

Basic Industrial Stormwater General Permit Guidance Document

NJPDES General Permit No NJ0088315

Revised February 1, 2013





New Jersey Department of Environmental Protection Division of Water Quality Bureau of Nonpoint Pollution Control State of New Jersey
New Jersey Department of Environmental Protection
Bureau of Nonpoint Pollution Control
Division of Water Quality

Basic Industrial Stormwater General Permit Guidance Document

NJPDES Permit No. NJ0088315



Revised February 1, 2013

Acknowledgements

Jim Murphy, Chief

Bureau of Nonpoint Pollution Control Division of Water Quality

Basic Industrial Stormwater General Permit Renewal Team

The following members of the Bureau of Nonpoint Pollution Control have revised the Basic Industrial Stormwater General Permit Guidance Document, SPPP forms and supporting materials, to assist permittees in complying with the Basic Industrial Stormwater General Permit (NJ0088315), which became effective on February 1, 2013:

Brian McLendon, Supervisor Kerri Standowski Dan Kuti Shashi Nayak

Table of Contents

Overview - Basic Industrial Stormwater General Permit	2
Recommended Best Management Practices	3
Process Wastewaters	5
Fueling Opeations	7
Equipment and Vehicle Washing	8
Material Handling and Storage	9
Aboveground Storage Tanks	12
Discharge of Accumulated Stormwater from Secondary Containment	13
Annual Employee Training	14
SPPP Form 1 - Stormwater Pollution Prevention Team	15
Example SPPP Form 1 – Stormwater Pollution Prevention Team	16
SPPP Form 2 - Inventory Requirements	17
Example SPPP Form 2 – Inventory Requirements	17
SPPP Form 3 - Developing a Site Map	19
Example SPPP Form 3 – Developing a Site Map	20
SPPP Form 4 - Best Management Practices	21
Example SPPP Form 4 – Best Management Practices	22
SPPP Form 5 - Maintenance Plan	23
Example SPPP Form 5 – Maintenance Plan	24
SPPP Form 6 - Inspection Schedule	25
Example SPPP Form 6 – Inspection Schedule	26
SPPP Form 7 - Coordination of SPPP with Other Existing Environmental Management	
Plans	27
Example SPPP Form 7 – Coordination of SPPP with other Existing Environmental Management Plans	28
SPPP Form 8 - Employee Training	
Example SPPP Form 8 – Employee Training	
SPPP Form 9 - Annual Self-Inspection Schedule	
Example SPPP Form 9 – Annual Inspection Schedule	
"Source Material" Guidance	
Important Names, Addresses and Contacts	

Overview - Basic Industrial Stormwater General Permit

In 1990, the Environmental Protection Agency (EPA) published regulations, known as the Phase I rules, which required the issuance of permits for stormwater discharges associated with certain industrial activities. In response to these rules, the New Jersey Department of Environmental Protection (Department) issued the Basic Industrial Stormwater General Permit (NJ0088315) for facilities that can eliminate the exposure of source materials and/or industrial activities to stormwater that **discharges** to the surface and/or ground waters of the State.



The Basic Industrial Stormwater General Permit (General Permit) emphasizes pollution prevention techniques and source control rather than "end-of-pipe" treatment. Permit authorization is intended for "light industries" that can easily eliminate exposure through the implementation of Best Management Practices (BMPs). Facilities authorized under the General Permit must prepare and implement a Stormwater Pollution Prevention Plan (SPPP). In general, the SPPP calls for removing pollutants from contact with stormwater. This may be achieved in a variety of ways such as covering with a roof or tarp, moving source materials inside, or simple housekeeping procedures. These plans stress the development of reasonable and cost effective BMPs that eliminate the contact between source materials and stormwater, preventing pollution and benefiting industry by reducing inventory and material losses and improving site conditions.

The SPPP is a written document that describes how your facility will eliminate exposure through the implementation of specific BMPs and provides a place for record keeping. This guidance document is provided to all permittees to assist in the development of their SPPP. Recommended BMPs and example SPPP forms are provided in subsequent chapters of this guidance document. Blank copies of the SPPP forms can be found on the Basic Industrial Stormwater General Permit webpage at www.state.ni.us/dep/dwq/5g2.htm.

All newly authorized facilities are required to have their SPPP prepared and implemented within six (6) months from the effective date of their permit authorization (EDPA). Existing permittees reauthorized under the General Permit automatic renewal procedures are required to submit the Certification Form along with their Annual Certification, certifying that they have updated their existing SPPP to include the additional permit requirements listed below.

1. Inventory Requirements

- a. List all seasonal activities conducted at the facility that are exposed to stormwater runoff;
- b. Include a list of process wastewaters generated at the facility, including but not limited to pressure-wash wastewater, hydro-blasting wastewater, boat bottom wash wastewater, vehicle and equipment wash wastewater; and
- c. Include a list of all other permit approvals issued by the NJDEP to the facility for the activities listed (i.e. air, solid waste, land use, etc.).

2. Mapping Requirements

- a. The property boundary;
- b. Additional stormwater control features including stormwater catch basins and designed stormwater basins (e.g. infiltration, detention, retention); and
- c. The location(s) where the additionally listed process waste waters (pressure-wash wastewater, hydro-blasting wastewater, boat bottom wash wastewater, vehicle and equipment wash

wastewater) generated at the facility enter a storm water conveyance that discharges to waters of the State.

3. Inspection Schedule

- a. Conduct monthly Maintenance Inspections to ensure that all BMPs identified in the SPPP are being properly implemented and/or maintained; and
- b. Maintain monthly inspection records onsite and available for Department review.

If, after reviewing this guidance document, you still have questions regarding your permit or permit conditions please contact the Bureau of Nonpoint Pollution Control at (609) 633 – 7021.

Recommended Best Management Practices

The Best Management Practices (BMPs) recommended in this guidance document are meant to aid your facility in achieving environmental compliance and preserving water quality. Facilities can use these recommended BMPs when developing their SPPP or they may decide to implement other BMPs. You may even have some BMPs already in place that are successful in keeping source materials and/or industrial activities from coming into contact with stormwater. Facilities need to consider all potential pollution sources when choosing which BMP(s) will be the best for their operational needs.

The following BMPs are provided to assist your facility in developing your SPPP. Please keep in mind that these are only a handful of the many BMP options that may be available to your facility.

Process Wastewaters

Eliminate the discharge of process wastewater, including but not limited to leachate, contact cooling water, pressure-wash wastewater, hydro-blasting wastewater, boat bottom wash wastewater, and vehicle and equipment wash wastewater. This BMP describes five (5) options that are available to your facility.

Fueling Operations

Ensure that leaks and/or spills from outdoor fueling operations or bulk fuel transfer do not contaminate stormwater. This BMP recommends ways your facility can manage these operations.

Equipment and Vehicle Maintenance

Ensure that all potential pollutants used/generated as a result of equipment and vehicle maintenance activities, including vehicle rehabilitation, mechanical repairs, painting, lubricating, etc. are properly managed and do not come in contact with stormwater. This BMP identifies possible sources of pollutants resulting from equipment and vehicle maintenance activities, as well as recommending ways to manage those pollutants.

Loading and Unloading Activities

Ensure that materials are not spilled, leaked or lost during loading/unloading operations outdoors. This BMP suggests some simple actions that your facility can implement to manage these activities.

Aboveground Storage Tanks

Ensure that spills and releases of chemicals from Aboveground Storage Tanks (ASTs) do not contaminate stormwater and degrade surface and/or ground water quality. Common causes of spills and releases include external corrosion, structural failure, installation problems, product transfer, overfilling, and equipment leaks. This BMP assists facilities in ensuring that ASTs are: inspected, in compliance with State and federal regulations, and operated in such a manner that prevents spills and leaks.

Discharge of Accumulated Stormwater from Secondary Containment

Basic Industrial Stormwater General Permit Guidance

Ensure that stormwater has not been exposed to the materials stored, or by the activities conducted within the containment area, before discharging accumulated stormwater from secondary containment areas. This BMP describes steps your facility must take to discharge accumulated stormwater.

Employee Training

Develop and conduct an annual Stormwater Pollution Prevention Plan training program for employees on topics identified in the SPPP. This BMP provides helpful hints on how to develop this program and successfully implement it at your facility.

Process Wastewaters

The discharge of process wastewaters, including but not limited to leachate, contact cooling water, pressure-wash wastewater, hydro-blasting wastewater, boat bottom wash wastewater, and vehicle and equipment wash wastewater is not authorized under this General Permit. Unless such discharges are authorized by a separate New Jersey Discharge Elimination System (NJPDES) discharge permit, these discharges are in violation of both the Water Pollution Control Act and the NJPDES rules.

Facilities must eliminate the unpermitted discharge of process wastewaters, including rinse water with or without



detergents, by either installing a wastewater reclaim system, capturing and hauling the wastewater for proper disposal, connecting to sanitary sewer (where applicable and approved by local authorities), ceasing the activity and/or applying for and obtaining a separate NJPDES permit. Below are examples of ways that a facility can properly manage their process wastewater discharges.

1. Install a wastewater reclaim system

Numerous systems are commercially available that recycle and treat wash wastewater for reuse, which can be sized for a wide range of flows. A wastewater reclaim system usually includes a sump, or some other mechanism to collect the water, a treatment system using one or more treatment technologies to remove contaminants, and a tank to store the treated water that is then reused. The Department has found that these systems offer many advantages including flexibility of design, relatively low initial capital costs, low operational costs, low disposal costs (when compared to discharges to sanitary sewer), significant reduction in water usage and no requirement for a NJPDES discharge permit, since there is no discharge to surface or ground water. Below is a list of five treatment technologies that may be used individually or in combination as part of a wastewater reclaim system:

Technology	How it works		
Electrocoagulation	As wastewater travels through a series of cells, an electrical current is applied to the stream providing an electromotive force that allows certain compounds to approach a more stable state. Typically, the more stable state for an element or compound results in a solid form that is removed by settling or filtration. The pollutant removal efficiency of electrocoagulation systems can be maintained throughout a range of influent pollutant concentrations. This process effectively removes emulsified oils and hydrocarbons, suspended solids, and heavy metals.		
Filtration	Filters can mechanically separate various components of a waste stream. Filter selection is an important part of a facility's assessment of this technology. The different filter media used by various manufacturers are designed to remove a wide range of pollutants, but certain media are only appropriate for particular compounds. For instance, activated carbon filter media are efficient at removing sediment and volatile organic compounds, not necessarily inorganic compounds like metals. Typical maintenance of these systems is the replacement of filter cartridges after periods of use.		

Chemical Treatment	Certain chemicals may be added to a waste stream to remove particular pollutants of concern. Various chemicals achieve pollutant removal through a number of chemical or mechanical processes. Examples include pH adjustment to neutralize wastewater, pH adjustment to facilitate the precipitation of metals or the addition of flocculants to improve settling of solids. The quantity of chemicals fed into the treatment process may change depending on the strength of pollutants entering the treatment system. Chemical treatment is generally effective; however, it can be cost prohibitive and require properly trained operators.
Settling	Settling is the process by which particulates, aided by gravity, settle to the bottom of a liquid and form sediment. The settling efficiency is dependent on the particle properties and the time given to the wastewater volume to remain at a low flow. Some pollutants, such as metals, may be chemically trapped in solution and the act of settling will not reduce the concentration of these pollutants.
Biological Treatment	Biological treatment utilizes bacteria that feed on organic materials, reducing pollutant load, specifically nutrients, biochemical oxygen demanding (BOD) substances, and oil and grease. Biological treatment is generally used to treat sanitary waste streams and require a constant source of organic matter and therefore may not be suitable for treatment of wash wastewater.

2. Capture and haul the wastewater for proper disposal

Facilities may construct or use an existing impervious area with berms or other methods to facilitate the collection of wastewater and then have the wastewater hauled for proper disposal. The wastewater would need to be characterized and based on that characterization may be accepted at a sewage treatment plant or may need to be disposed of as a hazardous waste.

3. Connect to sanitary sewer (where applicable and approved by local authorities)

It may be acceptable in some areas to connect to and discharge the wastewater directly to a sanitary sewer. However, facilities will need prior approval from the local sewerage authority prior to connection. Sewerage authority may require characterization of the wastewater prior to discharging and based on that characterization may require pretreatment of the wastewater. In addition, the sewerage authority may require that the wastewater meet pretreatment standards and require regular monitoring of the discharge to ensure the discharge meets these standards. Lastly, most sewerage authorities will require a connection fee and will charge a monthly sewerage fee.

4. Cease the activity

Your facility may find that ceasing the discharge of wastewater to be the easiest and most cost effective option. If you are simply washing a fleet of cars, trucks or buses it may be more cost efficient to take them to a commercial car or truck wash facility rather than install a treatment system.

5. Apply for and obtain a separate NJPDES permit

A facility always has the option to apply for a separate NJPDES permit that will specifically authorize the wastewater discharge. NJPDES permits limit the mass and/or concentration of pollutants discharged to surface or ground water of the State. Discharges must meet effluent limitations set in the permit designed to protect surface and ground water quality. In order to meet the effluent limitation in the NJPDES permit a facility would need to design and build a treatment unit. Permit holders are required to monitor the discharges, likely on a monthly basis, and submit discharge monitoring reports (DMRs). Facilities that exceed their permitted discharge limits and/or fail to submit the DMR are subject to significant mandatory penalties. In addition, NJPDES permits have an annual fee based on pollutant load. The minimum fee during fiscal year 2012 for an individual DSW permit was \$4, 200.

Fueling Operations

When stormwater mixes with fuel that has spilled or leaked onto the ground, it can become contaminated with organic chemicals that are harmful to the environment. The following will help you to identify activities that can contribute to stormwater pollution and identify BMPs to reduce or eliminate stormwater contamination from fueling operations.

Step 1: Identify all fueling operations that occur at your facility

- Fueling Operations for Vehicles and Equipment
- ♦ Bulk Fueling Transfers
- Fueling Operations for Ancillary Operations (mobile fueling operations)



Step 2: Implement BMP(s) to eliminate the source material(s) and/or activity(ies) Fueling Operations for Vehicles and Equipment

- Ensure that all fueling nozzles are equipped with an automatic shut-off to prevent overfill.
- ♦ Keep nozzles and hoses clean and free of residue and ensure that they are properly operating.
- ♦ Do not "top off" fuel tanks.
- Train fueling staff in spill prevention, containment and cleanup procedures.
- Ensure that spill kits and spill response equipment are located at the fueling area.
- ◆ Conduct cleanups of any spills immediately using a dry, absorbent material (e.g., kitty litter, sawdust, etc.).
- Clearly post instructions for safe operation of fueling equipment, and appropriate contact information for the person(s) responsible for spill response at your fueling area.

Bulk Fueling Transfers

- ♦ All fuel storage tanks must be in secondary containment and the fueling area must be on an impervious surface.
- During bulk transfer, either block storm drains and inlets or contain tank trucks within a temporary berm or temporary absorbent boom. All hose connections must be within the bermed area.
- Ensure that the bulk transfer is under the supervision of a trained employee from your facility.
- Place drip pans or absorbent pads under all hose and pipe connections and other leak prone areas during the entire fueling operation.
- Ensure that all above ground storage tanks (ASTs) and underground storage tanks (USTs) are functioning as designed, with all high level alarms in working order.

Fueling Operations for Ancillary Operations (mobile fueling operations)

- Minimize mobile fueling. Whenever practical, transport vehicles and equipment to your designated fueling area.
- Keep a copy of the fueling procedures with the mobile unit.
- Equip mobile units with spill kits, spill pans, spill collection containers, etc.
- If the service is contracted to a third party, your facility must ensure compliance with the aforementioned standards.

Equipment and Vehicle Maintenance

Many equipment and vehicle maintenance operations use materials or create wastes that are harmful to the environment. Stormwater runoff from areas where these activities occur can become polluted by a variety of contaminants such as oil, grease, solvents and degreasing products. The following will help you choose BMPs that can minimize and/or eliminate the sources.

Step 1: Identify maintenance activities

Maintenance Areas and Equipment & Vehicle Parts Cleaning

• Shop, parts and equipment maintenance and cleanup activities.

Inventory and Storage of Parts, Machinery and Equipment

♦ Dripping engine and automotive fluids from parked vehicles and equipment, storage areas and storage containers.



Disposal of Parts and Materials

♦ Coolants and degreasers, used oil, oil filters, air filters, antifreeze, cleaning solutions, hydraulic fluid, hazardous wastes (e.g., batteries) used rags, etc.

Step 2: Implement BMP(s) to eliminate the source material(s) and/or activity(ies)

Maintenance Areas and Equipment & Vehicle Parts Cleaning

- When possible, conduct maintenance activities off-site, otherwise perform maintenance indoors. If you cannot perform maintenance indoors, use designated areas away from any storm drains or block storm drains with berms, sandbags, or other barriers.
- Use portable tents or construct a roofing-device over long-term maintenance areas and for projects that must be performed outdoors.
- ♦ Always use drip pans, drain boards, and drying racks to contain leaks.
- ♦ Use absorbent clean-up materials (e.g., kitty litter and sawdust) in maintenance areas and dispose of properly after use. Use dry cleaning methods only. Do not hose down work areas.
- Use water based cleaning systems in place of organic solvent degreasers.
- Replace chlorinated organic solvents (e.g., methylene chloride) with non-chlorinated solvents like kerosene or mineral spirits.
- Use a non-toxic or less toxic cleaning material. For vehicles that use hydraulic equipment (e.g., excavators, loaders), consider using vegetable-based hydraulic oil, which is biodegradable.

Inventory and Storage of Parts, Machinery and Equipment

- ♦ Inspect incoming equipment and vehicles for leaks, and inspect all on-site equipment and vehicles during regular maintenance.
- Ensure that all containers are properly labeled and marked, and that the labels remain clean and visible. Keep all containers in good condition and tightly closed when not in use.
- ♦ Store all chemicals, fluids, supplies and other hazardous waste (e.g., batteries) indoors. If they must be kept outside, they must remain covered and placed on a spill platform.
- Ensure all storage drums are within secondary containment.

Disposal of Parts and Materials

- Drain fluids completely from parts before disposal.
- Recycle degreasers, used oil, oil filters, antifreeze, cleaning solutions, and hydraulic fluid.
- Recycle or dispose of hazardous waste (e.g. batteries) off-site.

Material Handling and Storage

Material Handling

Handling of materials is especially crucial during loading and unloading operations since these operations usually take place outside on docks or terminals. Materials spilled, leaked, or lost during loading/unloading may collect in the soil or on other surfaces and be carried away by stormwater runoff or when the area is cleaned. Additionally, pollutants from loading or unloading equipment and/or machinery may wash off during a rain event. The following BMPs will help you reduce, eliminate, or recycle pollutants that may otherwise contaminate stormwater.

Step 1: Recognize loading/unloading activities that can contaminate stormwater



- Pump liquids or gases to or from barges, trucks or rail cars to a storage facility.
- Transfer dry chemicals to or from loading and unloading vehicles.
- ◆ Transfer by mechanical conveyor systems.
- ♦ Transfer bags, boxes, drums, or other containers by forklift, hand trucks or other material handling equipment.

Step 2: Implement BMP(s) to eliminate the source material(s) and/or activity(ies)

- ♦ Have a designated location for tank trucks and material delivery vehicles where spills or leaks can be contained. Avoid placing storm drains in loading/unloading areas.
- Grade, berm or curb loading/unloading areas to prevent stormwater run-on and to direct stormwater away from the area.
- Pave loading areas with concrete instead of asphalt.
- If industrial activity is not occurring on the roof, position roof down spouts to direct stormwater away from loading/unloading areas and preferably to a drain that is connected to a dead-end sump or to a grassy or vegetated area where the stormwater can soak into the ground.
- ♦ Cover loading/unloading docks or areas (for example, using building overhangs) to prevent exposure of equipment, vehicles, and material to rain. Better yet, design your loading dock to have a bladder seal or door skirt between delivery vehicles and the building or allow enough room for the entire truck to back completely inside the building during loading/unloading activities.
- Whenever possible, do not conduct loading and unloading during wet weather.
- Check loading /unloading equipment and vehicles regularly for leaks, and fix any leaks promptly. Common areas for leaks are valves, pumps, flanges and connections. Also, look for dust or fumes because these are signs that material is being lost during unloading/loading operations.
- Ensure that spill kits and spill response equipment is located at the loading/unloading area. Use drip pans and/or spill kits underneath hose and pipe connections and other leak-prone areas. Conduct cleanups of any spills immediately using a dry, absorbent material (e.g., kitty litter, sawdust, etc.).
- Train employees (e.g., forklift operators) and contractors on proper handling techniques, loading and unloading procedures, and proper spill containment and cleanup. A trained employee should be present during all loading/unloading.

Material Storage

For many reasons, materials such as raw materials, intermediate products and final products may be stored outside. If stored improperly, these materials may be be carried away by stormwater runoff. The following BMPs will help you reduce or eliminate pollutants that may otherwise contaminate stormwater.

Step 1: Locate all materials stored outside that have the potential to pollute stormwater runoff

- Materials that are easily transported by stormwater.
- ♦ Materials that erode.
- ♦ Materials that dissolve in stormwater.
- Materials that degrade, breakdown, or disintergrate.
- Materials that add a distinct odor or color to the stormwater.

Step 2: Implement BMP(s) to eliminate the source material(s)

- ♦ Confine storage to designated and labeled areas outside of drainage pathways.
- Cover material storage areas with an awning, tarp, or roof.
- Divert stormwater around storage areas with vegetated swales, and/or berms.
- Store materials on concrete pads to allow for cleanup of spills or leaks.
- ♦ Locate storage areas away from high traffic areas and surface waters.
- Store drums indoors when possible and clearly label drum with its contents.
- Store drums, including empty or used drums, in secondary containment with a roof or cover (including temporary cover such as a tarp that prevents contact with precipitation).
- Practice good stockpiling practices such as: storing materials on concrete or asphalt pads; surrounding stockpiles with diversion dikes or curbs; and revegetating areas used for stockpiling in order to slow runoff.
- Minimize material storage through effective inventory and shipping controls.
- Stabilize areas surrounding storage and material handling areas.

Aboveground Storage Tanks

Spills and releases of chemicals from Aboveground Storage Tanks (ASTs) can contaminate stormwater and degrade surface and/or ground water quality. Common causes of spills and releases include external corrosion, structural failure, installation problems, product transfer, overfilling, and equipment leaks including leaking tanks, pumps, valves, piping, flanges, hoses, and couplings.

Step 1: Inspect the integrity of any ASTs located at your facility

- ♦ Inspect all ASTs prior to installation.
- After installation, ensure that operators routinely inspect ASTs including tank foundations, tank walls (shell), connections and piping for corrosion, leaks, or other physical damage that may weaken the system.
- Ensure that a qualified professional conducts integrity testing (hydrostatic test) periodically.
- ♦ Inspect ASTs regularly to identify and address any leaks that may occur. Maintain areas surrounding ASTs free of all contaminants and pollutants.

Step 2: Ensure compliance with applicable state and federal regulations

- ◆ Determine if your facility is subject to federal Spill Prevention, Control and Countermeasure (SPCC) regulations at 40 CFR 112 and/or the state Discharge Prevention, Containment and Countermeasure (DPCC) and Discharge Cleanup and Removal plan (DCR) regulations at N.J.A.C. 7:1E.
- ♦ If subject, pursuant to the Basic Industrial Stormwater General Permit (General Permit), you must cross-reference the SPCC and/or DPCC/DCR plan in your Stormwater Pollution Prevention Plan (SPPP).

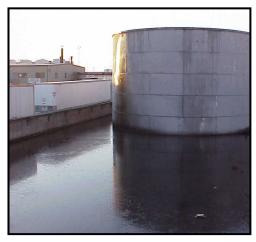
Step 3: Ensure safeguards are in place

- Install safeguards such as: overflow protection devices, protective guards around tanks and piping, and labeling of all valves and pumps.
- ◆ Train AST operators at least annually pursuant to the General Permit on the proper maintenance and operation of ASTs, ancillary pumps and valves (AST system).
- ♦ Locate ASTs within secondary containment. The capacity of the secondary containment msut be the volume of the largest tank within the secondary containment plus additional capacity to accommodate six inches rainwater unless otherwise required by regulation.
- Use secondary containment made of impermeable materials and maintain the impermeable condition.
- Perform necessary maintenance to ensure the integrity of all containment structures.
- Ensure that any discharge valves in secondary containment structures are in the closed shut-off position during normal conditions.
- Ensure that stormwater that accumulates in secondary containment structures is discharged to surface or groundwater only in accordance with the Discharge of Accumulated Stormwater from Secondary Containment BMP.



Discharge of Accumulated Stormwater from Secondary Containment

Many facilities authorized under the Basic Industrial Stormwater General Permit (General Permit) use secondary containment (permanent and temporary) as a means to prevent serious environmental problems from occurring from releases or failure of above ground storage tanks and drums. Facilities may also conduct activities such as liquid loading and unloading within containment areas. During storm events, water may accumulate within these containment areas. This accumulated stormwater may be discharged to surface and/or groundwater by facilities authorized under the General Permit as long as facilities can document that the



stormwater has not been exposed to the materials stored or by the activities conducted within the containment area.

The Department recommends that the following BMP be implemented by every facility that plans to discharge accumulated stormwater from containment areas:

Step 1: Ensure that you can control the discharge from the containment area

- Provide a valve or other means (globe, gate or equivalent) to control the discharge in all containment areas.
- Ensure that the valve remains closed at all times except when discharging stormwater.

Step 2: Inspect the integrity of the tanks or containers stored within the containment area

- Conduct routine inspections of the tanks, drums and other containers including any valves, hoses, pipes or other appurtenances within the containment area to ensure their integrity and proper operation.
- ♦ Maintain a log of these routine inspections.
- Perform regular maintenance of tanks, drums and other containers including any valves, hoses, pipes and appurtenances within the containment area including painting, repair and replacement.

Step 3: Ensure that the accumulated stormwater is clean prior to discharge

- Performed a physical inspection prior to discharging the accumulated stormwater to determine if the stormwater has been contaminated by the contents of the tank or by materials stored within the containment area. A physical inspection is appropriate when the contents of the tank or materials stored could discolor or impart a discernible odor to the stormwater, or leave a visual sheen.
- ♦ When a physical inspection is not adequate, collect and analyze a stormwater sample for an appropriate parameter to determine whether the accumulated stormwater is contaminated. An example of an appropriate parameter would be pH for an acid or caustic substance. Indicator, or non-specific tests, may be used in lieu of full priority pollutant scans. A New Jersey Certified Laboratory using approved analytical methodology must conduct all analyses. The collected stormwater will not be considered contaminated if concentrations for the pollutants analyzed are at, or below, the Recommended Quantitation Levels (RQLs) for the analysis. For acidic or caustic materials, the stormwater will not be considered contaminated if the pH level is found to be between 5-9 s.u. (Statewide). The discharge may exceed the RQLs, or the pH may be outside the acceptable ranges, if the analytical results are at, or below, a representative sample of ambient stormwater.
- If it is determined through physical inspection or analytical monitoring, or it is otherwise suspected that the stormwater is contaminated, then collect the accumulated stormwater and haul off-site using a licensed waste disposal service for proper disposal.

Step 4: Discharge accumulated stormwater

- Maintain records of every discharge from containment areas, which include the date, time, and approximate volume of the discharge, and maintain records of any physical inspection and/or analytical monitoring. Records must be maintained for five (5) years and be available for inspection.
- Ensure that the discharge of stormwater is approved by the facility's authorized representative.

Annual Employee Training

Your facility is <u>required</u> to establish an annual employee training program to educate your employees about stormwater management, potential sources of contaminants at your facility and pollution prevention. Employee training programs shall train employees on each aspect of the SPPP that is related to their job responsibilities. Employees should have an understanding of their SPPP, including BMPs, processes and materials they are working with, safety hazards, practices for preventing discharges, and procedures for responding quickly and properly to spills and releases. Training is important because one mistake or misunderstanding has the potential to result in the discharge of pollutants into our ecosystem.



Step 1: Determine which employees receive training, what topics will be addressed and the method of training

- ♦ Conduct an annual stormwater management and BMP educational training for employees on topics identified in the SPPP. For example, training drivers who fuel their own trucks on how to operate the fuel pump and how to respond to spills, which should be part of the facility's Fueling Operations BMP. Additional training topics can include Spill Prevention and Response, Good Housekeeping, Industrial Management, Loading and Unloading Practices.
- Standardized and repeat the program as necessary, to train both new and existing employees. The training can be a seminar, a workshop, or interactive computer-based. When practical, incorporate on-site training to show areas of potential storm water contamination and examples of proper BMP implementation.

Step 2: Helpful Tips and BMPs for implementing an employee training program can include:

- Conduct short, multiple training sessions through out the year to keep employees thinking about preventing stormwater pollution all year. Communicate with your employees frequently to ensure adequate understanding of SPPP goals and objectives.
- Incorporate stormwater training into existing health and safety or fire training.
- Educat employees on the theory(ies) of pollution prevention and follow up with practical examples.
- Present materials in several different ways, such as handouts and/or verbal. Handouts can be a good way for staff to follow along during the training. Make a copy of the BMPs and related materials that you want to discuss during training, and make of note of the important points for each BMP.
- Provide interactive training to keep your employee's attention (e.g., spill drills). Utilize experience from past spills to prevent future spills.
- Periodically check employees' work practices to ensure correct implementation. If corrections need to be
 made, inform the employees with the correct procedures and why they are doing it that way.
- Regularly review your BMP strategies and discuss with employees the effectiveness of the program. Encourage employees to give suggestions to improve existing BMPs and to create new BMPs.
- Make employees aware of BMP monitoring and spill reporting procedures.
- Ensure a strong commitment and periodic input from senior management.
- Include the information to be covered and dates of your training in the SPPP.

SPPP Form 1

Stormwater Pollution Prevention Team

<u>Purpose</u>

The Stormwater Pollution Prevention Team is responsible for overseeing the implementation of the various permit requirements. Individuals who participate on this team should be selected for their knowledge in the subject area or as a result of their current responsibilities at your facility. Due to the wide range of tasks that may be required, this team may need to include a variety of personnel, such as your CEO or President of Operations, plant manager, maintenance supervisor, quality control manager, environmental staff, and consultant, if applicable.

One person needs to be named the Facility Contact. This individual will be the primary contact for the Department and may be contacted when the Department schedules an inspection. It is recommended that the team meet on a regular basis to coordinate activities and discuss permit compliance issues, and update the SPPP as facility operations change.

How do I fill out this form?

At the top of each Stormwater Pollution Prevention Plan (SPPP) Form is a "Facility Information" section. This section should be completed in the same manner for each SPPP form.

Facility Name: This is the name of your facility, as provided on your Request for Authorization (RFA) and listed on your Authorization to Discharge page.

County: Please indicate in which county your facility is located.

NJPDES #: This is the permit number assigned to your facility by the Department. Your NJPDES permit number can be found on your Authorization to Discharge page, and begins with "NJG."

<u>PI ID #</u>: This is your Program Interest Identification number, as assigned by the Department. This number is also listed on your Authorization to Discharge page.

<u>Team Member/Title</u>: Please provide the name and title of the Stormwater Pollution Prevention Team member who is completing the specific form.

<u>Effective Date of Permit Authorization (EDPA)</u>: This is the date that your permit authorization became effective. This date can be found on your Authorization to Discharge page.

<u>Date of Completion</u>: Please list the date your SPP Team member completed the form.

<u>Date of Most Recent Update</u>: Each time your facility operations change or the SPP Team members change, you must update your SPPP. Please provide the date of the most recent update here.

Stormwater Pollution Prevention Team

The bottom portion of this form is where you list each member of your SPP Team and identify their individual responsibilities on the team. The first space is for your Facility Contact and the rest of the form is for the other team members. For each person listed, please provide their Name, Title, Office Phone number, Emergency Phone number and their specific responsibilities on the SPP Team related to implementing your SPPP.

Note: Blank copies of all SPPP forms can be found on the Basic Industrial Stormwater General Permit webpage at www.state.nj.us/dep/dwq/5g2.htm.

Example SPPP Form 1 – Stormwater Pollution Prevention Team

Facility nformation Facility Name: Specialty Pigments, Inc. County: Burlington

NJPDES # : NJ*G*0895746 PI ID #:34521

Team Member/Title: Benjamin Keating

Effective Date of Permit Authorization (EDPA):11/01/12

Date of Completion: 04/01/13 Date of most recent update: 08/15/13

Number of team members may vary.

Facility Contact: Benjamin Keating

Title: President

Office Phone #: 856-555-8923 Emergency Phone #: 800-555-7237

Responsibilities: Responsible for overseeing operating budget and approving expenditures, including those required for stormwater improvements. Authorized to sign stormwater permit certifications.

Member: Alexander Cosantino
Title: Quality Control Manager
Office Phone #: 856-555-8924
Emergency Phone #: 800-555-7237

Responsibilities: Employee training and overall environmental compliance.

Member: Max Nichols Title: Operations Manager Office Phone #: 856-555-8925 Emergency Phone #: 800-555-7237

Responsibilities: In charge of BMPs required inside of the facility including loading and unloading, material handling, forklift operation, handling of wastes products and ensuring compliance with wash water pretreatment permit.

Member: Henry Sydorko Title: Physical Plant Manager Office Phone #: 856-555-8926 Emergency Phone #: 800-555-7237

Responsibilities: In charge of maintenance staff and responsible for the implementation of BMPs outside the facility including drum storage, tote and bin storage, tracking issues and dumpsters. Also responsible for scheduling disposal of solvent and ink waste and ordering supplies.

SPPP Form 2 Inventory Requirements

Purpose

Each facility must develop an inventory of all industrial activities, source materials and non-stormwater discharges that exist at the facility. It is important to be as thorough as possible when developing your inventory because this information will be useful to you when developing other portions of your SPPP. You may want to refer to your "Right-to-Know" inventory to assist you in compiling this list.

The discharge of process wastewater, non-contact cooling water and/or domestic sewage is not authorized by the Basic Industrial Stormwater General Permit and may require a separate NJPDES/DSW or NJPDES/DGW permit. If your facility has a non-stormwater discharge, you should stop the discharge or apply for the appropriate permit. More information on the requirements for these types of discharges can be obtained from the Bureau of Surface Water Permitting at 609-292-4860, or from the Bureau of Nonpoint Pollution Control's Individual Ground Water Permitting Unit at 609-633-7021.

How do I fill out this form?

The first section of this form should be used to provide a detailed description of all industrial activities that are conducted at your facility. Industrial activity includes, but is not limited to, manufacturing, processing, disposing, storing, loading and unloading, transporting or conveying any raw material, intermediate product, final product, by-product, waste product or equipment. This also includes the treatment of a by-product or waste product and/or the maintenance of equipment associated with the regulated activity. Seasonal activities also need to be included within the description.

The second section of this form should be used to describe all source materials that are used, stored and/or handled at your facility that are directly or indirectly related to your industrial activities. Source materials may include, but are not limited to, raw materials, intermediate products, final products, waste materials, by-products, industrial machinery, fuels, lubricants, solvents, and detergents.

The third section of this form should be used to list all non-stormwater discharges that are generated at your facility and are discharged through separate storm sewers to surface waters, or to ground water. Examples of non-stormwater discharges may include domestic sewage, non-contact cooling water and/or process wastewater (including, but not limited to, leachate and contact cooling water, pressure-wash wastewater, hydro-blasting wastewater, boat bottom wash wastewater, vehicle and equipment wash wastewater). For all non-stormwater discharges listed, please provide any final or draft NJPDES permit, pending NJPDES permit application, pending requests for authorization under another NJPDES permit (including the NJPDES permit number where available), or any other discharge permit authorized or issued by a sewerage authority and identify the location of each discharge.

The last section of the form asks for a list of all other permit approvals issued by the NJDEP for the facility for the industrial activities listed in the first section. Examples of other permit approvals include NJDEP permits issued by Air, Solid Waste, Land Use, etc. Please provide the NJDEP permit number where available.

Example SPPP Form 2 – Inventory Requirements

Facility Information Facility Name: Specialty Pigments, Inc. County: Burlington

NJPDES #: NJG0895746 PI ID #: 34521
Team Member/Title: Max Nichols, Operations Manager
Effective Date of Permit Authorization (EDPA): 11/01/12

Date of Completion: 04/01/13 Date of most recent update: 08/15/13

Inventory of all industrial activities, source materials and non-stormwater discharges. Attach additional pages as necessary.

Please provide a detailed description of all industrial activities conducted at the facility: Specialty Pigments, Inc. formulates solvent and water based gravure and flexographic inks for the printing industry. Raw pigments are delivered by truck, bagged and in powder form. Solvents are also delivered by truck in 55-gallon drums. Pigments are ground and custom inks are mixed indoors and packaged in 5-gallon, 1 gallon and quart containers. Finished products are shipped by truck. Solid waste from ink production and office wastes are disposed into covered dumpsters stored outdoors. Totes and bins used in the grinding and mixing of pigments and inks are washed indoors with solvents and water. Used solvents are recovered. Waste inks, sludge, ink and solvent covered rags and solvents are contained in 55-gallon drums, stored in an outdoor trailer and hauled for proper disposal. Wash water is discharged to Delran Sewerage Authority for treatment under pretreatment permit #DSA-34286-01.

Describe all source materials used, stored, or otherwise located at the facility:

Material	Use	Storage	Handling
Raw pigments	Mixing inks	Indoors in bags on pallets	Delivered by truck, unloaded by forklift directly into building
Empty pigment bags	Waste product	Covered dumpster outside	Empty pigment bags are double bagged in plastic to prevent exposure of pigment fines during disposal
Sludge from distilling solvent waste, waste solvents, solvent and ink rags, and waste ink	Waste product	55-gallon drums stored in outdoor trailer	Labeled drums are stored indoors until filled and then transported by forklift to outdoor trailer until disposal

Solvents (thinners, washes, strippers)	Mixing inks and clean up		55-gallon drums indoors		Delivered by truck, unloaded by forklift directly into building
Finished ink product	Finished product		Packaged in 5-gallon, 1- gallon and quart containers and stored indoors		Loaded by forklift and into delivery truck
Covered dumpster	Waste storage		Outdoors		Cover is closed after use, solid waste only (no liquid), hauled by Dispose-All-Rite as needed
Surplus machinery, bins and totes	Spare parts/motors		Outdoors		
Used pallets	Shipping		Outdoors		
List all non-stormwater discha	arges gener	rated at the facility ar	nd any appropriate pe	ermit autho	orizing such discharges.
• • • • • • • • • • • • • • • • • • • •			r other permit # Discharge Location uplicable)		Discharge Location
l F		·			rains throughout ion area
List all other permit approvals	s issued by	the NJDEP for the f	acility.		
Type of Permit				NJDEP	Permit #
Air - Preconstruction Permit		PCP123456			

SPPP Form 3 Developing a Site Map

Purpose

Your facility site map provides you with an overall idea of how stormwater flows on your property and must include, at minimum, all of the applicable features listed below. Locating these features on your map will help you assess where potential stormwater pollutants are located on your site, where they mix with stormwater and where stormwater leaves your site. This information is essential in identifying the best opportunities for stormwater pollution prevention or control. This form is designed to help you develop an appropriate and useful site map.

Use the space provided on this form to develop a map of your site. If the space provided is not adequate,

How do I fill out this form?

you may attach a separate map. Existing engineered drawings should be used if available, but hand drawn maps are acceptable if all features are clearly indicated and labeled. The map should be drawn to scale and must include the following (if applicable):
the property boundary;
the location(s) of existing buildings and other permanent structures;
all paved areas, including roads and access areas;
stormwater control features including but not limited to drainage patterns, stormwater conveyances (e.g. stormwater catch basins, downspouts [where there is industrial activity on the roof], overland flow, swales, ditches and channels, and storm sewer pipes), designed stormwater basins (e.g. infiltration, detention, retention) and the location of all stormwater discharge structures;
the location(s), if any, where sanitary sewage, non-contact cooling water, , or process wastewater (including but not limited to leachate, contact cooling water, pressure-wash wastewater, hydro-blasting wastewater, boat bottom wash wastewater, vehicle and equipment wash wastewater) generated by the facility enters a storm water conveyance that discharges to waters of the State; and
the delineation of the areas regulated by this permit, including all source material storage areas and industrial activities conducted onsite.

Example SPPP Form 3 – Developing a Site Map

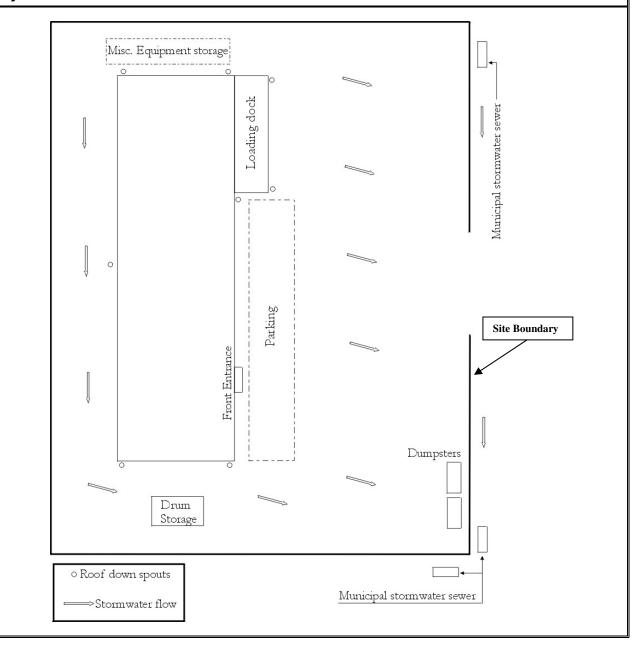
Facility formation Facility Name: Specialty Pigments, Inc. County: Burlington

NJPDES #: NJG0895746 PI ID #:34521
Team Member/Title: Max Nichols, Operations Manager

Effective Date of Permit Authorization (EDPA): 11/01/12

Date of Completion: 04/01/13 Date of most recent update: 08/15/13

Attach a map (preferably drawn to scale) of your site. Existing engineered drawings should be used if available. Hand drawn maps are acceptable if all features are clearly indicated and labeled.



SPPP Form 4 Best Management Practices

Purpose

During the inventory and mapping sections above, you took a broad look at your facility operations, and identified all areas where source materials are stored and where industrial activities occur. The next step is to take corrective action and select the appropriate Best Management Practices (BMPs) that will eliminate these exposures and pollutant sources. BMPs include, but are not limited to, structural and non structural controls, and operation and maintenance procedures which can be applied before, during, and after pollution producing activities to eliminate the introduction of pollutants into receiving waters. The primary objective of BMPs is to prevent the opportunity for stormwater to come into contact (e.g., run-on, run-through or run-off) with source materials and industrial activities. Once implemented, the BMPs will ensure that there will be no exposure of source material and/or industrial activities to stormwater that is discharged to surface and/or ground waters.

How do I fill out this form?

In the "Source Material/Industrial Activity" column, indicate the sources of materials and industrial activities you have at your facility. You should refer to the activities and sources identified in SPPP Form 2 when completing this list. An example of a source material may be waste oil storage drums or dumpster containing waste from your industrial activity.

In the "Corrective Action/BMP" column, indicate how you are going to eliminate these sources. For example, you could eliminate the exposure of the waste oil drums by storing them inside or purchasing a storage shed. For the dumpster, it may be as easy as calling the hauler and requesting a leak proof, covered dumpster. Other examples of corrective actions/BMPs include: ceasing the activity, relocating equipment underneath a cover, conducting activities indoors, implementing good housekeeping practices, removing or covering/tarping exposed materials, recycling waste, berming storage areas, etc.

In the "Scheduled Completion Date(s)" column, list the dates the BMPs will be or were fully implemented. For example, you installed a waste oil storage shed at your facility on 11/15/12 and eliminated outdoor drum storage.

Example SPPP Form 4 – Best Management Practices

Facility nformation Facility Name: Specialty Pigments, Inc. County: Burlington

NJPDES # : NJG0895746 PI ID #:34521

Team Member/Title: Alexander Cosantino, Quality Control Manager

Effective Date of Permit Authorization (EDPA):11/01/12

Date of Completion: 04/01/13 Date of most recent update: 08/15/13

Describe the BMPs that will be implemented at your facility to eliminate exposure of source material / industrial activity to stormwater and to ensure that the facility does not discharge any unpermitted wastewaters. Include a schedule for full implementation of the BMPs identified. Attach additional pages as necessary.

Source Material / Industrial Activity	Corrective Action / BMP	Scheduled Completion Date(s)
Used pigment bags	Used pigment bags will be encapsulated in double plastic bags to prevent pigment from spilling out when thrown away or contaminating dumpster	existing
Pigment / solvent tracking	Movement of forklifts in and out of the building has the potential to track pigment and solvents from the indoor production areas to outside where it can impact stormwater quality. A good housekeeping program including sweeping and an inspection of forklift wheels will be implemented.	12/01/12
Waste drum storage polyethylene spill pallets to provide containment if solvent drum were to spill or leak.		2/15/13
Surplus machinery	Surplus equipment and machinery will be inventoried. Useable motors and parts will be disassembled and moved indoors. Remaining machinery will be removed as scrap. No surplus equipment will be stored outdoors.	10/01/13
Surplus bins and totes / Used pallets	A modified storage and shipping container will be purchased and used for storage of surplus bins and totes as well as used pallets. Inventory of pallets will be kept at minimum and those with visible pigment on them will be thrown out.	1/01/14

SPPP Form 5 Maintenance Plan

<u>Purpose</u>

On SPPP Form 4 – Best Management Practices, your facility identified the BMPs that you will use onsite. Regular and thorough maintenance of your structural BMPs is necessary to ensure that they are functioning properly and effectively. (Structural BMPs are physically constructed features that are used specifically to change the way that stormwater flows or that are used to remove pollutants from stormwater.) Failure to perform such maintenance can lead to diminished performance, deterioration and, ultimately, the failure of your BMPs. Non-structural BMPs, such as Standard Operating Procedures (SOPs) will also need to be updated and maintained periodically to ensure that they are still accurate and up-to-date.

How do I fill out this form?

The first section of this form should be used to describe how your facility will ensure regular, preventative maintenance and appropriate repairs/replacement of all structural BMPs. Examples may include mowing and/or trimming vegetated areas, checking for excessive clogging and/or debris, removing what has accumulated, and repairing or replacing broken structures. This section should also explain and how your facility will maintain all non-structural BMPs. Examples may include reviewing and updating your SOPs, ensuring that your annual employee training is effectively targeting the correct audience, and periodically evaluating your good housekeeping practices to ensure that they continue to address all of the areas of your facility where source materials are present and industrial activities occur.

The second section of this form should be used to identify any problematic areas of your facility that may require special attention.

Example SPPP Form 5 – Maintenance Plan

Facility nformation Facility Name: Specialty Pigments, Inc. County: Burlington

NJPDES # : NJG0895746 PI ID #:34521

Team Member/Title: Henry Sydorko, Physical Plant Manager

Effective Date of Permit Authorization (EDPA):11/01/12

Date of Completion: 04/01/13 Date of most recent update: 08/15/13

Narrative description of structural BMP maintenance, repairs and/or replacement, the updating of non-structural BMPs, and any problematic areas needing special attention. Attach additional pages as necessary.

Describe how your facility will ensure regular, preventative maintenance and appropriate repairs, including replacement, of all structural BMPs and how your facility will update all non-structural BMPs. Regular scheduled inspections, as well as spot checks will be done to ensure that all BMPs are being implemented. Polyethylene spill pallets will be checked daily and emptied weekly. Any tracked pigment and/or solvent from the indoor production areas to outside storage area will be swept-up or contained and disposed of properly. Inventory of pallets will be kept at minimum and those with visible pigment on them will be thrown out. Pigment bags and storage containers will be kept out of the line of traffic where they could possibly be damaged, resulting in a spill of materials.

In addition to regular inspection and preventative maintenance, Specialty Pigments has allotted funds as part of our operating budget for the repair and/or replacement of structural BMPs including the drum storage trailer, spill pallets, loading dock bladder seals, and the surplus bin and tote/used pallet storage container.

Identify any problematic areas that may require special attention. There is a large amount of material that is shipped in and out of this facility every day, and there are times when inside storage area is unavailable. We are considering purchasing a second container to hold the excess materials. In the past, there has been a problem with materials being tracked outside of the facility. Hopefully the new BMPs will alleviate this situation.

SPPP Form 6 Inspection Schedule

<u>Purpose</u>

Qualified and trained personnel must inspect the facility on a monthly basis to ensure facility operations and equipment areas are maintained in good condition. Facility personnel also need to inspect all areas where Best Management Practices (BMPs) have been implemented, and ensure those BMPs are functioning properly and are effective. If the facility inspector identifies problems with any of these BMPs during their regular inspections, then they need to correct the problem and make a record of what was done. Inspection records should include: when inspections were done, what problems were found, and what steps were taken to correct any problems and prevent them from recurring. If certain BMPs fail to meet the permit's requirement to eliminate exposure of source materials and/or industrial activities to stormwater, the inspector must indicate the cause(s) for such failure and then resolve these problems. However, if the failure of the BMP is intrinsic to the BMP, then the area of concern must be re-evaluated, and new or additional BMPs must be installed.

How do I fill out this form?

In the "Date" column of this form, indicate the date of the required weekly inspection.

In the "BMPs Properly Implemented and Maintained?" column, refer to SPPP Form 4, and list the BMPs implemented at your facility. Conduct a full inspection of the outside of the facility to ensure that all BMPs listed in SPPP Form 4 are properly implemented and maintained. If all BMPs are properly implemented and maintained, write YES. If you answer YES, there is no need to complete the additional columns. If problems are found, answer NO and fill in the additional required information. For example, if your facility is using a tarp to cover machinery and equipment, but during the inspection, you notice that the tarp is ripped, write NO and proceed to fill out the additional column.

In the "Problem(s) Found" column, indicate any problems identified during the inspection. For example, you might use a tarp to cover machinery and equipment, but you noted during the inspection that it was ripped and exposing the source materials (Problem Found).

In the "Steps taken to Correct the Problem and Date Completed" column, indicate what was done to correct the problem(s). Also, indicate the date of the corrected/repaired BMP. For example, you may have inspected the tarp used to cover the machinery and equipment and found it had a rip in it (Problem Found). Therefore, you replaced the tarp with a new one on 5/7/13 (Steps Taken to Correct Problem and Date).

Example SPPP Form 6 – Inspection Schedule

Facility nformation Facility Name: Specialty Pigments, Inc. County: Burlington

NJPDES # : NJ*G*0895746 PI ID #:34521

Team Member/Title: Henry Sydorko, Physical Plant Manager

Effective Date of Permit Authorization (EDPA):11/01/12

Date of Completion: 04/01/13 Date of most recent update: 05/08/13

Conduct MONTHLY inspections of your entire facility and review your SPPP to ensure that all BMPs are properly implemented and/or maintained. Identify any problems and the corrective action(s) taken. Attach additional pages as necessary.

Date	BMPs Properly Implemented and Maintained?	Problem(s) Found	Steps Taken to Correct the Problem and Date Completed
1/2/13	No	Tracking of pigment found outside near overhead doors	Additional training of forklift operators scheduled for 1/15/06
2/3/13	No	Pigment on ground under dumpster. Inspection found not all used pigment bags were bagged in plastic.	Replacement bags were not ordered. Henry Sydorko will ensure that adequate supplies of bags are on hand. If bags are not available, used pigment bags will be stored indoors until new bags arrive. 5/1/06
3/10/13	Yes		
4/2/13	Yes		
5/6/13	No	55-gallon drums staged outside. No room in trailer.	Trailer can hold 35 drums. Waste hauler will be scheduled when 25 drums have been accumulated. If there is no room in trailer, drums will be staged indoors. 7/30/06
6/2/13	Used pallets	Used pallets stored in shipping container had visible stains	Staff is reminded that pallets in bad condition, with visible staining are to be thrown out. Henry Sydorko's staff went through all stored used pallets and threw out those in poor condition. 3/15/07
7/8/13	Solvent Storage Trailer	55-gallon drums staged outside. No room in trailer.	Trailer can hold 35 drums. Waste hauler will be scheduled when 25 drums have been accumulated. If there is no room in trailer, drums will be staged indoors. 7/30/06

SPPP Form 7

Coordination of SPPP with Other Existing Environmental Management Plans

Purpose

Your facility may have already incorporated stormwater management practices into daily operations as part of an environmental management plan required by other regulations. It is the responsibility of your Stormwater Pollution Prevention Team to evaluate any other plans to determine which provisions can be incorporated into your SPPP. In some cases, it may be possible to build on the relevant elements of these plans. For example, if your facility already has an effective spill prevention and response plan in place, elements of that plan may be incorporated into your SPPP by cross reference.

How do I fill out this form?

The first section of this form provides space for you to include, or cite, the location(s) of any notifications prepared under section 313 in Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, 42 U.S.C. 9601 et seq. If your facility is subject to SARA Title III (also known as the Emergency Planning and Right-to-Know Act) and has prepared a Toxic Chemical Release Inventory Form (Form R), you should include a copy of the form(s) or provide the location(s) of the form(s) as part of your SPPP.

The second section of this form provides space for you to include, or cite, the location(s) of any Spill Prevention Control and Countermeasure Plan (SPCC plan) prepared under 40 CFR 112 and section 311 of the Clean Water Act, 33 U.S.C. 1321. The regulation applies to non-transportation related facilities with a total aboveground (e.g., not completely buried) oil storage capacity of greater than 1,320 gallons, or total completely buried oil storage capacity greater than 42,000 gallons. The regulations apply specifically to a facility's storage capacity, regardless of whether the tank(s) is completely filled.

The third section of this form provides space for you to include, or cite, the location(s) of any discharge prevention, containment and countermeasure plan (DPCC plan) and discharge cleanup and removal plan (DCR plan) prepared under N.J.A.C. 7:1E. DPCC/DCR plans are required for facilities that store, transfer or process 20,000 gallons or more of New Jersey-regulated hazardous substances, excluding petroleum products, or 200,000 gallons of regulated hazardous substances including petroleum products. These plans are regulated by the Department's Bureau of Discharge Prevention and describe the storage, facility complex, maintenance procedures, training procedures, SOPs and contact information in the event of an accident.

The last section of this form provides space for you to include, or cite, the location(s) of any other environmental management plans your facility may already have in place. Examples may include, but are not limited to, the Preparedness, Prevention and Contingency Plan and the Occupational Health and Safety Administration (OSHA) Emergency Action Plan.

Example SPPP Form 7 – Coordination of SPPP with Other Existing Environmental Management Plans

Facility nformation ${\bf Facility\ Name:\ Specialty\ Pigments,\ Inc.\ County:\ Burlington}$

NJPDES # : NJ*G*0895746 PI ID #:34521

Team Member/Title: Benjamin Keating

Effective Date of Permit Authorization (EDPA): 11/01/12

Date of Completion: 04/01/13 Date of most recent update: 08/15/13

Evaluate any existing environmental management plans (if applicable) for consistency, and determine if any provisions can be incorporated into the SPPP. Attach additional pages as necessary.

Include, or cite, the location(s) of any Toxic Chemical Release Inventory Form(s) prepared under section 313 in Title III of the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. 9601 et seq. Our facility is subject to SARA Title III and has prepared the required Form R for each of the "extremely hazardous substances" our facility handles. These forms are kept in our office, with our SPPP.

Include, or cite, the location(s) of any Spill Prevention Control and Countermeasure Plan (SPCC Plan) prepared under 40 CFR 112 and section 311 of the Clean Water Act, 33 U.S.C. 1321. Our facility is not subject to SPCC regulations because we do not store above 1,320 gallons of fuel oil.

Include, or cite, the location(s) of any discharge prevention, containment and countermeasure plan (DPCC plan) and discharge cleanup and removal plan (DCR plan) prepared under N.J.A.C. 7:1E. Our facility is not required to prepare DPCC/DCR plans as we do not transfer or process 20,000 gallons or more of New Jersey-regulated hazardous substances.

Include, or cite, the location (s) of any other environmental management plans (e.g., the Preparedness, Prevention and Contingency Plan and the Occupational Health and Safety Administration (OSHA) Emergency Action Plan). Our facility, having more than 11 full-time employees on a day to day basis, is required to have a written Emergency Action Plan. This plan is kept in a binder in the office along with MSDS sheets.

SPPP Form 8 Employee Training

<u>Purpose</u>

Employee Training is essential to effectively implementing your SPPP. The purpose of a training program is to teach personnel at all levels of responsibility the components and goals of the SPPP. When properly trained, personnel are more capable of preventing spills, responding safely and effectively to an accident when one occurs, and recognizing situations that could lead to stormwater contamination.

Employee training sessions can be conducted in any manner that you choose. In some cases it may be necessary to train your employees out in the field (e.g., how to properly clean up after a spill), but in other cases it may be more appropriate to have a presentation type of training (e.g., how to identify source materials). Each training event should accurately reflect any changes in your facility's operations and they should be held annually to ensure that all employees receive the same training.

How do I fill out this form?

The first column of this form should include the date of each employee training session your facility conducts.

The second column of this form should include the training topic of your employee training session. Examples of possible training topics could include spill response and clean-up, good housekeeping practices, pollution prevention, how to identify potential source materials and proper loading/unloading procedures to minimize exposure to stormwater.

The third column of this form should include a list of employees that received the training. Employees should be trained on each aspect of your SPPP that is related to their daily responsibilities at your facility. The employees that receive these training sessions may vary depending on the topic being discussed.

Example SPPP Form 8 – Employee Training

Facility

Facility Name: Specialty Pigments, Inc. County: Burlington

NJPDES # : NJG0895746 PI ID #:34521

Team Member/Title: Alexander Cosantino, Quality Control Manager

Effective Date of Permit Authorization (EDPA): 11/01/12

Date of Completion: 04/01/13 Date of most recent update: 08/15/13

Conduct an annual Stormwater Pollution Prevention Plan training program for employees on topics identified in the SPPP. Record all training sessions below.

Attach additional pages as necessary.

Date	Training Topic	Employees Receiving Training
01/15/13	Stormwater Pollution Prevention Plan Overview	Managers, Forklift Operators, Production Staff, Maintenance Crew
01/15/13	Pigment/Solvent tracking - Good Housekeeping Procedures	Forklift operators, Production Staff, Maintenance Crew
01/15/13	Handling, Transport and Disposal of Waste Solvent and Ink Drums	Forklift operators, Production Staff, Maintenance Crew
01/15/13	Surplus Bins and Totes/Used Pallet Storage	Production Staff, Maintenance Crew
01/23/14	Stormwater Pollution Prevention Plan Overview	Managers, Forklift Operators, Production Staff, Maintenance Crew
01/23/14	Pigment/Solvent tracking - Good Housekeeping Procedures	Forklift operators, Production Staff, Maintenance Crew
01/23/14	Handling, Transport and Disposal of Waste Solvent and Ink Drums	Forklift operators, Production Staff, Maintenance Crew
01/23/14	Surplus Bins and Totes/Used Pallet Storage	Production Staff, Maintenance Crew

SPPP Form 9 Annual Inspection Schedule

Purpose

Annual inspections are comprehensive compliance evaluations performed by individuals specifically designated on your Stormwater Pollution Prevention Team as having responsibility for conducting such inspections. These employees should be familiar with your facility operations as well as your SPPP goals and requirements, and should be able to make necessary management decisions or have direct access to management.

Your annual inspection provides a basis for evaluating the overall effectiveness of your SPPP. In particular, this inspection will allow you to verify that the description of source materials and industrial activity indicated in your SPPP is accurate; that the BMPs/corrective actions described in your SPPP are accurately identified, in place and working; and that the SPPP is accurate or has been updated to reflect current conditions. The annual inspection will also identify where new BMPs are needed so that you may implement them and incorporate them into the SPPP.

How do I fill out this form?

The first column of this form should include the date of the annual self-inspection at your facility.

The second column of this form should be checked if, during your annual self-inspection, it is determined that your facility is in complete compliance with its SPPP and all applicable permit conditions.

The third column of this form should be checked if, during your annual self-inspection, it is determined that your facility is not in compliance with the SPPP and all applicable permit conditions, and that additional measures are needed to meet the permit conditions.

Example SPPP Form 9 – Annual Inspection Schedule Facility Name: Specialty Pigments, Inc. County: Burlington NJPDES #: NJG0895746 PI ID #:34521 Team Member/Title: Henry Sydorko, Physical Plant Manager Effective Date of Permit Authorization (EDPA):11/01/12 Date of Completion: 04/01/13 Date of most recent update: 08/30/14 Conduct annual inspections to ensure that the SPPP is current and up-to-date, properly implemented and effectively eliminating exposure of source materials and industrial activity to stormwater. **Inspection Date** In Compliance **Out of Compliance** 04/02/13

"Source Material" Guidance

This guidance is provided to help facilities distinguish between source materials and non-source materials.

It would be impossible for the Department to compile a complete list of source materials that are applicable to each specific industry within the federal definition of "stormwater discharges associated with industrial activity". Instead, the Department has developed this self-screening procedure as a means for identifying source materials that must be addressed under this program based on their physical and chemical properties. This can be accomplished via a visual inspection to



ascertain whether materials themselves are being transported by stormwater or if materials are producing pollutants that can be transported by stormwater.

The following basic criteria shall be applied:

- 1. Is the material an industrial liquid that is exposed to and easily transported by stormwater? Examples include coolants, lubricants, fuels, antifreeze, additives, other chemicals and trash.
- 2. Is the material eroding or easily susceptible to erosion by water or wind? Examples include piles of raw materials, powders, and pellets.
- 3. Is some or all of the material dissolving in stormwater or easily susceptible to dissolving or transport by stormwater?
 - Examples include lubricants, protective coatings on finished products, solvents, degreasers, and salt piles.
- 4. Will the material degrade, break down, or disintergrate in such a manner as to add pollutants if the stormwater were to come into contact with it?
 - Examples include degradation or corrosion that results in flaking or crumbling of plastic or rusty metal.
- 5. Does the material add a distinct odor or color to the stormwater discharge? Examples include dyes, pigments, mulch, food wastes.

If you answered **YES** to any of these, the material in question is a **SOURCE MATERIAL** and your facility must implement BMPs to ensure that they are not exposed to stormwater that dischrages to the surface and or groundwaters of the State. If the substance in question does not have one of the above mentioned physical states, then that material generally may not be considered a source material. However, please keep in mind that the physical properties as listed above, although representative, do not comprise a complete list of applicable situations in which substances would be classified as source material.

The Department has developed specific guidance regarding the following:

Materials Intended for Outside Use

Examples of materials that generally will not be considered source materials (unless any of the above criteria are met) are: finished pre-cast concrete products; stone and gravel which is pre-washed prior to delivery; clean, wooden pallets; and clean, solid, durable finished products intended for outdoor use, such as structural steel beams and outdoor furniture. Such materials should not have any coatings on their exterior such as creosote or a lubricant film.

Drums - New and Used

The Department has determined that drums that hold or have held material, are source material, regardless of the type and condition of the drums, the varying products they contain, and the varying handling techniques applied. This does include factory sealed unopened drums which contain materials. However, drums that remain empty after their previous contents have been removed, cleaned thoroughly in a manner not contributing pollutants to the land or water, and where no residue of materials remain on the drums, shall not be considered a source material. Additionally, new unused drums that are devoid of contents will not be considered source materials.

Dumpsters and Roll-Off Containers

Dumpsters and roll-off containers which receive the following materials as waste: industrial raw materials, intermediate products, by-products, waste products or residues from material handling equipment, shall be considered source materials unless the dumpsters are covered and watertight, and maintained so as to prevent any leaking materials from mixing with stormwater running off the site. In addition, there should be no evidence of debris or other contaminants on the exterior of the dumpster including the cover. Even if a dumpster or roll-off container meets these conditions, they should still be identified in the SPPP. If a dumpster is receiving non-industrial waste only (e.g., office waste or cafeteria waste), the dumpster does not need to be addressed in the SPPP, as the dumpster will not be considered a source material by the Department. Similarly, this guidance shall apply to smaller waste containers such as garbage cans.

Vehicles and Industrial Machinery

Vehicles and industrial machinery shall be considered source materials where engines, grease, oil, antifreeze, or other vehicle or machinery fluids are exposed to storm water. For vehicles whose engines are under hoods, only exposure of engines and vehicle fluids shall be considered source materials. An example is increased exposure due to vehicle maintenance or dismantling activities. However, exposed source materials transported by or left as residues on vehicles or machinery after transporting source materials, must be addressed in the facility's SPPP. All facilities that fuel vehicles and/or machinery must prevent the discharge to surface water of stormwater that has come into contact with fuels at the facility. This may be accomplished with a variety of best management practices (BMPs) solely or in combination, such as roofing the fueling area and preventing storm water run-on and run-through that area, or fuel/spill containment BMPs that do not allow any discharge of fuels or storm water exposed to fuels to surface waters. Furthermore, residues from wash water and cleansing agents that are used to clean vehicles or machinery shall be considered source materials if exposed to stormwater.

Materials not Associated with Industrial Activity

Materials that are stored in minimal quantities outdoors, which do not pertain to the facility's primary industrial function(s), and which are stored on a temporary basis for purposes such as emergency repairs, alterations, recycling, or maintenance activities such as landscaping, minor construction, etc., will not be considered a source material. The material must not be stored for longer than fourteen (14) days in order to be considered temporary, nor exceed ten (10) cubic yards of material in order to be considered a minimal amount. However, in all scenarios source materials should be covered whenever feasible.

Source Material Exceptions for Discharges to Ground Water

In situations where a facility discharges stormwater to ground water only either via overland flow or through a unit designed to discharge to ground water (with no overflow weir, outfall or spillway), certain materials are not considered a source material because they do not have the potential to impact ground water quality. Specifically in these situations, solid materials such as sand, aggregate piles, or soil piles are NOT considered source materials

Important Names, Addresses and Contacts NIDEP CONTACT INFORMATION

Bureau of Nonpoint Pollution Control

Division of Water Quality Mail Code 401-02B PO Box 420 Trenton, New Jersey 08625-0420 (609) 633-7021

Issues NJPDES permits for industrial stormwater discharges and discharges to ground water.

Permits Administrative Section

Division of Water Quality Mail Code 401-02B PO Box 420 Trenton, New Jersey 08625-0420 (609) 984-4428

Receives and conducts the administrative review of Requests for Authorization (RFAs) under the Basic Industrial Stormwater General Permit. RFA, permit fee and billing questions should be submitted to this bureau.

Surface Water Permitting

Division of Water Quality Mail Code 401-02B PO Box 420 Trenton, New Jersey 08625-0420 (609) 292-4860

Issues permits for non-stormwater discharges to surface water including process wastewater, non-contact cooling water, or domestic sewage discharges.

Regional NJDEP Water Compliance and Enforcement Offices

Conducts compliance evaluation inspections of NJPDES permitted facilities.

Northern	Central	Southern
7 Ridgedale Avenue	Mail Code 44-03	One Port Center
Cedar Knolls, NJ 07927	22 S. Clinton Avenue, 4 Station Plaza	2 Riverside Drive, Suite 201
(973) 656-4099	PO Box 420	Camden, NJ 08103
Fax: (973) 656-4400	Trenton, NJ 08625-0420	(856) 614-3655
(serves Bergen, Essex, Hudson,	(609) 292-3010	Fax: (856) 614-3608
Hunterdon, Morris, Passaic,	Fax: (609) 292-6493	(serves Atlantic, Burlington,
Somerset, Sussex & Warren		Camden, Cape May, Cumberland,
Counties)	(serves Mercer, Middlesex,	Gloucester & Salem Counties)
	Monmouth, Ocean & Union	
	Counties)	