April 17, 2014

Why are we doing stormwater inspections?

- Every city and the county are regulated under permit by the Federal CWA (NPDES)
 - Implemented by the SWRCB
 - Municipal Regional Permit (MRP)
- The MRP requires implementation of a commercial/industrial site control program
 - Inspect all sites which "could reasonably be considered to cause or contribute to pollution of stormwater runoff."
- We are audited and subject to penalties

Why are we doing stormwater inspections?

- Failure to do inspections cause compliance issues for us
 - Risk NOV/NOD
 - Risk fines
 - Risk Scrutiny from decision makers
 - Jeopardize funding
 - Diminish our reputation as public servants
 - Elk River chemical Spill, Charleston, W. VA.
- Uh... environmental protection?

How are we doing stormwater inspections?

- County Environmental Health has an agreement with the cities to conduct stormwater inspections at commercial/industrial facilities that they already inspect
 - Excludes Daly City and South San Francisco
 - Does not cover every single program (e.g., housing, solid waste, smaller H.W. storage, etc.)
 - Does not mean that Environmental Health inspects every commercial/industrial facility within the cities.
- Cities are responsible for all other facilities

Terminology

- What are we protecting?
 - **Receiving waters** - creeks, streams, lagoons, the Bay, and the ocean



Receiving Waters



Receiving Waters



Terminology

- What are we protecting?
 - **MS4 - Municipal Separate Storm Sewer System**
 - A conveyance, or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains
 - MS4 is **not** the sanitary sewer
 - MS4 is **not** a combined system
- The MS4 does not include treatment

Terminology

- **MS4 - Municipal Separate Storm Sewer System**



Terminology

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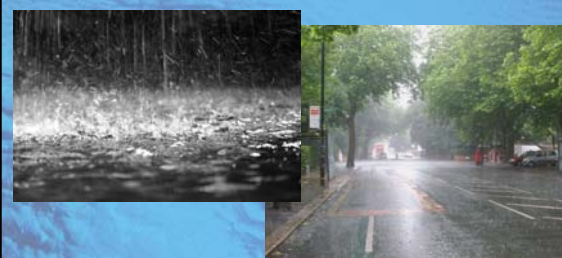
Terminology

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Terminology

- **Stormwater** –surface runoff and drainage ... derived from rainfall



Terminology

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Terminology

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Terminology

- **Pollutant** – dredged soil, solid waste, incinerator residue, sewage, sewage sludge, garbage, munitions, chemical wastes, biological materials, radioactive materials, wrecked or destroyed equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharge into water.
 - **Some of these pollutants trigger action from other programs!**

Terminology

- **Pollutant** – also includes any increment or increase in the total volume of stormwater runoff resulting from any activity or development.



Terminology

- **Discharge** – Any addition of any pollutant to navigable waters (receiving waters) from any point sources or any addition of any pollutant to the waters of the ocean from any point source, except water craft/vessels (ordinance)
- More broadly, it can also mean a release or flow of stormwater or nonstormwater from a conveyance system or storage container (e.g., a facility or the MS4)

Terminology

- **Discharge –**



Terminology

- **Illicit Discharge** – Any discharge into the MS4 that is not composed entirely of stormwater except those allowed under a NPDES permit or discharges resulting from fire fighting and other emergency response activities (ordinance).
- Any discharge to an MS4 that is not in compliance with applicable laws and regulations

Unapproved, neglectful, or intentional discharges

Illicit Discharge

Discharges that contain:

- Dirt or Soil
- Construction runoff
- Paint
- Saw Cut
- Masonry Wash
- Soapy Water
- Hazardous Liquids
- Dissolved Metals
- Oil and Grease
- Food Products
- Trash



Illicit Discharge



Terminology

Permitted Discharge –

- Stormwater that does not carry pollutants from a facility/operations
- Discharge from emergency fire fighting operations
- **Residential** personal vehicle washing
- Rinse with water only *
- Discharges allowed by an NPDES Permit

Terminology

Permitted Discharge –



Terminology

Permitted Discharge –



Terminology

Permitted Discharge –



Terminology

Potential Discharge - Not yet an actual discharge to the storm drainage system...but it will be with rain or an accident.

Deserves a verbal warning!



C.4 Inspection Components

- Legal authority
 - Ordinance
 - The jurisdiction the inspection occurs is done under that jurisdiction's ordinance
 - Disclosure of violations and requirement to correct
 - 10-day compliance
- Business Inspection Plan (BIP)
- Enforcement Response Plan (ERP)
- Staff training
- Reporting

Inspection Process

1. Review inspection history
2. Site visit / find facility rep
3. Introduce and identify
4. Obtain permission to inspect
5. Walk Site, Ask Questions, **Take Pictures/Samples?**
6. Look at paperwork
7. Document inspection
8. Go over inspection report
9. Outline required action
10. Follow up



Inspector Resources

- Public "incognito" page at www.flowstobay.org/inspectorresources
 - Not for public consumption
 - So please don't share it
 - Contains city and county ordinance and agreements, BIP, and ERP
 - Shortcut to the MRP permit and extracted sections for inspectors
 - Resources for BMPs
 - Example enforcement letters

Inspector Resources

Ordinance

4.100.140 Best management practices for new developments and redevelopments.
Any construction contractor performing work that provide filter materials at the catch basin to retain any debris and dirt flowing in to the County's storm sewer system. County may establish controls on the volume and rate of storm water runoff from new developments and redevelopments as may be appropriate to minimize the discharge and transport of pollutants.
(Prior code § 5022 Ord. 3032, 01495)

4.100.150 Compliance with best management practices.
Every person undertaking any activity or operation, or operating a facility, which may cause or contribute to storm water pollution or contamination, direct discharges, and/or discharge of non-storm water to the storm water system, shall utilize best management practices to prevent or reduce the discharge of pollutants directly or indirectly to the County's storm sewer system.
(Prior code § 5023 Ord. 3032, 01495)

4.100.160 Watercourse protection.
Every person owning property through which a watercourse passes, or such person's lessee or tenant, shall keep and maintain that part of the watercourse within the property reasonably free of trash, debris, excessive vegetation, and other obstacles which would obstruct, contaminate, or significantly retard the flow of water through the watercourse; shall maintain existing privately owned structures within a watercourse so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse; and shall not remove healthy bank vegetation beyond that actually necessary for said maintenance; nor remove said vegetation in such a manner as to increase the vulnerability of the watercourse to erosion.
(Prior code § 5034 Ord. 3032, 01495)

4.100.170 Authority to inspect.
The County Health Officer or other duly authorized representative of the County shall visit all premises from time to time and examine the sanitary conditions of said premises and determine whether the provisions of this ordinance are complied with.
(Prior code § 5025 Ord. 3032, 01495)

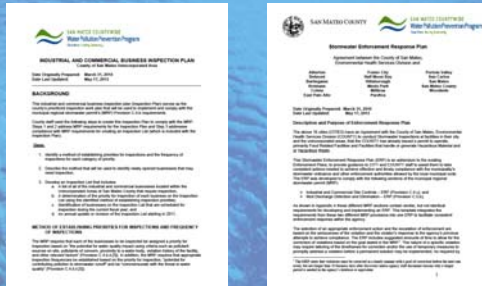
Inspector Resources

Agreement

AGREEMENT BETWEEN
CITY OF XXX AND COUNTY OF SAN MATEO
FOR
STORMWATER INSPECTION AND FOLLOW UP SERVICES
THIS AGREEMENT, entered into this 6th day of July, 2011, by and between the County of San Mateo Health System, Environmental Health Services Division, hereinafter called "County" and the "City of XXX", hereinafter called "City";
WITNESSETH:
WHEREAS, the San Mateo County Flood Control District, the County of San Mateo, and the twenty (20) incorporated cities in San Mateo County, as co-permittees (along with other Phase I municipal stormwater dischargers in the Bay Area) were reissued a National Pollutant Discharge Elimination System Permit (NPDES Permit No. CAS612008) on October 14, 2009.
WHEREAS, NPDES Permit No. CAS612008 regulates the discharge of stormwater from co-permittees' municipal separate storm sewer systems (MS4) to various surface waters including local creeks, sloughs, lagoons, San Francisco Bay, and the Pacific Ocean.
WHEREAS, NPDES Permit No. CAS612008 requires the implementation of specific industrial

Inspector Resources

BIP / ERP



Inspector Resources

MRP

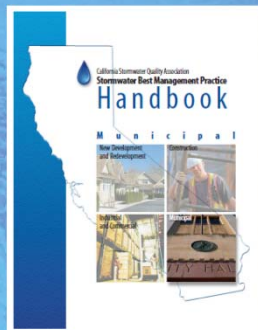
California Regional Water Quality Control Board
San Francisco Bay Region
Municipal Regional Stormwater NPDES Permit

Order R2-2009-0074
NPDES Permit No. CAS612008
Adopted October 14, 2009
Revised November 28, 2011



Inspector Resources

Resources



Inspector Resources

Example Enforcement Letters



What Could We Expect To See in the Field?



Restaurants



Restaurants



Restaurants



Restaurants



Restaurants



Restaurants



Auto Body Facilities



Auto Body Facilities



Auto Repair Facilities



Auto Repair Facilities



Auto Repair Facilities



Auto Repair Facilities



Auto Repair Facilities



Auto Repair Facilities



Haz Mat Facilities



Corp Yards / Industrial Facilities



Corp Yards / Industrial Facilities



Corp Yards / Industrial Facilities



Corp Yards / Industrial Facilities



Corp Yards / Industrial Facilities



Finding Illicit Discharges & Conducting a Thorough Inspection

Follow the trail.....



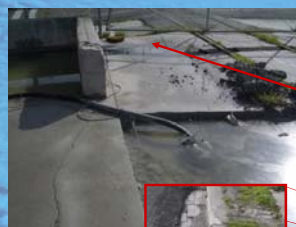
Stop them in the act!

Look in the Basins



Ewww!
Seriously?
Totally Gross

Sump Pumps



When pump is off...



When pump is on.....where does it go?

Follow the Pipes



- Follow it
- Look at Plans
- Contact DPW/Sewer Dist.
- Dye Test

- Look for Source
- Sample it
- Whatever it is, it ain't allowed

Where Does it Go?



What if it Rains?



What if it Leaks/Spills?



What BMPs are in Place?



What BMPs are in Place?



Further Investigation Required



Outdoor Process/Manufacturing Areas



Outdoor Materials Storage



Outdoor Waste Storage/Disposal



Outdoor Vehicle and Hvy Eqt Storage and Maintenance



Outdoor Parking Areas



Outdoor Wash



Rooftop Equipment



Rooftop Equipment



Outdoor Drainage from Indoor



Ending the Inspection

- Review observations, violations, mitigation requirements
- Give facility representative verbal warning for threatened releases and written warnings for violations
- Inform representative of next steps and consequences of non-compliance
- Get outta dodge

Follow-Up and Enforcement

- Write and send notice(s)
- Print/electronically file pictures
- Refer any issues to other agencies
- Conduct follow-up inspections as needed (within 10 days or before next rain)
- Initiate enforcement as needed
- Progressive response
- Document return to compliance

How to Abate



- Inspection Record
- Notice to Abate
- Notice of Violations
- Compliance Requirements
- BMP Materials
- Education
- Referral
- Enforcement/Invoice

Immediate Fine

Fine: DCMC 13.16.070-110 \$ 100.00
Fees: Inspection Hourly rate \$ 140.00

Total Due: \$ 240.00



Coordinate w/ Other Agencies

- Public Works, Code Enforcement, Fire, Sewer District, Police, DFG, SWRCB, EPA, City Attorney, DA, etc.



Share the Glory!

Obtain Compliance



- Reinspect Site before next rain / within 10 days
- Document return to compliance

Water Quality Depends on Us

