

Reissued MRP: How is it the same and how is it different

Industrial/Commercial Inspection Workshop

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Outline of Presentation

- Regulatory Background
- **New** Municipal Regional Permit
- Resources

Terms

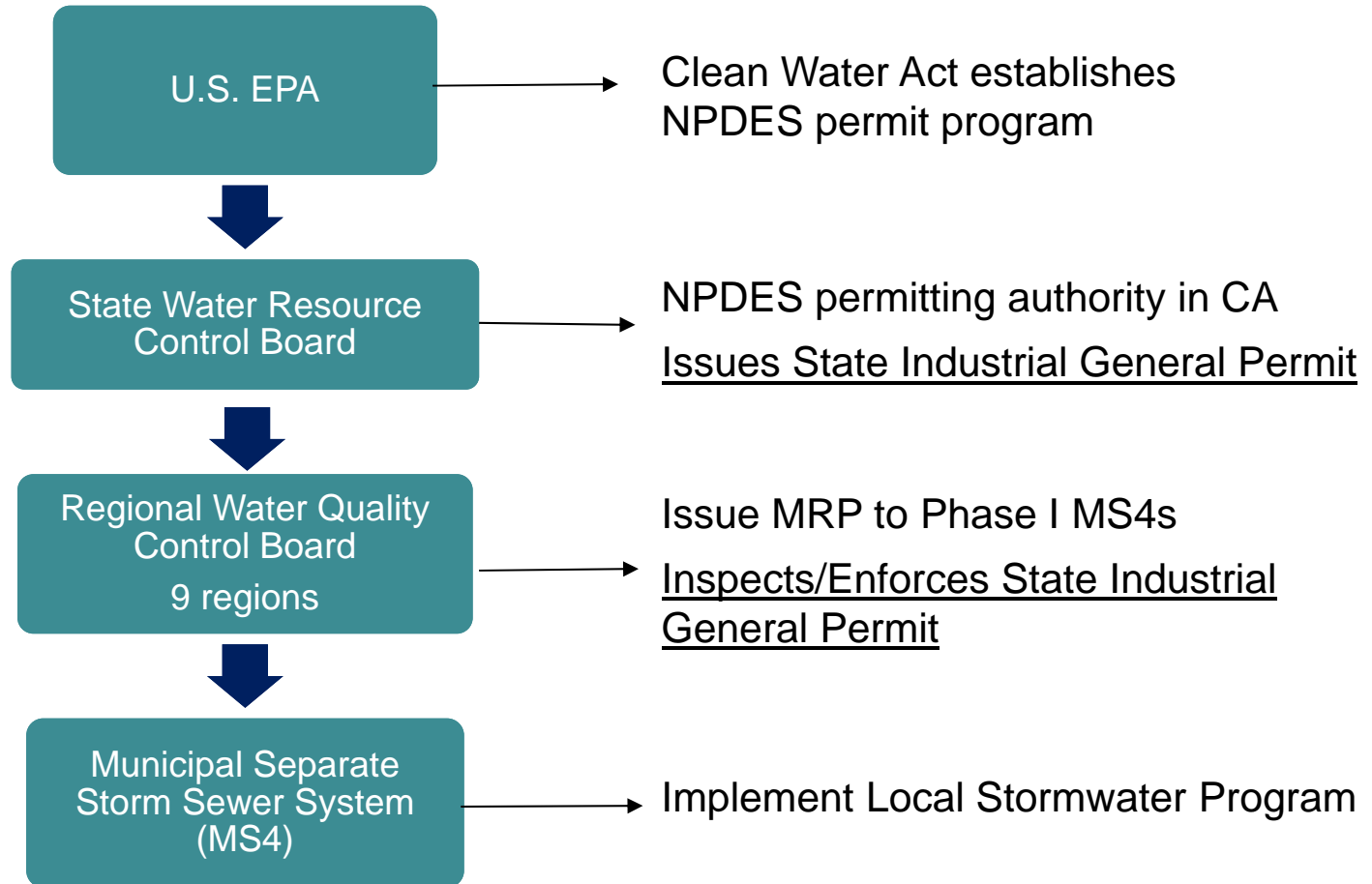
- **MRP:** San Francisco Bay Municipal Regional Stormwater Permit
 - **NPDES:** National Pollutant Discharge Elimination System
 - **Receiving Water:** Waters of the U.S. or creeks, rivers, lakes or bays
 - **MS4s:** Municipal Separate Storm Sewer Systems
 - **RWB:** Regional Water Board
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Terms

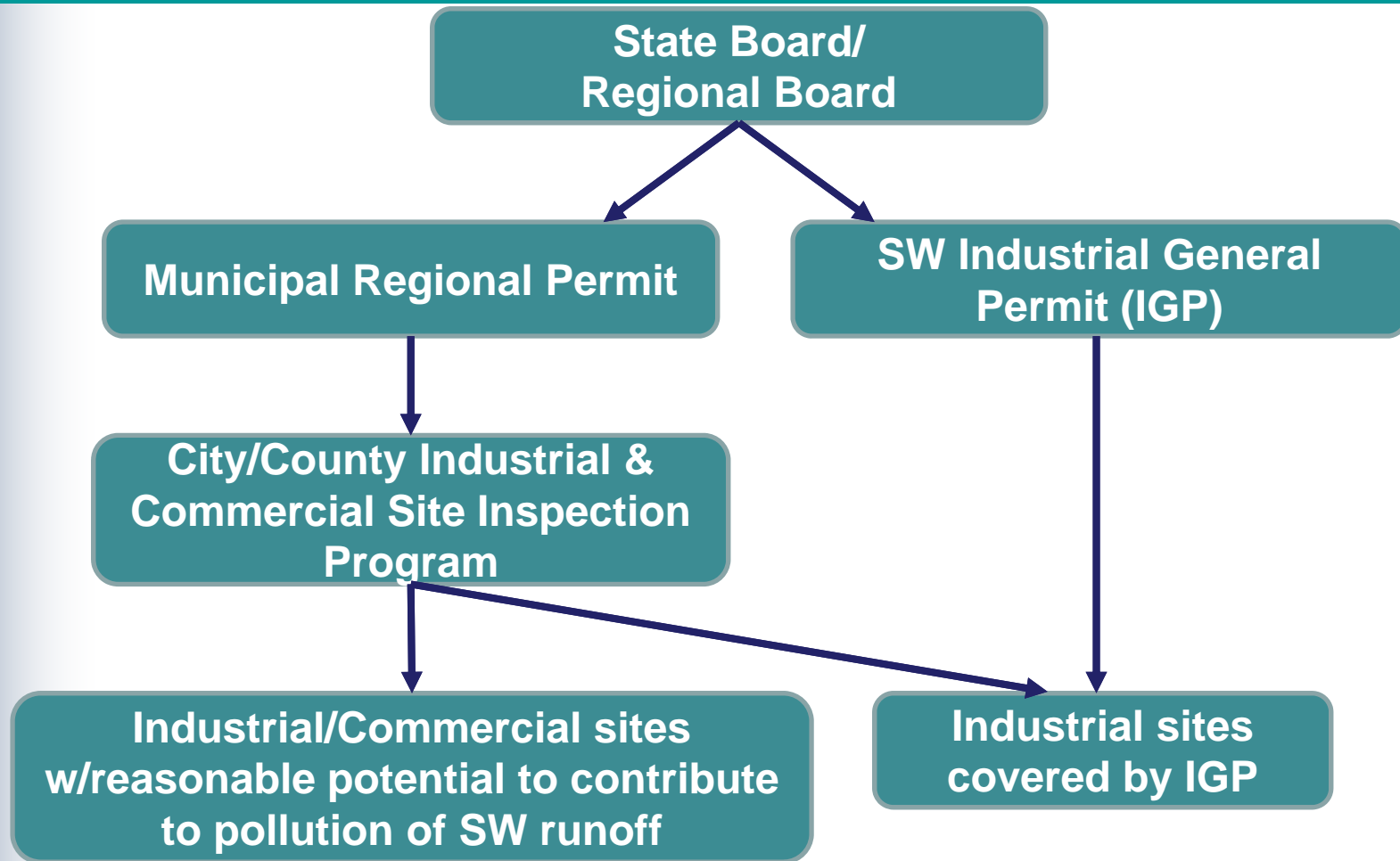
- **BMPs:** Best Management Practices

CASQA Definition: Measures to prevent or mitigate pollution commonly categorized whether they are non-structural or structural, or whether they are Source Control or Treatment Control.

Stormwater Regulations

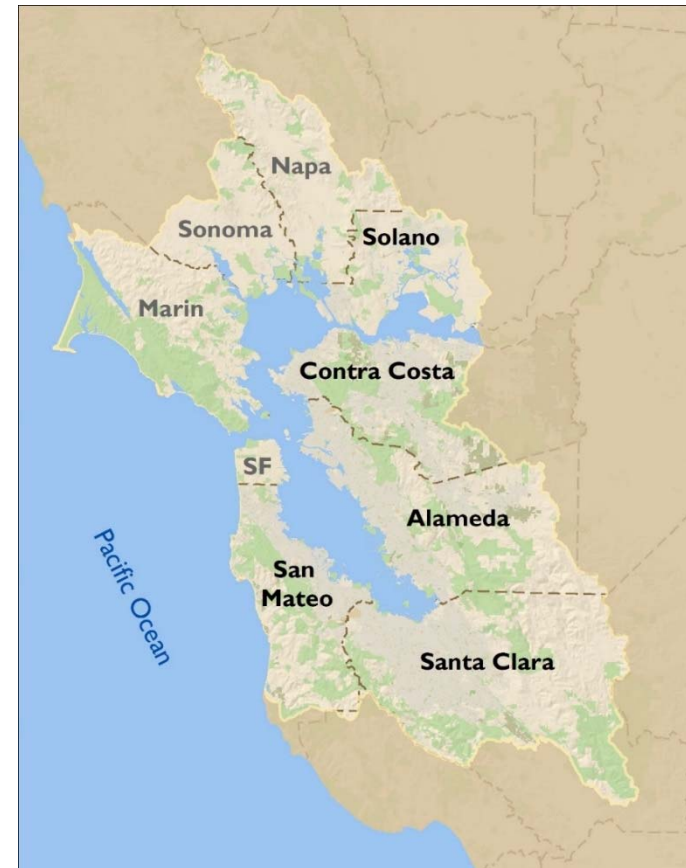


Industrial Site Regulations



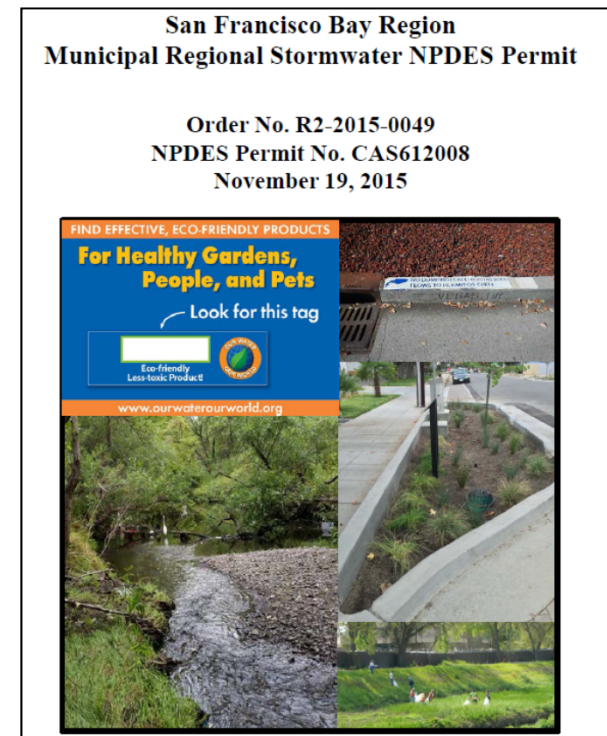
Municipal Regional Permit (MRP)

- Regional permit regulating municipal stormwater systems
- Applies to 76 cities, counties, and districts in:
 - Santa Clara, Alameda, Contra Costa, and San Mateo Counties
 - Fairfield and Suisun City (Solano County)
 - Vallejo (Solano County)



Municipal Regional Permit (MRP)

- First adopted by Regional Water Board:
October 14, 2009
- Permit renewed every 5 years
- Reissued November 19, 2015
- Became effective
January 1, 2016



Municipal Regional Permit (MRP)

- MRP Provisions
 - C.4 Industrial and Commercial Site Controls
 - C.5 Illicit Discharge Detection and Elimination
 - C.13 Copper Controls
 - Minor changes in reissued MRP
 - Prevent discharges of pollutants and impacts on receiving waters
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Business Inspection Program Requirements

- Legal authority – no change
 - Business Inspection Plans – small changes
 - Identify facilities for inspection by
 - Activities
 - Types of businesses
 - Industrial facilities subject to State IGP
 - Prioritize inspections
 - Identify new businesses
 - **List of facilities scheduled for inspection each FY**
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Enforcement Response Plan

- Permittees should review ERPs and confirm meet new detailed description of contents
- Description of procedures/guidance
- Discuss escalating enforcement tools for different field scenarios
- No longer use “violations” refers to actual and potential discharges **(NEW)**

Enforcement Response Plan

- Timely Correction
 - Actual non-stormwater discharges cease immediately
(NEW)
 - Industrial General Permit authorized non-stormwater discharges conditionally allowed
 - Corrective actions implemented
 - Within 10 business days,
 - OR before next rain event,
 - OR record rationale for longer compliance.
 - Referral to Regional Water Board
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Recordkeeping

- Electronic database or table
 - Facility
 - Type of activity or pollutant source
 - Inspection date
 - Industrial General Permit coverage required*
 - Compliance status
 - Type of enforcement
 - Specific problems
 - Problem resolution **date (new)**
 - Comments
-

Recordkeeping

- Annual Report
 - Summary numbers match tabular data
 - Provide list of industrial facilities that may require IGP coverage
 - Includes No Exposure Certification (NEC) facilities



Staff Training

- Provide training in following topics
 - Urban runoff pollution prevention
 - Inspection procedures
 - **Business Inspection Plan (new)**
 - **Enforcement Response Plan (new)**
 - Illicit Discharge Detection and Elimination
 - Appropriate BMPs for different facilities

IDDE Program

- Legal Authority – no changes
 - ERP – same as C.4
 - Spill/Complaint Inspection
 - Minor change to electronic database/table data tracking
 - Date and time abated
 - **Removed response times**
 - Include method for identifying Mobile Business (**new recommendation**)
 - **New reporting requirements for mobile business inspections and enforcement**
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IDDE Program

- Control of Mobile Business
 - Standard BMPs
 - Enforcement strategy
 - Share enforcement at IND/IDD AHTG meetings
 - Enforce under IDDE Program
 - Inventory
 - submit new businesses to SCVURPPP Program staff
 - Posted on SCVURPPP members only webpage
 - Outreach
 - Report enforcement and inspections - new

Three Steps to Remember Before You Clean

- 1. Be a BASMAA Recognized Mobile Cleaner** – Take the online “mobile surface cleaning” training from BASMAA (Bay Area Stormwater Management Agencies Association). This program will train you on how to clean different surfaces in an environmentally acceptable way and publish your name as a trained cleaner. Visit www.basmaa.org.
- 2. Ask Your Local Inspector**
Contact your local City stormwater inspector to determine specific discharge requirements. Obtain permission to discharge to the property owner’s sanitary sewer plumbing or landscaping before starting the job.
- 3. Divert and Collect Wash Water**
Cover the storm drains to prevent wash water from entering and divert wash water to the sanitary sewer system if permitted to do so. Small amounts may be diverted to landscaped areas, if appropriate.

Local Pollution Control Agencies

San Jose/Santa Clara Water Pollution Control Plant.
(408) 945-3000

Serving Campbell, Cupertino, Los Gatos, Milpitas, Monte Sereno, San Jose, Santa Clara, Saratoga

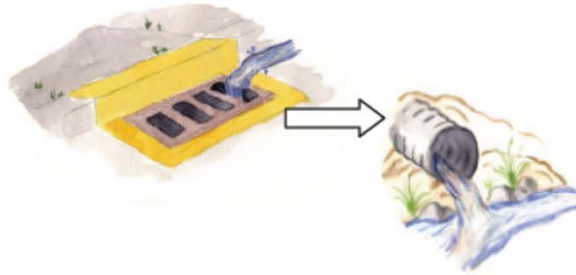
City of Sunnyvale Environmental Services
Department
(408) 730-7270

Regional Water Quality Control Plant (650) 329-2598

Serving East Palo Alto Sanitary District, Los Altos, Los Altos Hills, Mountain View, Palo Alto, Stanford

Protect the Bay and Yourself!

When wash water flows into storm drains it goes straight to local creeks and the Bay without any cleaning or filtering.



If you discharge wash water generated by mobile cleaning activities to the storm drain, **you are violating municipal stormwater ordinances and may be subject to a fine.**

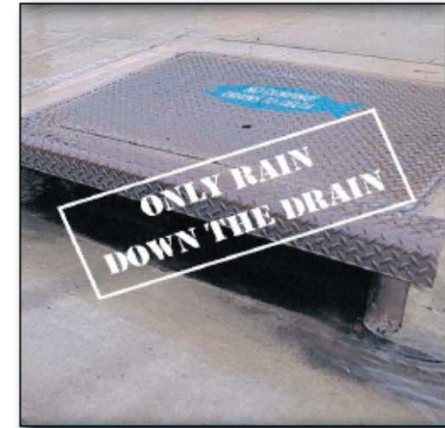
For More Information About Stormwater Pollution Prevention

www.myWatershedWatch.org



MOBILE BUSINESSES

Best Management Practices



This brochure provides information about using Best Management Practices (BMPs) to prevent polluted water from entering storm drain system

Who should use this brochure?

- Automobile Washers or Detailers
- Power Washers
- Carpet Cleaners
- Steam Cleaners
- Pet Care Services

Why should we be concerned with wash water disposal?

Wash water from mobile cleaning is NOT just dirt and water. It also may contain soaps, toxic chemicals, heavy metals, oil and grease that are harmful to our creeks and waterways.

Pollutants draining from mobile cleaning activities are washed into the street and into the storm drain system which then flows to our creeks and Bay without any cleaning or filtering.

Federal, State and local regulations **prohibit discharge of anything but rain water in the storm drain.**

Implementing the proper Best Management Practices (BMPs) is easy and is required for compliance with State and local stormwater pollution prevention regulations.



What about biodegradable and non-toxic cleaning products?

Cleaning products labeled “nontoxic” and “biodegradable” can still harm wildlife if they enter a storm drain system. Fish, for example, are affected by **both** regular soap and biodegradable soap! However, if disposed of in the sanitary sewer system, wastewater treatment plants prefer biodegradable products over toxic cleaners.



Plan Ahead

- Determine where you will discharge wastewater before starting a new job.
- Be sure to have equipment on hand (i.e. long hoses, sump pump, etc) for directing discharge to sanitary sewer access points. Ensure hoses are long enough to reach access points that are far from your holding tank.



Contact your local hardware or construction material stores for available tools and materials for mobile businesses including vacuum pumps, mats, sand or gravel bags, wattles, etc

Options for Wash Water Disposal

Never drain wash water into streets, gutters, parking lots, or storm drains.

- Wash water can usually be discharged to the sanitary sewer through a drain the property owner’s home or business, such as a utility sink, floor drain, mop sink or toilet. Take precautions to prevent debris, hazardous materials or anything that can clog from entering sinks, toilets or sanitary drain.
- Direct wash water to landscaping or gravel surfaces. Wash water must completely soak into vegetation before you leave the site.

Doing the Job Right Checklist of BMPs

- Walk the area to identify storm drains.
- Sweep the wash area to remove debris.
- If feasible, wash on a vegetated or gravel surface where wash water can infiltrate into the ground without runoff.
- Contain wash area so that water does not drain down streets and gutters– use sand bag berms, wattles, or bermed mats.
- Block or seal off any storm drain inlets and sloping areas that release water to the storm gutter to prevent wash water from entering the storm drain.
- Put storm drain protection in place before starting the washing process and remove before you leave the site.
- Vacuum or shake floor mats into a trashcan.
- Minimize water use; use nozzles on hoses.
- Use less-toxic cleaning products (wash without soaps and solvents, if possible)
- Use a “wet-vac” to vacuum up the contained wash water for proper disposal.
- Remove all debris or sediment accumulated during the washing activities.



Source Control: Copper (Provision C.13)

- Discharges from Pools, Spas, and Fountains that Contain Copper Based Chemicals
 - Prohibit discharges
 - Report annually on enforcement activities - new
 - Industrial Sources
 - Identify facilities likely to have sources of copper
 - Educate industrial facilities on proper BMPs
 - Ensure proper BMPs to minimize discharge of copper, including roof runoff
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SAN JOSE/
SANTA CLARA
WATER POLLUTION
CONTROL PLANT

IS YOUR ROOF RUNOFF POLLUTED?

Facilities covered under the State NPDES Industrial Activities Storm Water General Permit should include roof runoff in their assessment of potential pollutant sources.

The Concern

Roof runoff in industrial areas can be a significant source of pollutants to stormwater. Early studies of roof runoff have shown that galvanized metal roofs are sources of zinc at concentrations two to twenty times greater than other urban source areas, and often produce runoff that exceeds acute toxicity for aquatic life. Materials, paints, and coatings associated with roofing are also suspected of being significant sources of copper and lead.

Local Studies/Findings

Studies conducted by the cities of San José and Sunnyvale show that metal finishing and electroplating processes contributed greater amounts of copper and nickel to stormwater runoff than other industrial and commercial activities.

Potential sources identified for copper and nickel in roof deposition included copper chloride etchers, ammonia etchers, and acid plating bath exhaust vents.

Deposition was visible at most facilities, ranging from a slight discoloration to a dark blue or deep green deposit. Leaks in exhaust pipes and containment vessels could be seen as localized deposition directly below the pipefitting. Air deposition of exhaust vapors could be seen as a plume radiating out from the exhaust pipe.

However, data from one of the pilot facilities showed that an absence of visual deposition does not imply an absence of pollutants.

To see an example of roof contamination go to: www.sanjoseca.gov/esd/stormwater/roof-runoff.asp

BMPs

There are a variety of Best Management Practices (BMPs) available to prevent rooftop pollution (see list at right).

An evaluation of various BMPs being implemented in the area in 2000 demonstrated the complexity and the effectiveness of some BMPs. For example, BMPs to control pollutant release from ammonia etcher exhaust vents vary.

The most basic type of control method is a vent cover and drip pan collection system. The vent cover provides a surface

for condensation of exhaust vapors and protects from rain entering the system. Condensate in the drip pan is plumbed to the waste treatment system or emptied manually. In some cases, ammonia etchant vapor condenses readily in the vent pipe. In other cases, the vapor contacts the vent cover and condenses into the collection pan. Sometimes, however, vapors escape to the atmosphere and condense on the roof.

To promote condensation, one facility employed chiller coils at the junction of the ammonia etcher and exhaust vent. This technique also helps reduce chemical loss.

Another BMP is to treat ammonia etchant vapors with a scrubber system. The effectiveness of the scrubber seems to depend on the type of scrubber solution used. Using plain water in the scrubber system was ineffective in controlling emissions, leaving deposits of copper salts on the roof. A dilute sulfuric acid solution seems to be the most effective means of treating exhaust vapors from an ammonia etcher.

BMPs TO CONSIDER

- *Install vent covers and drip pans where there are none.*
- *Prevent leaks in pipefittings and containment vessels with routine maintenance.*
- *Dispose of condensate from ventilation properly, or treat it.*
- *Promote condensation within piping containment, such as using chiller coils.*
- *Check that your scrubber solution is appropriate for the chemistry of the fumes.*
- *Look for chemical deposition around vents, pipes and other surfaces.*

The information provided here is intended to provide examples for consideration. It is the responsibility of a discharger to determine the applicability of any treatment to his/her facility.

Updated 04/08



Santa Clara Valley
Urban Runoff
Pollution Prevention Program

Resources...

- CASQA Industrial and Commercial BMP Handbook Portal
 - Available on web by subscription
 - SCVURPPP has a group subscription
 - Contact your agency stormwater coordinator for information on how to access the portal
 - www.casqa.org
 - BMPs by Business Category or Source Control
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CASQA BMP Fact Sheets

Outdoor Liquid Container Storage SC-31

Description

Accidental releases of materials from above ground liquid storage tanks, drums, and dumpsters present the potential for contaminating stormwater with many different pollutants. Tanks may store many potential stormwater runoff pollutants, such as gasoline, aviation gas, diesel fuel, kerosene, oils, greases, lubricants and other distilled, blended and refined products derived from crude petroleum. Materials spilled, leaked, or lost from storage tanks may accumulate in soils or on other surfaces and be carried away by rainfall runoff. These source controls apply to containers located outside of a building used to temporarily store liquid materials and include installing safeguards against accidental releases, installing secondary containment, conducting regular inspections, and training employees in standard operating procedures and spill cleanup techniques.

Approach

General Pollution Prevention Protocols

- Educate employees about pollution prevention measures and goals.
- Keep an accurate, up-to-date inventory of the materials delivered and stored on-site.
- Try to keep chemicals in their original containers, and keep them well labeled.
- Develop an operations plan that describes procedures for loading and/or unloading. Refer to SC-30 Outdoor Loading/Unloading of Materials for more detailed BMP information pertaining to loading and unloading of liquids.
- Protect materials from rainfall, run-on, runoff, and wind dispersal:
 - ✓ Cover the storage area with a roof.

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize

Targeted Constituents

Sediment	
Nutrients	✓
Trash	
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓

Minimum BMPs Covered

 Good Housekeeping	
 Preventative Maintenance	✓
 Spill and Leak Prevention and Response	✓
 Material Handling & Waste Management	✓
 Erosion and Sediment Controls	
 Employee Training Program	✓
 Quality Assurance Record Keeping	✓



Outdoor Liquid Container Storage SC-31

- ✓ Minimize stormwater run-on by enclosing the area or building a berm around it.
- ✓ Use a walled structure for storage of liquid containers.
- ✓ Use only watertight containers and keep the lids closed.
- Employ safeguards against accidental releases:
 - ✓ Provide overflow protection devices to warn operator or automatic shutdown transfer pumps.
 - ✓ Provide protection guards (bollards) around tanks and piping to prevent damage from a vehicle or forklift.
 - ✓ Provide clear tagging or labeling, and restrict access to valves to reduce human error.
 - ✓ Berm or surround tank or container with secondary containment system, including dikes, liners, vaults, or double walled tanks.
 - ✓ Be aware and ready to address the fact that some municipalities require secondary containment areas to be connected to the sanitary sewer, prohibiting any hard connections to the storm drain.
 - ✓ Contact the appropriate regulatory agency regarding environmental compliance for facilities with "spill ponds" designed to intercept, treat, and/or divert spills.
 - ✓ Have registered and specifically trained professional engineers identify and correct potential problems such as loose fittings, poor welding, and improper or poorly fitted gaskets for newly installed tank systems.
- Use MSDSs to ID hazardous components and keep incompatible products apart and to list/have available appropriate PPE and clean-up products.



Good Housekeeping

- Provide storage tank piping located below product level with a shut-off valve at the tank; ideally this valve should be an automatic shear valve with the shut-off located inside the tank.
- Provide barriers such as posts or guardrails, where tanks are exposed, to prevent collision damage with vehicles.
- Provide secure storage to prevent vandalism-caused contamination.
- Place tight-fitting lids on containers.

Resources....

- CASQA website (public)
 - QISP Fact Sheet:
www.casqa.org/sites/default/files/downloads/qisp_fact_sheet.pdf
 - NEC Fact Sheet: www.casqa.org/sites/default/files/casqa-handbook-industrial/nec_factsheet_27032015.pdf
 - State Water Board website
 - No Exposure Certification (NEC) brochure:
www.waterboards.ca.gov/water_issues/programs/stormwater/docs/toolbox/nec_brochure.pdf
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Resources....

- SCVURPPP Website
 - Industrial General Permit Fact Sheet (new)
 - Illicit Discharge Door Hanger Template (new)
 - Past training presentations
 - www.scvurpppp.org
 - Watershed Watch website
 - www.MyWatershedWatch.org
 - Outreach materials
 - Agency specific outreach
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Contact Information

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