

NES

ENVIRONMENTAL HEALTH & SAFETY
SOLUTIONS —————

Storm Water Permitting

Presentation Overview

- **What is a storm water permit and who needs one?**
- **Types of permit coverage**
- **Sources of storm water pollution**
- **Best management practices to control pollution**
- **Storm Water Pollution Prevention Plans**
- **Monitoring & Sampling Requirements**
- **Inspections, Lawsuits, and Common Citations**

Storm Water Permitting

Facilities performing industrial activities that are exposed to precipitation must obtain a permit to discharge storm water from their property.

- Issued by State Water Board
- Enforced by Regional Water Boards, Counties, Cities
- Permit assigned to specific facility location & owner
- 3 Types of Coverage – NOI, NEC, NONA

Regardless of permit requirements, facilities should implement pollution control measures to **protect water quality** and reduce potential **liability**.



CTA Storm Water Programs

CTA Compliance Group (CTACG)

The State allows Compliance Groups for facilities that perform similar operations (based on SIC Code). *NES* administers the CTA Compliance Group for transportation facilities with the following SIC Codes:

- 4212, 4213, 4214, 4231

CTA Storm Water Program (CTASWP)

CTA facilities that are not eligible to participate in the Compliance Group based on SIC Code are able to join the CTASWP.

Members receive the same benefits with exception of the 50% sampling frequency reduction.



Regulated Activities

Covered facilities are listed in Attachment A of the Industrial General Permit

- Based on facility's SIC Code
- Industries included:
 - Subchapter N (*cement, feedlots, fertilizers, airport deicing...*)
 - Manufacturing (*20XX-39XX, 4221-4225*)
 - Oil & Gas / Mining (*10XX-14XX*)
 - Hazardous Waste Treatment, Storage, or Disposal
 - Landfills, Land Application Sites, and Open Dumps
 - Recycling Facilities (*5015, 5093*)
 - Steam Electric Power Generating Facilities
 - **Transportation Facilities** (*40XX-45XX except 4221-4225, 5171*)
 - Sewage or Wastewater Treatment Works



Notice of Intent (NOI)

Notice of Intent application submitted electronically on SMARTS Database

- Certified by Legally Responsible Person

Requirements for NOI

- Site specific SWPPP and Site Map
- Signed SMARTS Authorization Form
- Annual permit fee payment around **\$1,600** – based on facility size

If approved, facility issued WDID Number and is subject to permit requirements

New Dischargers require QISP assistance to submit NOI

- Perform pollution source assessment
- Develop SWPPP and Monitoring Plan
- Receiving Water Body Evaluation



No Exposure Certification (NEC)

Industrial materials and activities are protected by a storm-resistant shelter to prevent all exposure to precipitation, including the following:

- Industrial material handling activities or equipment
- Machinery
- Raw Materials
- Intermediate Products
- Final Products
- Waste Products

NEC application submitted electronically on SMARTS Database

- Complete NEC Checklist (recertified annually)
- Upload Site Map
- Annual NEC fee payment of **\$200**

If approved, facility is exempt from monitoring and SWPPP requirements



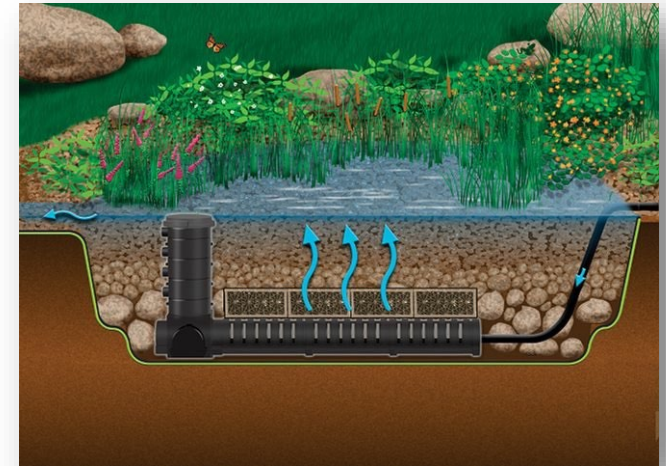
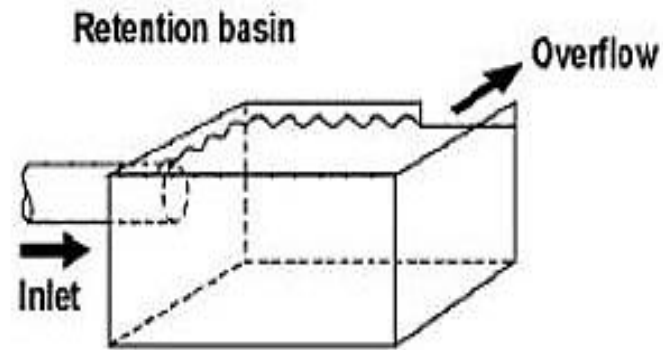
Notice of Non-Applicability (NONA)

Facilities designed to contain all storm water discharges, or those not linked to waters of the U.S.

- Requires Professional Engineer (PE)
- NONA Technical Report with PE stamp
- Report submitted on SMARTS
- Initial costs for PE evaluation, but saves money in the long run

NONAs are reviewed by the Water Board

If approved, facility is exempt from monitoring and SWPPP requirements



Where Do Pollutants Come From?



Maintenance

- Vehicle Maintenance Shops
- Washing Areas
- Fuel Stations
- Welding Areas
- Hazardous Waste Storage



Manufacturing

- Raw Materials Storage
- Transferring Activities
- Manufacturing Processes
- Ready Mix Concrete
- Mining Operations



Outdoor Activity

- Stockpiles and Boneyards
- Mobile Vendors
- Loading & Unloading
- Product Storage
- Track out

These activities can introduce pollutants into storm water.

Potential Pollutant Sources

Sediment (TSS)

Maintenance Activities

- Tire and brake dust
- Welding particulates

Loading & Unloading

- Trash & debris
- Vehicle traffic

Manufacturing

- Spills and leaks
- Tracked materials
- Exhaust vents

Oil & Grease

Chemical Storage Areas

- Spills and leaks
- Tracked materials from spills
- Missing secondary containment

Vehicles

- Leaking trucks and yard goats
- Employee parking areas

pH

Washing Activities

- Detergents
- Wash water

Storage Areas

- Vehicle batteries
- Acid / Base storage
- DEF (pH 9-10)

Good Housekeeping

Good Housekeeping is the **first impression** inspectors have when visiting your facility. To make the best impression, the following should be performed:

- Routine inspections
- Picking up trash and debris
- Watch for track out
- Clean out drain inlets, catch basins, and curb lines
- Filters and wattles

Poor housekeeping often leads to increased scrutiny for remainder of inspection. These are easy items for inspectors to document.

Housekeeping is a **TEAM** effort.







First Aid
Safety First

Handwritten graffiti in red and white on a metal surface.

GPC-3

TRONA

TRONA

Preventative Maintenance

Facility equipment and vehicles should routinely inspected.

- Identify leaks or damage
- Establish a maintenance schedule
- Implement corrective actions
- Document inspections
- BIT Inspections

Preventative maintenance is an important form of **source control** for pollutants. Fixing issues before they occur can prevent potential releases of petroleum products (i.e. oils, greases, fuels) into storm water.







Material Handling

Employees should be trained on the following material handling requirements:

- Train forklift operators
- Cover storage bins and trash cans
- Reduce exposure to storm water
- Store and dispose of wastes in accordance with regulations

Minimizing contact of industrial materials with storm water will reduce the potential for discharge of pollutants. Controlling the source of pollution is often more cost effective than treating contaminated storm water discharges.





Erosion & Sediment Control

Unpaved facilities face additional challenges with sediment. Erosion caused by industrial activity should be reduced or eliminated to prevent discharge of sediment.

- Stabilize high traffic areas
- Drain inlet protection
- Monitor for track out
- Routine cleaning of tracked sediment
- Tire rinsing stations

There are many products available to reduce erosions. Specific needs will vary depending on the amount of erosion present, the types of soil, and the amount of vehicle traffic.



Additional BMPs to Consider



Advanced Controls

Advanced BMPs are implemented when minimum BMPs are not sufficient to reduce or prevent storm water pollution:

- **Exposure Minimization**
 - Permanent Canopy Structures
 - Buildings
- **Storm Water Containment & Discharge Reduction**
 - Retention Ponds
 - Underground Vaults
 - Dry Wells
- **Treatment Control**
 - Mechanical, Chemical, or Biological Treatment Systems
 - Clarifiers & Separators



Storm Water Pollution Prevention Plan

SWPPP Purpose

- Identify and evaluate potential sources of storm water pollution
- Develop methods to control, reduce or eliminate pollutants
- Identify and eliminate unauthorized non-storm water discharges
- Comply with Permit requirements

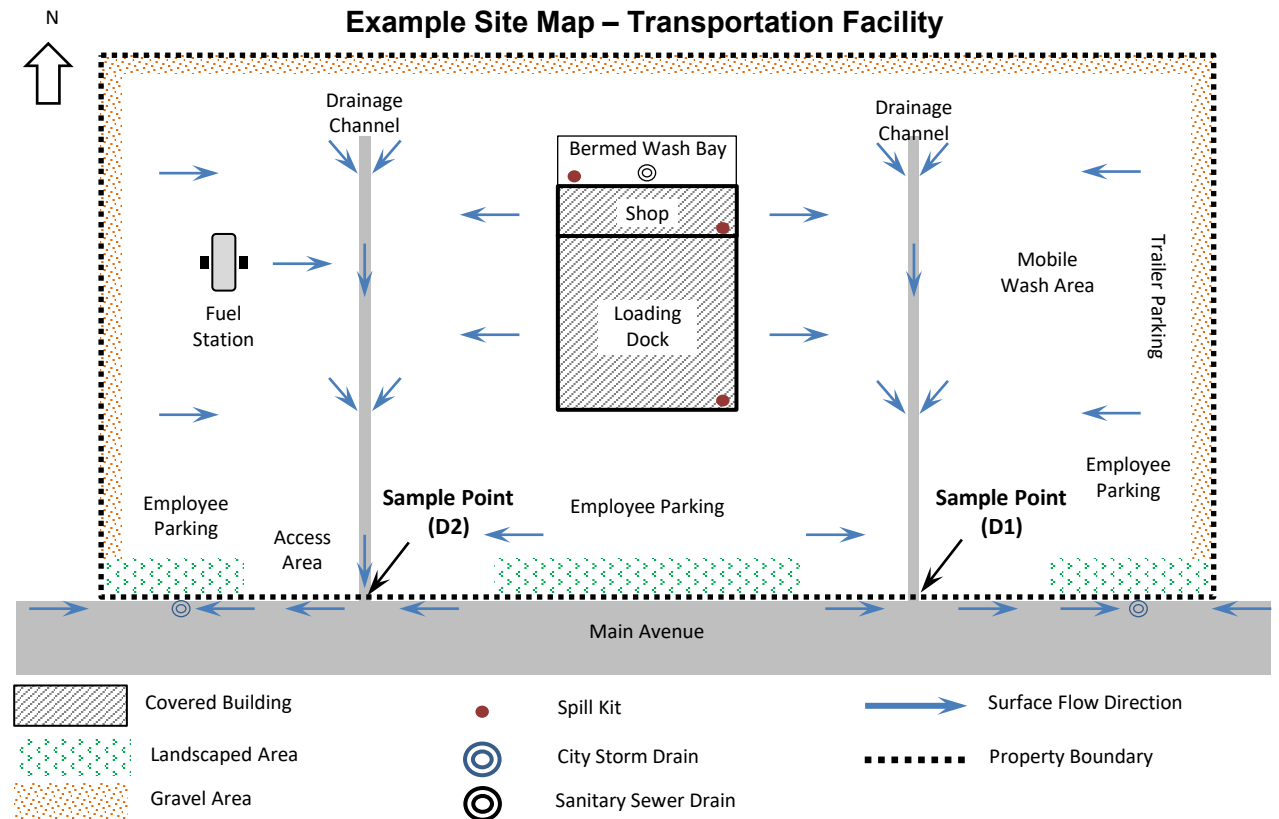
SWPPP Certification

- Legally Responsible Person (LRP) must sign the SWPPP Certification Statement
- Upload signed SWPPP and Site Map to SMARTS
- Upload major revisions within 30 days
 - Add/remove industrial activity, materials, sampling points
 - New Legally Responsible Person

SWPPP Overview

The following elements are included in the SWPPP:

- Pollution Prevention Team
- Facility Information
- Site Map
- Industrial Activity Areas
- List of Potential Pollutant Materials
- Handling & Storage Areas
- Non-Storm Water Discharges
- Past Spills & Leaks
- Erosion & Dust Generating Activities
- Best Management Practices
- Monitoring Implementation Plan



Fillable SWPPP templates provided to all CTACG & CTASWP members.

Monthly Visual Observations

Perform at least once per month during daylight operating hours with no precipitation, documenting the following:

Non-Storm Water Discharges (NSWD)

- Authorized, Unauthorized, No Discharge

Best Management Practices (BMPs)

- BMP deficiencies and corrective actions

Potential Pollutant Sources

- Outdoor Equipment
- Storage Areas
- Industrial Activity Areas



Observation form templates and review provided to CTACG & CTASWP members.

What Can Go in the Storm Drain?

Authorized Discharges

Allowed to Discharge into Storm Drain

- Fire System Flushing
- Potable Water Sources
- Condensates
 - Refrigeration
 - Air Conditioners
 - Compressors
- Irrigation Drainage
- Groundwater

Unauthorized Discharges

NOT Allowed to Discharge into Storm Drain

- Wash Waters:
 - Vehicle
 - Equipment
 - Pavement
- Spilled Chemicals:
 - Petroleum Products
 - Solvents
 - Detergents

Sampling Requirements

Collect samples of storm water discharges that are representative of industrial activities performed onsite.

- Frequency: 4 samples per reporting year
 - 50% frequency reduction for CTA Compliance Group members
- Collect samples from a Qualifying Storm Event
- Compare sample results to Numerical Action Levels
- Sample data is uploaded on SMARTS Database – **Available to the public.**
- Facility assigned a risk level based on sample results
 - Baseline, Level 1, Level 2



Sample kits, analysis and electronic reporting provided to all CTACG & CTASWP members.

Regulatory Inspections & Outcomes

Regulatory inspections for storm water can be performed by multiple agencies.

- State & Regional Water Quality Control Boards
- City & County Inspectors

SMARTS Database as an Inspection Tool

- Facilities operating without a WDID (non-filers)
- Facilities that have never been inspected
- Top polluters based on sample results
- Non-samplers
- Inspection reports and photos posted to SMARTS

Enforcement actions may vary based on findings and repeat offenses

- Notice of Non-Compliance
- Notice of Violation (\$\$\$)
- Can be considered “recurring” when issue is found at multiple sites

3rd Party Lawsuits

3rd Party lawsuits against industrial facilities are on the rise

- 75% increase seen in recent years
- Only have to **allege** the facility violated requirements of the IGP

Typical Process of 3rd Party Lawsuits

- 60-Day Notice of Intent to Sue sent to facility
- Facility seeks immediate legal counsel
- Formal response to notice with legal counsel

Ways to Avoid 3rd Party Lawsuits

- Be familiar with SMARTS and update as needed
- Maintain and update the SWPPP
- Meet storm water deadlines
- Take sampling seriously!



Common Citations & Prevention

Citations

- Operating without a WDID
- Late or Incomplete Reports
- Inadequate BMP Implementation
- Poor Housekeeping
- Lack of Sample Collection
- Untrained Employees
- Administrative / SWPPP
- Staining (Historical vs Recent)
- Inadequate Spill Response Materials
- **Up to \$10,000 per day per violation**

Prevention

- Submit NOI, if applicable
- Meet submittal deadlines, review documents
- BMP evaluations, maintenance, selection
- Routine Inspections
- Weather Tracking & Documentation
- Annual Employee Training (minimum)
- Document Reviews, Recordkeeping
- Document staining, evaluate source control, spill response
- Select appropriate number, size, and type of spill kit based on the storage area needs

Network Environmental Systems, Inc.

How We Can Help

NES has administered the California Trucking Association Compliance Group since 1999. We aim to help members develop and implement effective storm water programs throughout the state. CTACG and CTASWP members receive the following benefits:

- Simplified form templates and review;
- SWPPP template and guidance;
- Sample kits and analysis;
- BMP recommendations;
- SMARTS Database assistance and reporting;
- Annual site assistance visit;
- Semiannual training classes and webinars;
- 50% reduction in sampling frequency for CTACG;
- Significant cost savings compared to outside consultants;



Thank You!

Questions?

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