Storm Water
Pollution Prevention Program

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What Is The Storm Water Pollution Prevention Program?

- It is a comprehensive facility wide mandate to implement practices to reduce the pollutants present in storm water discharges associated with facility activity.

- The foundation of the Storm Water Pollution Prevention Program is the *Storm Water Pollution Prevention Plan*. The Storm Water Pollution Prevention Plan was designed and is being implemented to assure compliance with the terms and conditions of the Industrial General Storm Water Permit.

- The Storm Water Pollution Prevention Plan is maintained by the facility Pollution Prevention Team.
What Are The Regulatory Requirements?

- National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activity
Storm Water NPDES Permit Requirements (40 CFR 122):

- Each facility covered by the NPDES General Storm Water Permit must develop and implement a storm water pollution prevention plan.
- Identify potential pollutant sources which may reasonably be expected to affect the quality of storm water discharges from the facility.
- Establish best management practices to reduce pollutants in storm water discharges.
- A copy of the General NPDES Permit is kept in Appendix A of the Storm Water Pollution Prevention Plan.
Storm Water Pollution Prevention Plan (SWP3)

- Amendments, updates, and certifications
- Pollution prevention team
- Pollutant source assessment
- Countermeasures and controls
- Incident reporting
- TMDL analysis
- Compliance evaluation
- Monitoring requirements
Amendment/Update, Certification, and Records

- The SWP3 must be amended whenever there is a change in design, construction, operation, and maintenance, which has a significant effect on the potential for release of pollutants to the environment.

- The SWP3 requires a management commitment certification.

- All reports and related documents must be maintained for the life of the facility.
Pollution Prevention Team

- The designated group of individuals within the plant organization responsible for development and implementation of the SWP3.

- Duties include: identification of pollutant sources and best management practices; procedures development; routine inspections and annual compliance evaluation; incident investigation; training; and SWP3 review, revision and maintenance.
Pollutant Source Assessment

- Inventory of significant materials and operations.
- Structural management practices (e.g., retention basins, secondary containment, etc.).
- Past spills.
- Risk identification by source (e.g., chemical storage, recycling, etc.).
DPW Pollutant Source Assessment - Inventory of Significant Materials and Operations

- Fueling station
- Diesel fuel AST
- Recycling center
- Pesticide storage
- Vector garage
- Propane tank

- Scrap metal storage
- Used Oil storage
- Fleet maintenance area
- Solid waste dumpsters
- Roads and drainage maintenance area
- Equipment and material staging areas
Landfill Pollutant Source Assessment - Inventory of Significant Materials and Operations

- Fueling station
- Bulk fuel USTs
- C&D drop off bins
- Recycling center
- Scrap metal storage
- Maintenance building
- Solid waste dumpster
- Active landfill cells
Airport Pollutant Source Assessment - Inventory of Significant Materials and Operations

- Fueling station
- Bulk fuel USTs
- Mobile fuel trucks
- Used oil tank

- Gasoline AST
- Maintenance hangar
- Solid waste dumpster
- Wash rack/oil water separator
Pollutant Source Assessment

**Structural Management Practices:**

- Detention basins
- Secondary containment
- Covered and enclosed storage areas
- Oil water separator
- UST leak detection system
- Grading and cover practices for landfill cells
Pollutant Source Assessment

Risk Identification By Source:

- The risk identification for each potential source includes a description of the source/activity, identification of the associated pollutant(s) and pollutant parameter(s), direction of storm water flow and related drainage basin, and existing management practices.
Countermeasures and Controls

- Housekeeping
- Preventive maintenance
- Material compatibility
- Spill prevention and response
- Emergency equipment
- Inspections
- Training
- Non-storm water discharges
- Management of runoff
Countermeasures and Controls

Housekeeping:
- Store all materials in designated areas in sealed labeled containers.
- Clean all spills and leaks promptly.
- Drain, seal, and wipe residue from outside of containers after transferring contents.
- Maintain routine recycling pickup schedules
- Check, verify, and relocate all materials received to designated inventory areas upon receipt.
- Continuously observe bulk material transfer.
Countermeasures and Controls

Preventive Maintenance:

- Schedule of periodic inspections and tests of equipment and systems.
- Prompt corrective action when inspections and testing reveal defects in equipment.
Countermeasures and Controls

Spill Prevention and Response:

- Four types of spill categories (e.g., bulk storage, human error, equipment failure, material unloading/transfer)
- Prevention measures
- General and material specific incident response considerations
Countermeasures and Controls

Inspections:
- During bulk material unloading operations.
- During in-plant material transfer.
- Monthly visual inspections.
- The monthly inspection form (Appendix C of the SWP3) should be used to document the inspection.
Countermeasures and Controls

Training:

- Permit and regulatory requirements.
- Good housekeeping and material handling practices.
- Reason for and maintenance of BMPs.
- On-the-job training.
- Orientation at initial assignment and annually.
Countermeasures and Controls

Non-storm water discharges:

- Pouring, dumping, or any other type of discharge to the storm water collection system is strictly prohibited.
- Non-storm water discharges are not permitted.
- Non-storm water discharge certification (Appendix F of SWP3).
Incident Reporting

- Immediately report any spill or release to the manager/foreman.
- The manager/foreman will determine the regulatory reporting requirement, proper spill handling, and cleanup procedures.
- No employee is authorized to cleanup a spilled material that they have not been trained to handle.
Total Maximum Daily Load (TMDL) Analysis

- Initial TMDL Applicability Evaluation
- Annual TMDL Applicability Evaluation
Comprehensive Site Compliance Evaluation

- A comprehensive site compliance evaluation must be conducted annually by qualified plant personnel (Pollution Prevention Team).

- The compliance evaluation must address drainage areas and storm water outfalls, pollution control devices, effectiveness of best management practices, TMDL applicability, and records.

- The site compliance evaluation questionnaire (Appendix H of the SWP3) should be used to document the evaluation.
Monitoring Requirements

- According to the NPDES permit and based on current facility operations, storm water monitoring is not required at the plant.

- TMDL sampling is not currently required (but must be evaluated annually).
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