



# **Texas Pollutant Discharge Elimination System Industrial Stormwater Permit TXR050000**

## ***Stormwater Pollution Prevention Plan (SWP3) Worksheet Instructions***

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The TCEQ Small Business and Local Government Assistance (SBLGA) Program developed these worksheets to help you develop a Stormwater Pollution Prevention Plan (SWP3) under the Texas Pollutant Discharge Elimination System (TPDES), Multi-Sector General Permit (MSGP) for stormwater discharges from industrial facilities. These worksheets are for guidance purposes only and cannot serve as a substitute for the requirements outlined in **Part III** (starting on page 52) of the MSGP relating to minimum SWP3 requirements.

### **General Facility Information: Worksheet 1**

#### ***Limitations on Permit Coverage, Part II Section B.1.-15. (page 42 of TXR050000)***

Your SWP3 must include a short description of the process(es) conducted at your facility and an explanation of any other industrial activities or facilities at this same location. The SWP3 must also identify bodies of water receiving stormwater discharges from your facility and explain whether or not those discharges may contribute to water quality impairment. Discharges of pollutant(s) of concern to impaired water bodies where there is a TMDL are not eligible for coverage under this permit, unless they are consistent with the EPA approved TMDL. Additional limitation, conditions, and requirements are applicable to these discharges. Facilities located within the Edwards Aquifer Recharge Zone or Contributing Zone are subject to additional requirements.

### **Pollution Prevention Team: Worksheet 2**

#### ***Pollution Prevention Team Members, Part III Section A.2.a (page 59)***

Identify a specific individual or group of individuals within the facility as members of your Pollution Prevention Team. If the facility is not staffed on a continuous

basis, an employee from a third party may be identified as part of the team. Additional members of the team may include environmental professionals who are under contract. Examples of Pollution Prevention Team members within the facility may include, but are not limited to:

- environmental staff
- health and safety staff
- plant or facility operators
- plant or facility managers

Examples of Pollution Prevention team members from outside the facility may include, but are not limited to:

- corporate environmental staff
- corporate health and safety staff
- regional managers
- environmental consultants under contract to the facility or corporation

Make sure all members of the Pollution Prevention Team are familiar with the requirements of the MSGP, the facility, and the SWP3 for the facility.

### ***Pollution Prevention Team Responsibilities, Part III Section A.2.b (page 59)***

The Pollution Prevention Team is responsible for the development, implementation, maintenance, and revisions to the SWP3. The SWP3 should clearly define all team members' responsibilities. An individual may have multiple responsibilities depending on facility and staff size. Include team members' contact phone number with their assignments to give non-team member employees the ability to locate a team member when needed.

Examples of duties related to the SWP3 include, but are not limited to:

- stormwater sampling
- routine facility inspections
- rain gauge monitoring
- SWP3 revisions
- maintenance of Best Management Practices (BMPs) and erosion controls
- non-stormwater investigations
- good housekeeping measures
- maintenance of exposed inventory lists
- site map development and maintenance

- spill prevention and response
- employee training and documentation
- maintenance of spill and leak log
- annual comprehensive site compliance evaluation

## **Description of Potential Pollutant Sources: Worksheet 3**

### ***Inventory of Exposed Materials, Part III Section A.3.a (page 59)***

The Pollution Prevention Team must develop an inventory of materials currently handled at the facility that may be exposed to rainfall. This list must include all materials that are handled, stored, processed, treated, or disposed of in a manner that allows exposure to rainfall or runoff. The inventory of exposed materials must also include specific pollutants (e.g. oil and grease, copper, wood shavings, etc.) that can be attributed to those materials. It is mandatory to update the inventory within 30 days of a significant change in the types of materials that are exposed to rainfall or runoff, or within 30 days of a significant change in the types of materials exposed to stormwater that were not already included in the inventory. A significant change in material management practices is a change that would either result in initial exposure of a material not already listed in the inventory, or result in an increased exposure of an already listed material.

The inventory does not have to include any materials stored in drums, barrels, tanks, and similar containers that are tightly sealed, in **good** structural condition, and do **not** have leaking valves.

## **Description of Potential Pollutant Sources: Worksheet 4**

### ***Narrative Description of Potential Pollutant Sources, Part III Section A.3.b (page 60)***

Develop a narrative description to describe all activities and potential sources of pollutants that may add pollutants to stormwater discharges or that may result in non-stormwater discharges from the facility.

Examples of activities and potential sources of pollutants that may be described in this section are:

- loading and unloading areas (including areas where chemicals and other materials are transferred)
- outdoor storage areas
- outdoor processing areas

- dust producing activities
- on-site waste disposal
- vehicle and equipment maintenance, cleaning, and fueling areas (including areas where vehicles are stored awaiting maintenance)
- liquid storage tank areas
- railroad sidings, tracks, and rail cars
- potential spill locations
- location onsite of significant spills and leaks that occurred onsite in the past three years.

The narrative description must be updated within 30 days following a change in the types or quantities of materials or in material management practices that may affect the exposure of materials to rainfall.

## **Site Map: Worksheet 5**

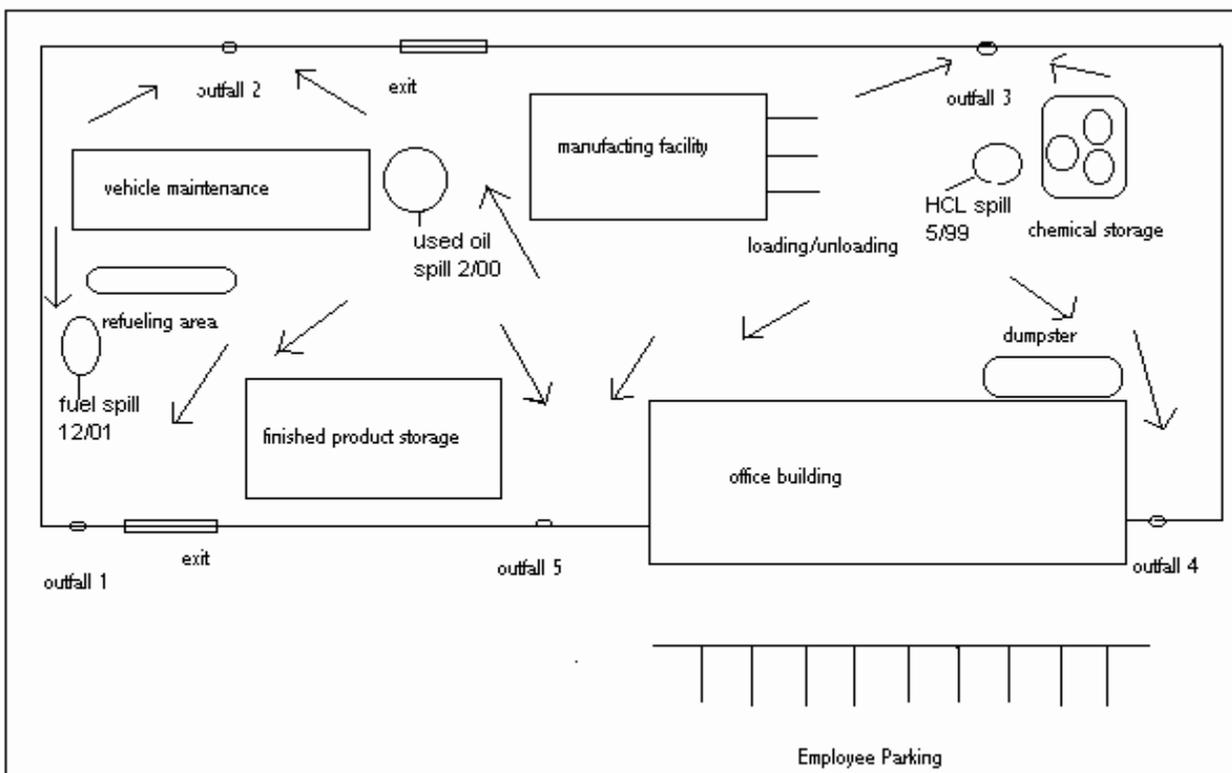
### ***Site Map, Part III Section A.3.c & d (page 60)***

Develop a site map and drainage site map (or maps) that includes the following:

- the location of each outfall
- an outline of the drainage area within the facility's boundary for each stormwater outfall
- connections or discharges to municipal separate storm sewer systems
- the location of all structures (e.g. buildings, storage, tanks, vehicle storage areas, etc.)
- structural control devices designed to reduce pollution in stormwater runoff
- process wastewater treatment units (including ponds)
- bag house and other air treatment units exposed to rainfall or runoff
- landfills, scrap yards, surface water bodies (including wetlands)
- vehicle fueling and exposed maintenance areas
- physical features of the site that may influence runoff
- the locations where reportable quantity spills or leaks have occurred during the three years before the Notice of Intent (NOI) for coverage under this permit was submitted
- process areas, storage areas, or other locations where materials are exposed to rainfall or runoff

The site map should clearly show the flow of stormwater runoff to each outfall. You may develop a series of maps if the amount of information would cause a single map to be difficult to read and interpret. The site map may be hand drawn and should receive updates as facility changes occur.

**Figure 1: Example Site Map**



## Description of Potential Pollutant Sources: Worksheet 6

### ***Spills and Leaks, Part III Section A.3.e & f (page 61)***

The SWP3 must contain a list of reportable quantity spills and leaks of toxic or hazardous pollutants. A reportable quantity spill is one where the amount of material spilled requires it be reported to the TCEQ at (800) 832-8224 and/or the National Response Center at (800) 424-8802. Regulations concerning reportable quantities can be found at Title 30 Texas Administrative Code (TAC) §327.4. In the list, describe spills and leaks that occurred during the three years before the NOI was submitted. Also include all other spills within the last five years, even if they were not of reportable quantity. You must update the list quarterly to include additional spills and leaks, if they occur while operating under the MSGP.

## **Pollution Prevention Measures & Controls: Worksheet 7**

### ***Best Management Practices, Part III Section A.4.a (page 62)***

You must develop a section in the SWP3 that describes the best management practices (BMPs) used to reduce the discharge and potential discharge of pollutants in stormwater. In developing BMPs, consider the activities and potentials for contamination identified in Part III, Section A.4 of the MSGP, “Pollution Prevention Measures and Controls” (Worksheet 3).

BMPs, like good housekeeping measures, may be everyday operating procedures that aid in the prevention of exposure of pollutants to stormwater. BMPs may also be structural controls such as covered storage racks. There may be sector specific pollution prevention measures listed in Part V of the MSGP that may be required to be addressed as a BMP. Worksheet 7 allows space to list multiple BMPs at a facility location. Though an exact date is not required, at a minimum, you should list a month and year, or quarter and year to demonstrate advances made in stormwater pollution prevention, and updates made to the SWP3 annually.

When developing BMPs, consider the following:

- storage of materials
- maintenance programs for equipment and machinery
- spill prevention and cleanup activities
- stormwater management equipment
- standard operating procedures that may have positive effects on discharge

## **Pollution Prevention Measures & Controls: Worksheet 8**

### ***Good Housekeeping Measures, Part III Section A.4.b (page 62)***

Ensure that areas of the facility that contribute or potentially contribute pollutants to stormwater discharges are maintained in a clean, orderly manner. Good housekeeping is one of the most important aspects of stormwater pollution prevention efforts. An investigator is much less likely to find an area of concern in a well maintained facility than they would in a disorderly one.

Examples of areas that could contribute stormwater pollutants include, but are not limited to:

- areas around the trash containers

- outdoor storage areas
- loading docks
- outdoor processing areas

Good housekeeping must include measures to eliminate or reduce exposure of trash and debris, prior to their proper disposal, to rainfall or runoff. Typical good housekeeping measures include activities performed on a daily basis by employees during the course of normal work activities. Good housekeeping measures must be incorporated as a part of the employee training program to ensure that all employees know the company's policies and how their responsibilities affect compliance.

## **Pollution Prevention Measures & Controls: Worksheet 9**

### ***Erosion and Sedimentation Control Measures, Part III Section A.4.c (page 63)***

Your SWP3 must also address soil erosion. Controls should be evaluated and used, as necessary, to prevent soil loss in areas of the facility that have the potential for erosion. If the facility does not utilize any erosion-control measures, it should be noted in the plan that erosion is not an issue on site.

At a minimum, evaluate the following controls:

- soil stabilization through the use of vegetative cover (i.e., grass, weeds, etc.)
- contouring slopes
- paving
- installation of structural controls

## **Pollution Prevention Measures & Controls: Worksheet 10**

### ***Maintenance Program for Structural Controls, Part III Section A.4.d (page 63)***

Establish a maintenance program for stormwater structural controls. Example of structural controls that should be inspected on a regular basis included:

- oil/water separators
- catch basins
- sediment ponds
- grass swales

- berms
- any other controls used on-site

The SWP3 must establish maintenance frequencies for each of the controls at intervals that ensure effective operation.

Mechanical equipment that is part of a structural control, such as a stormwater pump or secondary containment drain valves, must also be inspected at intervals described in the SWP3 and maintained at intervals necessary to prevent failures that could result in a discharge of pollutants.

The SWP3 must identify qualified personnel to conduct inspections and establish inspection and maintenance schedules.

Records must document the estimated volumes of **solids removed** from catch basins, sediment ponds, and other similar control structures.

## **Pollution Prevention Measures & Controls: Worksheet 11**

### ***Spill Prevention and Response Procedures, Part III Section A.4.e (page 63)***

Develop and implement a section of the SWP3 that addresses preventing spills and to allow for adequate spill response. This section must include the following:

- identification of areas where spills could contribute pollutants to stormwater discharges
- development and implementation of procedures to minimize or prevent contamination of stormwater from spills

Examples include, but are not limited to:

- training employees to inspect for leaks each day during operation of equipment
- installing overflow prevention devices on pumps and tanks
- requiring all tanks, drums, and similar containers to be properly labeled
- installing secondary containment structures around liquid storage tanks and drums
- inspecting drums, tanks, and similar containers routinely
- modifying material handling techniques
- requiring hazardous waste containers that require special handling, storage, use, and disposal be clearly marked
- developing and implementing specific spill prevention and cleanup techniques
- developing and maintaining an inventory of spill cleanup materials and equipment (spill kits)

- placing spill kits, readily available to employees, in strategic locations throughout the facility
- incorporating all of the above mentioned measures into your employee training program

## **Pollution Prevention Measures & Controls: Worksheet 12**

### ***Employee Training Program and Employee Education, Part III Section A.4.f (page 64)***

Develop a section in the SWP3 that establishes a training program. Training must be offered to all employees who are responsible for implementing or maintaining activities identified in the SWP3.

At a minimum, employee training must include:

- proper material handling practices for specific chemicals, fluids, and any other materials used or commonly encountered at the facility
- spill prevention measures
- the location of materials and equipment necessary for spill clean-up
- spill cleanup techniques
- proper spill reporting procedures
- familiarization with good housekeeping measures, BMPs, and the overall goals of the SWP3

When developing the schedule for employee training sessions, you must consider pollutant potential, employee turnover rate, and other factors, as needed. Conduct training at least once per year and maintain all training activity and attendance lists must be in the SWP3.

You also must offer education to employees at the facility who are not directly responsible for implementing or maintaining activities identified in the SWP3, and who do not participate in the employee training program. At a minimum, educate these employees of the SWP3's basic goal and how to contact the facility's Pollution Prevention Team about stormwater related issues.

## **Non-Stormwater Discharges: Worksheet 13**

### ***Non-Stormwater Discharges, Part III Section B.1. (page 65)***

Non-stormwater discharges are defined as discharges from your facility that occur when it is not raining. Certain non-stormwater discharges are covered under this permit. They

include:

- discharges from firefighting activities, fire hydrant flushing, or potable water sources (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life)
- lawn watering and similar irrigation drainage
- water from routine external washing of buildings, conducted without the use of detergents or other chemicals
- water from the routine washing of pavement conducted without the use of detergents or other chemicals, and where spills and leaks of toxic or hazardous materials have not occurred (unless all contaminated materials have been abated)
- boat rinse water from transportation facilities, such as marinas, where the boat rinse water does not contain chemicals, surfactants, or elevated temperatures and is not from pressure washing activities
- air conditioner condensate, compressor condensate, and condensate that externally forms on steam lines
- water from foundation or footing drains where flows are not contaminated with pollutants (e.g. process materials, solvents, and other pollutants)
- springs and other uncontaminated ground water
- discharges described in Part V of the permit that are subject to effluent guidelines and effluent limitations.

### ***Non-Stormwater Discharges, Part III Section B.1.a. & b. (page 65 and 66)***

The facility's Pollution Prevention team must conduct an evaluation of potential non-stormwater discharges that are not approved by the permit. If the facility discharges into a separate storm sewer system, the team should also test the system or inspect it for the presence of non-stormwater flows. The designated Pollution Prevention Team member(s) must eliminate any potential sources that are discovered. Process wastewater must not be combined with stormwater discharges and must not be discharged off-site unless authorized under an individual TPDES permit. Within 180 days of filing an NOI for coverage (or a renewal NOI) the permittee shall conduct a survey of potential non-stormwater sources and shall provide the certification required in Part III, Section B.1.(c) below. The SWP3 must be updated based on this evaluation.

Develop a narrative description of the non-stormwater discharge investigation and include the following:

- the date and description of the criteria used for the evaluation;
- the outfalls or onsite discharge points observed;
- the different types of identified non-stormwater discharges and their source

locations; and

- appropriate BMPs for the non-stormwater discharges, or the actions taken or the control measures used to eliminate them.

### ***Certification, Part III Section B.1.c (page 66)***

Inspection, Documentation, and Certification of Non-Stormwater Discharges. The SWP3 must include a certification, signed according to Part III, Section E.6.(c) of this general permit, relating to Signatory Requirements for Reports and Certifications, that states that the facility's storm sewer system has been evaluated for the presence of non-stormwater discharges and that the discharge of non-permitted, non-stormwater does not occur. The certification must include steps taken while conducting the evaluation was conducted, results of any testing, dates of evaluations or tests, and the portions of the storm sewer system that were observed during the inspection. The inspection for non-stormwater discharges must be completed and the certification must be prepared within 180 days after filing an NOI for permit coverage. The certification must be made readily available for review upon request by authorized TCEQ personnel as well as any local pollution control agency with jurisdiction.

### ***Failure to Certify, Part III Section B.1.d (page 66)***

If a part of the separate storm sewer system cannot be accessed to complete the evaluation, then the certification will cover the remainder of the system. Notice of this deficiency must be provided to the TCEQ within 180 days after permit coverage is obtained. Facilities that contribute stormwater discharges to a municipal separate storm sewer system (MS4) must provide notice of this deficiency **upon request**. The notice shall include an explanation of why the evaluation could not be performed and list in the certification all known potential, non-permitted, non-stormwater sources that could not be included in the evaluation.

## **Pollution Prevention Measures & Controls: Worksheet 14**

### ***Routine Facility Inspections, Part III Section B.2 (pages 66 and 67)***

Qualified personnel who are familiar with permit requirements and the industrial activities performed at the facility must conduct periodic inspections to determine the effectiveness of the following:

- good housekeeping measures
- spill prevention and response measures
- erosion control measures

- maintenance or repairs for structural controls
- best management practices
- employee training program
- weather information and any weather-related discharges at the time of the inspection
- any previously unidentified discharges of pollutants from the site
- any failed control measures that need replacement
- any incidents of noncompliance that are observed
- any additional control measured needed to comply with the permit requirements; and
- identification of any existing BMPs that are not being properly or completely implemented.

Inspections must occur on a frequency of once per quarter, unless otherwise specified in Part V of the MSGP that relates to specific requirements for industrial activities.

On-site inspections must be documented by the use of a checklist that includes each of the controls and measures being evaluated. The routine facility inspection checklist must remain available for review upon request.

This documentation must be signed. When revisions or additions to the SWP3 are recommended as a result of inspections, you must attach a summary description of these proposed changes to the inspection checklist. The summary must identify any necessary time frames required to implement the proposed changes.

## **Pollution Prevention Measures & Controls: Worksheet 15**

### ***Quarterly Visual Monitoring, Part III Section B.3 (page 67)***

Stormwater discharges from each outfall authorized by the general permit must be visually examined on a quarterly basis. Monitoring must be conducted during the normal hours of operation for the facility and samples must be collected in a clean, clear, glass or plastic container and examined in a well-lit area. Findings must document observations of the following parameters.

- (1) color;
- (2) clarity;
- (3) floating solids
- (4) settled solids;

- (5) suspended solids;
- (6) foam;
- (7) oil sheen;
- (8) other obvious indicators of stormwater pollution; and
- (9) noticeable odors.

Part V of this general permit may include alternative schedules for visual monitoring at specific industrial sections, and may include additional requirements.

## **Annual Comprehensive Compliance: Worksheets 16 & 17**

### ***Comprehensive Site Compliance Evaluation and Report, Part III Section B.5.a&b (page 69 and 70)***

The comprehensive site compliance evaluation is a required site inspection and an overall assessment of the effectiveness of the current SWP3. This evaluation is in addition to other routine inspections, but may substitute for one quarterly inspection.

Either one or more members of the Pollution Prevention Team will conduct the evaluation at least once per year. The evaluation must include:

- inspection of all areas identified in the Inventory of Exposed Materials section of the SWP3 (worksheet 3);
- inspection of all structural controls, including maintenance and effectiveness;
- inspection of all nonstructural controls, including BMP effectiveness, good housekeeping measures, and spill prevention;
- all areas where spills and leaks have occurred in the past three years;
- industrial materials, residue, or trash that may have or could come into contact with stormwater;
- leaks or spills from industrial equipment, drums, tanks and other containers;
- offsite tracking of industrial or waste materials, or sediment where vehicles enters or exit the site;
- tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;
- a review of the results of the past year's visual and analytical monitoring when planning and conducting inspections that are required by this general permit; and

- inspection of all reasonably accessible areas immediately downstream of each stormwater outfall authorized by this MSGP; and
- any control measures needing replacement, maintenance or repair

The report must be prepared within 30 days of performing the annual site compliance evaluation, and must include a narrative discussion of your facility's compliance with the current SWP3 and document the following:

- the personnel conducting the evaluation
- the dates of the evaluation
- any incidents of non-compliance
- observations relating to the implementation of control measures;
- previously unidentified discharges from the site;
- previously unidentified pollutants in existing discharges;
- evidence of, or the potential for, pollutants entering the drainage system;
- evidence of pollutants discharging to receiving waters, and the condition of and around each outfalls; and
- additional control measures needed to address any conditions requiring corrective action identified during the inspection.

For the purposes of this inspection, a non-compliance incident is where an element of the SWP3 is either not implemented, or where specific conditions of the permit are not met. If the report indicates an incident of non-compliance, you must complete all necessary actions to achieve compliance as soon as practicable, but no later than 12 weeks following the completion of the report. If the Pollution Prevention Team does not discover any incidents of non-compliance, the report will contain a certification that the facility is in compliance with the SWP3.

Either include the report as part of the SWP3 or reference it in the SWP3. The report must remain readily available for review by authorized personnel upon request.

## **Annual Comprehensive Compliance: Worksheet 18**

### ***Revision to the SWP3, Part III Section B.5.c (page 71)***

Revise the SWP3 to include and address the findings of the Site Compliance Evaluation Report within 12 weeks following the completion of the report. Revisions must include all applicable changes that result from the report and all applicable updates to:

- elements of the SWP3 that require modification for effectiveness
- any additional elements (e.g. structural controls of BMPs) that should be added or modified for prevention of pollution

- the site map
- the inventory of exposed materials
- the description of good housekeeping measures
- the description of structural and nonstructural controls
- any other elements of the plan that were either found to be inaccurate or that will require modification

### ***Annual Plan Certification, Part III Section E.6.c (page 84)***

All reports and certification shall be signed by an authorized individual and in the manner required by Title 30 TAC §305.128 (relating to Signatories to Reports). The SWP3 must be signed and certified by an authorized representative of the facility. Without a signature from an authorized facility representative, the SWP3 is considered non-compliant with the MSGP permit.

## **Rain Gauge Monitoring and Recordkeeping: Worksheet 19**

### ***Rain Gauge Monitoring and Recordkeeping, Part III Section D.1.c (page 75)***

Maintain a rain gauge on-site or utilize a rain gauge in the immediate vicinity of the site to determine when a qualifying rain event occurs. A representative storm event is precipitation that:

- is measurable,
- causes runoff at the outfall, and
- occurs at least 72 hours (3 days) after the previous storm event.

At a minimum, the rain gauge must be monitored:

- once per week, and
- once per day during a storm event
- if it does not rain during the week, record a zero rainfall or no rain

The rain gauge monitoring log should be included in your SWP3. Monitoring may be temporarily suspended during a given monitoring period if a representative storm event has occurred and the required sampling and analysis has been conducted.