

**ATTACHMENT B:
CONTENTS OF THE
STORMWATER
POLLUTION PREVENTION PLAN**

For

**Mining and Quarry General Permit
June 2017**

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I. Stormwater Pollution Prevention Plan

The following outline provides the key elements of an acceptable Stormwater Pollution Prevention Plan (SPPP). The purpose of the SPPP is to meet the following objectives:

- A. to identify potential sources of pollution and source materials onsite which may reasonably be expected to affect the quality of stormwater discharges associated with industrial activity;
- B. to describe and ensure that practices are implemented to eliminate and/or reduce pollutants from source materials in stormwater discharges associated with industrial activity; and
- C. to ensure compliance with the terms and conditions of this permit.
<http://www.saltinstitute.org/wp-content/uploads/2013/09/Salt-Storage-Handbook-2015.pdf>
- D. Drainage Control
 - 1. Establish Drainage Control to ensure all stormwater from industrial areas is directed to regulated outfalls
 - 2. Create a Drainage Control Map
 - 3. Create a Drainage Control Written Narrative

II. Stormwater Pollution Prevention Team

The permittee shall form and identify a Stormwater Pollution Prevention Team in the SPPP. The SPPP shall name a specific individual or individuals within the facility organization who are members of the team. The team is responsible for developing the SPPP in accordance with good engineering practices, and in the plan's implementation, and maintenance. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's SPPP which are provided below.

III. Description of Existing Environmental Management Plans

The SPPP team shall evaluate the facility's existing environmental management plans and programs for consistency with this permit and determine which provisions, if any, from these other plans can be incorporated by reference into the SPPP.

Examples of plans which may be referred to when applicable to the site include: Discharge Prevention Containment and Countermeasure (DPCC), Discharge Cleanup and Removal (DCR), Preparedness Prevention and Contingency Plan (PPCP, 40 CFR Parts 264 and 265), the Spill Prevention Control and Countermeasures (SPCC) requirements (40 CFR Part 112), the National Pollutant Discharge Elimination System Toxic Organic Management Plan (NPDESTOMP, 40 CFR Parts 413, 433, and 469), and the Occupational Safety and Health Administration (OSHA)

Emergency Action Plan (29 CFR Part 1910). A copy of any plans referred to in the SPPP should be kept on-site with the SPPP.

IV. Site Assessment

The Site Assessment shall describe the physical facility and the potential pollutant sources (materials, activities and areas) which may be reasonably expected to affect the quality of stormwater discharges. The key elements of the site assessment shall include, at a minimum, the following requirements:

A. Inventory Requirements

Each facility must develop and update annually, as appropriate, an inventory which includes, at a minimum, the following:

1. list of the general categories of source materials that have been used, loaded/unloaded, stored, treated, spilled, leaked and/or disposed onsite in a manner to allow exposure to stormwater; and
2. list of any domestic wastewater, non-contact cooling water, or process waste water (see definitions in Part IV of permit), that is generated at the facility and discharged through separate storm sewers (see definition in Part IV of permit) to surface waters. List any current NJPDES (New Jersey Pollutant Discharge Elimination System) permits or permit application that the facility may have for such discharges.

B. DCP-Mapping Requirements

A site map drawn to an 1" = 400' scale that clearly shows the following:

1. buildings and other permanent structures;
2. paved areas and roadways;
3. surface water bodies (e.g., rivers, lakes, streams, bays, estuaries) that are located on or about the property which receive or may receive stormwater from the site;
4. all stormwater discharge locations;
5. location of each point or sewer segment, where domestic sewage, process waste water, or non-contact cooling water generated by the facility enters storm sewers that discharge to surface waters;
6. outline of each drainage area within the facility boundaries and a depiction of flow direction (e.g., arrow head) of stormwater in each drainage area;

7. locations where source materials are likely to be exposed to stormwater, and the following activities and/or areas, at a minimum; storage areas, palleted materials, outdoor handling, treatment or disposal areas, loading and/or unloading areas, manufacturing and/or processing areas, waste storage areas, vehicle/equipment maintenance areas, vehicle/equipment fueling areas, hazardous waste storage or disposal areas, areas of spills and/or leaks of source materials, and access routes;
8. location of existing stormwater structural control measures (e.g., containment, berms, detention/retention basins, grassed swales, oil/water separators); and
9. areas of existing and potential soil erosion.

C. Narrative Description of Existing Conditions

The SPPP shall include a narrative description concerning the existing management of all source materials at the facility which are handled, treated, stored, disposed, or which otherwise exist in a manner allowing contact with stormwater. The narrative description shall address the following where appropriate:

1. any discharges of domestic sewage, non-contact cooling water, or process water that are listed in accordance with A.2 above (unless such discharges have been authorized by other NJPDES permits or identified in applications or requests for authorization submitted for other NJPDES permits);
2. description of type of industrial activities and/or areas (e.g., fueling, material handling, manufacturing or processing areas) at the site;
3. the actual or potential pollutant categories associated with each industrial area and/or activity where source materials are likely to be exposed to stormwater including, but not limited to: fueling stations, loading/unloading areas, maintenance shops, areas where spills and/or leaks of source materials frequently occur, equipment or vehicle cleaning areas, outdoor storage areas, outdoor manufacturing or processing areas, onsite waste disposal areas, above ground liquid storage tanks, outside storage of raw materials, by-products, or finished products, (e.g., fueling area - diesel fuels, gasoline, petroleum hydrocarbons); and
4. a description of existing management practices employed to : a) eliminate contact of source materials with stormwater; b) minimize or reduce pollutants from source materials through structural or non-structural measures; c) divert stormwater to specific areas on or off-site, including diversion to containment areas, holding tanks, treatment facilities, or sanitary or combined sewers; d) treat stormwater discharging from the site; and e) prevent or permit any discharges of domestic wastewater, non-contact cooling water, or process wastewater to surface water.

V. Best Management Practices (BMP) Selection and Plan Design

The permittee shall evaluate the information from the site assessment phase of this plan to identify potential and existing sources of stormwater contaminated by source material. **All discharges to surface water of domestic sewage, non-contact cooling water, and process waste water must be eliminated or permitted.** BMPs are measures used to prevent or mitigate pollution from any type of activity. The permittee shall design, implement and maintain BMPs to meet EPA benchmark concentrations and numeric limits specified in this permit. Based upon the site assessment performed, the permittee shall develop BMP's that will effectively eliminate or reduce pollutant loadings in stormwater discharges from the facility in accordance with the following sections. The evaluation and selection of the BMP's addressing each area, and/or activity where source materials are exposed to stormwater discharging to surface water, shall be documented in the SPPP and shall include at a minimum the following BMPs:

A. Non-Stormwater Discharges into Storm Sewers

The facility shall ensure that it does not generate and discharge, through storm sewers to surface waters, any domestic sewage, non-contact cooling water, or process wastewaters, unless that discharge is authorized by another NJPDES permit or identified in an application or request for authorization submitted for another NJPDES permit.

B. Removal, Cover or Control of Industrial Activities

Except as specified and required in Part IV of the permit for certain, specific exposures of source materials, all other source materials shall be moved indoors, covered, used, handled, and/or stored in a manner so as to prevent contact with stormwater that is discharged to surface water. Each BMP that prevents such contact shall be identified and discussed in the SPPP.

C. Diverting Stormwater

Approved diversion of contaminated stormwater to either a domestic or industrial wastewater treatment plant may also be considered when choosing an appropriate BMP where feasible. (Diversion to groundwater may require a separate NJPDES permit. Consult the Bureau of Nonpoint Pollution Control.)

D. Spill Prevention and Response

Areas where actual or potential spills of source materials can occur and are exposed to stormwater discharges shall be identified clearly in the SPPP (the accompanying drainage points shall also be identified). Specific material handling procedures, storage requirements and use of equipment such as diversion valves shall be developed and practiced to prevent and/or eliminate spills and/or leaks of source materials from being exposed to stormwater. A valid SPCC or DPCC shall satisfy this requirement provided the plan includes spill prevention/cleanup for all site chemicals, wastewater and raw materials.

The permittee shall develop and implement a Spill Prevention Plan. At a minimum, the Plan shall include:

1. Spill Response Coordinator;
2. Procedures for preventing and/or cleaning up spills;
3. List of available spill cleanup materials, including brooms, shovels, absorbents, heavy equipment, containers, etc. (The list should include normal level of inventory that will be kept onsite);
4. Description of employee training, including:
 - a. Location of spill cleanup materials, containers and equipment;
 - b. Procedures for preventing and/or cleaning up spills;
 - c. Company Spill Response Coordinator (the coordinator can be listed by Title, such as, Plant Manager);
 - d. List of emergency phone numbers.
5. Description of routine inspections for spills, leaks, damage to containment and spill structures. Inspections should be done at least weekly;
6. Routine inventory of spill cleanup materials and equipment;

E. Good Housekeeping

The SPPP must include a good housekeeping program to help maintain a clean and orderly work place. For certain activities or areas, the discharge of stormwater exposed to source materials may be prevented merely by using good housekeeping methods. The following are some simple procedures that a facility can consider incorporating into an effective good housekeeping program:

1. conduct cleanup immediately after discovery of leaks and spills;
2. implement careful material storage practices;
3. improve operation and maintenance of industrial machinery and processes;
4. maintain up-to-date material inventory;
5. maintain well organized work areas;
6. provide regular pickup and disposal of waste materials;

7. maintain dry and clean floors and ground surfaces by using brooms, shovels, vacuum cleaners, or cleaning machines; and
8. train employees about good housekeeping practices.

F. Site Stabilization and Dust Control

The SPPP shall include standards for site stabilization and dust control designed to prevent transport of particulate and sediment from areas devoid of vegetation and to prevent downstream soil erosion caused by routine operations and uncontrolled stormwater runoff. At a minimum, the standards shall meet the technical standards found in *the Standards for Soil and Erosion and Sediment Control in New Jersey* and shall include:

1. traffic control to prevent or minimize disturbance of unstabilized areas and to prevent disturbance of vegetative covers and/or other dust control mechanisms;
2. entrance/exit stabilization to prevent or minimize transport of sediment and dust outside the site property line;
3. dust control to prevent or minimize movement of dust and sediment from exposed soil areas;
4. outfall stabilization to reduce stormwater velocity at the outfall to the degree necessary to prevent downstream erosion and/or degradation.

G. Settling Aids and Gel Logs

Use of settling aids and gel logs must be done in accordance with manufacturers' recommendations. The SPPP should demonstrate how the permittee ensures that this is done at the site. The Department retains the right to refuse any type of flocculant or other settling aid for use at the facility. The description should include all of the following:

1. System Design

The SPPP must include a line or block diagram of the system. The line or block diagram must include the chemical(s) injection point(s), type of agitation, flash tanks, mixing tanks, clarifier type, flowmeters, metering pumps, clear water and dirty water discharges, etc. The diagram shall state if the system is "continuous" or "batch" process.

The system must use anti-siphon devices to prevent overfeed of settling aids and other chemical additives. A copy of the manufacturers' recommended system and usage must be kept with the SPPP.

2. Usage and Recordkeeping

- a. The records must be kept on a daily log (Attachment F or equivalent) and include all of the following information:
 - i. Total daily usage of each chemical;
 - ii. The LC₅₀ for each chemical;
 - iii. Total gallons of water treated;
 - iv. Calculated dose (amount of chemical used per gallon of water treated);
 - v. Name of chemical and gallons of chemical used to adjust pH (if any);
 - vi. Copies of the MSDS and Technical Data Sheet for the settling aids presently in use must be available upon request;
 - vii. The Logsheet must be signed and dated monthly by an authorized person.
- b. Calibration records for flowmeters, metering pumps, gauges and other monitoring equipment critical to the control of the process shall be kept with the SPPP.
- c. Inspections should be made at least once daily to ensure the proper operation and to discover potential failures that could result in system malfunctions.

3. Employee Training

No employee shall be permitted to operate the system without training unless he/she is under the direct supervision of a trained operator. Employees should be trained within 3 months of employment and at least once annually thereafter. At a minimum, the training should be equivalent to the requirements for an operator of a Very Small Water System (VSWS). The training shall include the following:

- a. Review of MSDSs for each chemical used;
- b. Explanation on proper operation of the operation of the system;
- c. Recordkeeping requirements;
- d. Update training for use of new chemicals, etc.

4. Substitution of New Settling Aids

- a. The permittee must inform the Bureau in writing thirty (30) days prior to implementation of the change.

- b. The permittee must comply with all of Section G and submit an updated Section G to the Bureau prior to implementation of the change.

H. Preventative Maintenance

The SPPP shall include a Preventative Maintenance Program to include timely and regular inspections and maintenance of stormwater management devices (e.g., cleaning oil/water separators, catch basins, drip pans, catch basins, detention basins, covers, treatment units) and routine inspections of facility equipment and operations to detect faulty equipment. Equipment (such as tanks, piping, containers, and drums) should be checked regularly for signs of deterioration.

I. Inspections and Evaluation Process

1. Regular Inspections

The SPPP shall require regular inspections of the facility's equipment, exposed source materials and industrial areas to provide that all elements of the SPPP are in place and working properly. Inspections shall be conducted by qualified, trained plant personnel. Records of these inspections shall be kept onsite with the SPPP. These inspection records shall consist of the following, at a minimum: date of inspection; location of and problem(s) identified; steps taken to correct problem(s) and prevent recurrence; and inspector's names and title. In addition these inspection records shall record any incidents such as leaks or accidental discharges, and any failures or breakdowns of structural BMPs.

2. Annual Inspections

The SPPP shall also require an annual inspection and shall include an annual report of the entire facility in accordance with Part IV of this permit.

3. Evaluation Process

The SPPP shall include a system to routinely and continually evaluate the SPPP for effectiveness, any flaws that may have developed, and maintenance that may be required. The routine evaluation must include, but not be limited to, regular and annual inspections, inspection logs and records, internal reporting, plan revisions to correct any flaws detected in the SPPP or to reflect changes/additions at the facility, and logs of preventative maintenance performed at the facility. In addition, the Annual Reports and Certifications required under Part IV are integral to the evaluation process.

J. Air Compressor Condensate Discharges

The SPPP shall include a detailed summary of management of permanent and portable air compressor discharges including the cfm rating of each air compressor, location(s) and how discharge is managed.

1. Air Compressor Discharge to POTW

- a. The SPPP shall include a description of how each permanent air compressor discharge is directed to the POTW including hard piping, collecting in a container and pumping, pouring, etc. and the type and cfm rating of each permanent air compressor.
- b. The SPPP shall include a description of how each portable air compressor discharge (including air compressors used by contractors) is directed to the POTW including hard piping, collecting in a container and pumping, pouring, etc. Air compressor type and cfm rating of portable air compressors is not required when discharging to a POTW.

2. Air Compressor Discharge Collected as Wastewater

- a. The SPPP shall include a description of how each permanent air compressor discharge is collected and managed, including how it is stored and either treated onsite or shipped offsite for proper disposal and the type and cfm rating of each permanent air compressor.
- b. The SPPP shall include a description of how each portable air compressor discharge (including air compressors used by contractors) is stored and either treated onsite or shipped offsite for proper disposal. Air compressor type and cfm rating of portable air compressors is not required when discharge is collected as wastewater.

VI. Implementation Schedule

The SPPP shall include an implementation schedule for all structural and non-structural BMP's including a schedule(s) for removal, coverage, minimization of exposure of source material to stormwater, and/or stormwater diversion or treatment. The schedule shall meet the deadlines established in the permit in accordance with Part IV.

Upon completion of the initial SPPP, those BMP's (e.g., spill response, good housekeeping) that may readily be implemented shall be done so within 30 days, if not already practiced.

VII. General Plan Requirements

This section provides additional requirements on the administrative requirements related to finalizing your SPPP. It covers (1) required signatures, (2) requirements for plan location and access, and (3) required certifications.

A. Required Signatures for SPPP and the Certification Form.

The SPPP and Certification form shall be signed as follows:

FOR A CORPORATION: a “responsible corporate officer” or duly authorized representative. A “responsible corporate officer” is (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

FOR A PARTNERSHIP OR SOLE PROPRIETORSHIP: a general partner or the proprietor, respectively, or duly authorized representative.

FOR A MUNICIPALITY, STATE, FEDERAL OR OTHER PUBLIC AGENCY: either a principal executive officer or ranking elected official, or duly authorized representative.

A “responsible corporate officer”, general partner, proprietor, principal executive officer of a public agency, or ranking elected official may assign his or her signatory authority for this Certification to a duly authorized representative, which is a named person or generic position (e.g., plant manager, superintendent, plant engineer, operations manager, etc.) having overall responsibility for facility operation or the permittee's environmental matters, by submitting a letter to the Bureau of Nonpoint Pollution Control stating said authority and naming the person or position.

Whenever there are two or more permittees for the facility, all of those permittees shall jointly submit this Certification, unless permittees received authorization on different dates and this Certification is therefore due from them at different dates.

B. Plan Location and Public Access

1. The SPPP and inspection and preventative maintenance records or logs shall be maintained on site at all times. These documents must be made available, upon request, to a representative of the Department and to the owner and operator of any municipal separate storm sewer receiving the stormwater discharge.
2. The SPPP shall be made available to the public upon request. The facility may claim any portion of the SPPP as confidential in accordance with the provisions set forth in N.J.A.C. 7:14A-18.2.
3. A copy of the SPPP shall be submitted to the appropriate Regional Bureau of Water Compliance and Enforcement and to the Bureau of Nonpoint Pollution Control. Revisions made to the facility's SPPP shall be submitted also.

C. Certification of Stormwater Pollution Prevention Plan

1. The Certification form with the appropriate box checked off certifying that the SPPP has been prepared, shall be signed and submitted by the permittee to the Department's Bureau of Nonpoint Pollution Control as required by Part IV of the permit.
2. The Certification form with the appropriate box checked off certifying that the SPPP has been implemented shall be signed and submitted by the permittee to the Department's Bureau of Nonpoint Pollution Control as required by Part IV of the permit, and annually thereafter in accordance with the permit.

VIII. Special Requirements

A. Facilities Subject to Emergency Planning and Community Right-to-Know Statute

For facilities subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313, the SPPP shall include, or cite the location of, any spill reports prepared under that Act.

B. Facilities with SPCC Plans, DPCC Plans, or DCR Plans

The SPPP shall 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; and 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.

C. Facilities Undergoing Construction Activities

Whenever construction activities are undertaken at the facility, the SPPP shall be amended, if necessary, so that the SPPP continues to be accurate and to meet the requirements of Part I of this permit.