

Stormwater Pollution Prevention Plan
Instruction Booklet

How to Use this Instruction Booklet

This instruction booklet was developed by the Vermont Agency of Natural Resources Water Quality Division to guide your facility through the development of a Storm Water Pollution Prevention Plan (SWPPP). This booklet is designed to accompany the fillinable SWPPP template. Once completed, the SWPPP will help you comply with the Vermont Multi-Sector General Permit (MSGP, also referred to as “the permit” by this document). The fillinable SWPPP template and this instruction booklet include the basic SWPPP requirements in the permit. You may need to include additional Sector specific information in your SWPPP to meet the needs of your site.

- ❖ This template is based on the requirements found in Part 2 of the permit. You should be familiar with these requirements before writing your SWPPP. The permit can be found on the Water Quality Division website:
http://www.anr.state.vt.us/dec/waterq/stormwater/htm/sw_msgp.htm.
- ❖ While you are developing your SWPPP, keep in mind other federal, state, and local regulations that your facility may be subject to. These may affect how you can implement the SWPPP.
- ❖ The fillinable SWPPP template contains many tables and sample worksheets, some of which can be found at the end of the document. Expand or edit these documents according to your needs.
- ❖ The appendices of the fillinable SWPPP template include blank copies of forms you will need to record the results of your monitoring and inspections. When completed, be sure to add the filled out forms to the appropriate appendix. This is a requirement of the permit.
- ❖ Your SWPPP must include implementation dates for best management practices (BMPs). Inspections, monitoring, and employee training also need implementation schedules.
- ❖ **Once the SWPPP is completed, send a copy to the Stormwater Section and keep the original at your facility. Use it to stay in compliance with the General Permit by implementing controls, monitoring, training, and inspections as planned.**

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1 Introduction (page 1)

1. Enter the official or legal name of the facility or site.
2. Enter the complete street address of the facility.

2 Pollution Prevention Team (page 1)

You must designate an individual or team to prepare and carry out your facility's stormwater pollution prevention plan. The team leader will also serve as the main facility contact person for communications with the Agency.

1. Enter the name, title and contact information for the team members.
2. Enter the responsibilities for each team member. Areas of responsibilities include initial site assessment, identification of pollutant sources and risks, decision making on appropriate BMPs and regular evaluations to measure the effectiveness of the plan. Specific responsibilities of each staff individual on the team must be identified and listed in the SWPPP.

3 Site Description (pages 2 - 8)

This section is where you will gather information about current and past conditions at your facility. By taking an inventory of site activities, materials, local precipitation patterns, and receiving waters you will be able to identify potential problems on your site.

If your facility has conducted any water quality sampling prior to this permit, you should include the results of this testing with your SWPPP. Use this data to assess your facility for pollution sources.

3.1 Facility Information (page 2)

1. Enter the complete street address of the facility.
2. Enter the Latitude and Longitude of the approximate center of the facility. This information can be found on the Notice of Intent (NOI) form you submitted for your facility.
3. Enter the Standard Industrial Classification (SIC) code and MSGP Sector for your facility. This information can be found on the NOI form you submitted for your facility. This information can also be found on Table D-1 of the permit.

3.2 Narrative Site Description (page 2)

1. Enter the size of the facility in acres
2. Enter the size of the impervious cover in acres. Impervious cover includes rooftops, sidewalks, paved and gravel roads and driveways.
3. Divide the impervious area (#2) by the total size of the facility (#1) and multiply the result by 100. This will give you the percent impervious area.

Example: 1. Size of facility = 2 acres

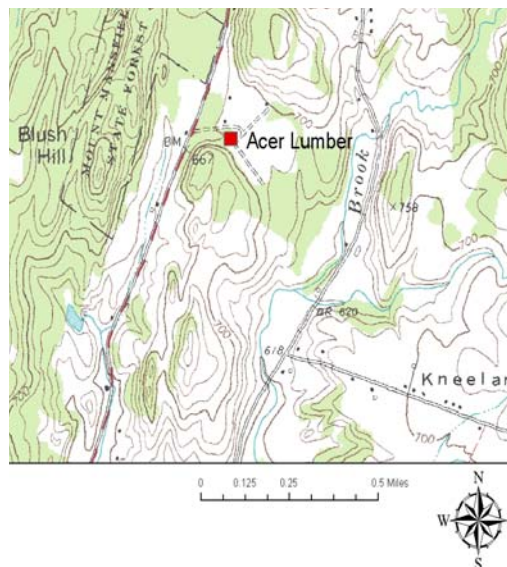
2. Impervious cover = 1.5 acres

3. $(1.5 / 2) = 0.75 \times 100 = 75\%$

4. Enter the number of buildings and what they are used for
5. Enter the hours and season of operations
6. Enter the number and type of vehicles used on site
7. Describe what takes place outdoors and any materials that are stored outside.
Materials stored outdoors includes raw materials, intermediate products, and waste materials
8. Enter the number and location of stormwater outfalls to surface waters, ditches, or storm drains. Stormwater outfalls are where rainwater or snowmelt runs off the facility (at the property line) or where rainwater or snowmelt runs into a stream, wetland, stormdrain or waterway.

3.3 General Location Map (page 3)

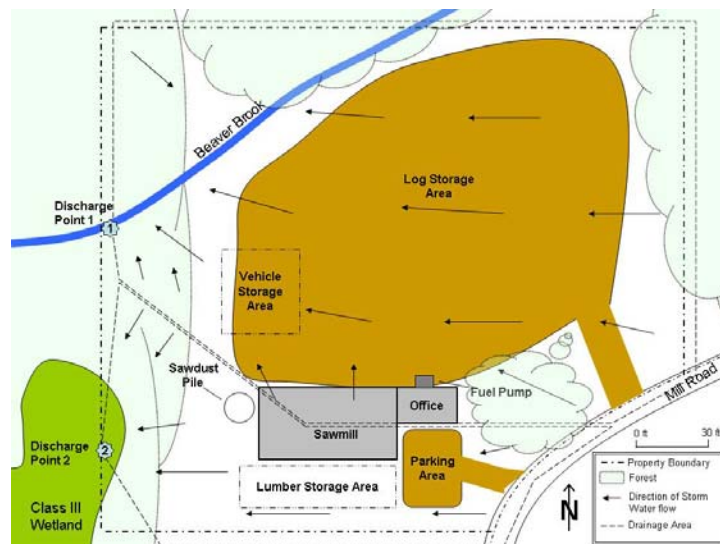
Provide a general location map (e.g. a U.S. Geological Survey (USGS) quadrangle map) showing receiving waters and other significant landmarks within a one-mile radius. You may use the Stormwater Site Locator map at http://maps.anr.state.vt.us/website/sw_viewer to locate your facility and receiving waters. Click on the red “Legend/Layer List” button on the left, then in the right hand column, check the box next to “USGS topomaps”. Zoom in to show a one mile radius. You may print a copy of this map and include it in your SWPPP.



3.4 Site Map (page 4)

Create a map of the facility including the following items:

- Property lines
- Delineation of all impervious surfaces including gravel roads and parking
- Access roads
- Rail Cars and tracks
- All surface water bodies
- Direction of stormwater flow (use arrows)
- Identify each stormwater outfall and delineate the drainage area for each
- Location of existing structural stormwater controls including:
 - flow diversion structures
 - retention/ detention ponds
 - vegetated swales
 - sediment traps
- All areas which may be pollutant sources and are exposed to precipitation (including areas identified in section 3.7 of this plan)
 - Outside storage of raw materials, by-products, and/or finished products
 - Fueling stations
 - Vehicle or equipment washing and/or maintenance areas
 - Loading/unloading areas
 - Areas used for treatment, storage or disposal of waste
 - Liquid storage tanks
 - Processing and storage areas
 - Material handling areas
 - Machinery
 - Areas of exposed soil
 - Salt/sand storage piles
- Past significant leaks or spills (as identified in section 3.8 of this plan)
- Location and description of each non-stormwater discharge
- Location and source of run-on from adjacent properties containing significant quantities of pollutants




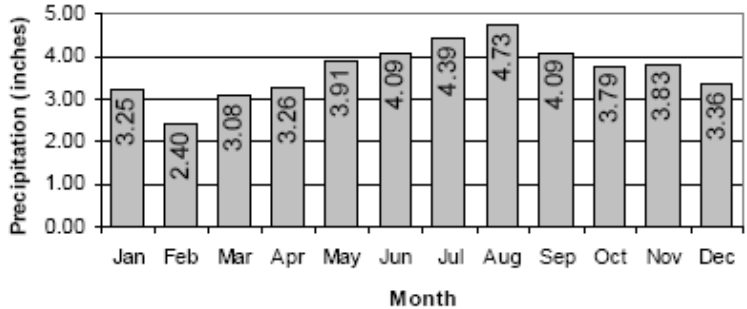

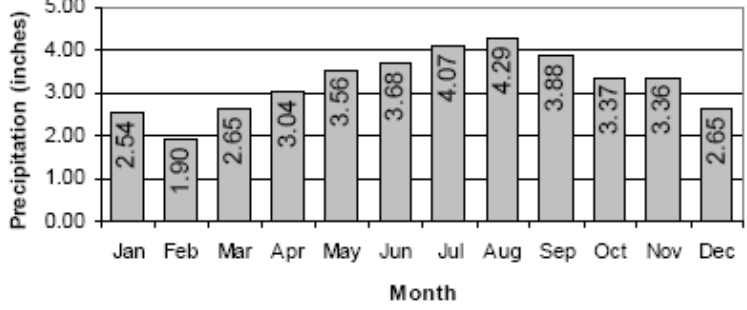

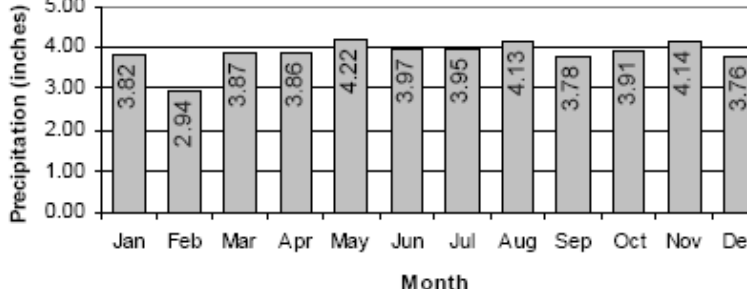
3.5 Description of Receiving Waters (page 5)

1. Enter the names of all receiving waters to which stormwater from your site is discharged. A receiving water is any river, stream, lake, pond, intermittent stream, or wetland. To identify your facility's receiving waters, watch where stormwater flows off your site. If stormwater usually stays onsite and infiltrates into the ground, think about where stormwater goes in a very large storm. Then look at the USGS topo map (the general location map included in your plan) to find the closest waterbody (identified by a blue line or a wetland area). Discharges to a municipal separate storm sewer (MS4) need to be identified along with the operator of the system.
2. Enter the numbers of the discharge points that flow to this receiving water. These numbers should match the discharge point numbers on your site map.
3. Enter the receiving water classification found in the Vermont Water Quality Standards. Examples include: Class A1, A2 or B. The Vermont Water Quality Standards can be found at:
http://www.vtwaterquality.org/stormwater/docs/msgp/sw_water_quality_standards.pdf
4. Identify if the receiving water is impaired and for what pollutant. The lists of impaired waters can be found at the following links. Impaired waters are listed by VT Waterbody ID and waterbody segment name. If you need help identifying if your receiving water is impaired, please call (802) 241-3770.
http://www.vtwaterquality.org/stormwater/docs/msgp/sw_pl_2006.partA.pdf
http://www.vtwaterquality.org/stormwater/docs/msgp/sw_pl_2006.partsB-G.pdf

3.6 Precipitation Information (page 5)

1. Enter the annual average precipitation for your site. You may use the following table to determine this amount. First, find the region of the state where your facility is located. Average annual precipitation for the state is as follows:
 - a. Northeastern Region = 45 inches
 - b. Western Region = 39 inches
 - c. Southeastern Region = 46.5 inches
2. Enter the wettest months. You may use the following table to determine which months have the most rainfall.
3. Enter the expected rainfall in the wettest month.
4. Describe the type and intensity of storms. Example storm types and intensities include: short duration downpours, day-long drizzles, day-long intermittent rainfall.
5. Explain how your operation is affected by the weather. For example, does your business close operations in the rain or do you continue to work? Are machines/vehicles moved inside during storms? Are tarps put over materials during rain events?

Table 1: Vermont Monthly Precipitation Normals by Month, 1971-2000*

 <p>Division 1: Northeastern</p>	 <table border="1"> <thead> <tr> <th>Month</th> <th>Precipitation (inches)</th> </tr> </thead> <tbody> <tr><td>Jan</td><td>3.25</td></tr> <tr><td>Feb</td><td>2.40</td></tr> <tr><td>Mar</td><td>3.08</td></tr> <tr><td>Apr</td><td>3.26</td></tr> <tr><td>May</td><td>3.91</td></tr> <tr><td>Jun</td><td>4.09</td></tr> <tr><td>Jul</td><td>4.39</td></tr> <tr><td>Aug</td><td>4.73</td></tr> <tr><td>Sep</td><td>4.09</td></tr> <tr><td>Oct</td><td>3.79</td></tr> <tr><td>Nov</td><td>3.83</td></tr> <tr><td>Dec</td><td>3.36</td></tr> </tbody> </table>	Month	Precipitation (inches)	Jan	3.25	Feb	2.40	Mar	3.08	Apr	3.26	May	3.91	Jun	4.09	Jul	4.39	Aug	4.73	Sep	4.09	Oct	3.79	Nov	3.83	Dec	3.36
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 <p>Division 2: Western</p>	 <table border="1"> <thead> <tr> <th>Month</th> <th>Precipitation (inches)</th> </tr> </thead> <tbody> <tr><td>Jan</td><td>2.54</td></tr> <tr><td>Feb</td><td>1.90</td></tr> <tr><td>Mar</td><td>2.65</td></tr> <tr><td>Apr</td><td>3.04</td></tr> <tr><td>May</td><td>3.56</td></tr> <tr><td>Jun</td><td>3.68</td></tr> <tr><td>Jul</td><td>4.07</td></tr> <tr><td>Aug</td><td>4.29</td></tr> <tr><td>Sep</td><td>3.88</td></tr> <tr><td>Oct</td><td>3.37</td></tr> <tr><td>Nov</td><td>3.36</td></tr> <tr><td>Dec</td><td>2.65</td></tr> </tbody> </table>	Month	Precipitation (inches)	Jan	2.54	Feb	1.90	Mar	2.65	Apr	3.04	May	3.56	Jun	3.68	Jul	4.07	Aug	4.29	Sep	3.88	Oct	3.37	Nov	3.36	Dec	2.65
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 <p>Division 3: Southeastern</p>	 <table border="1"> <thead> <tr> <th>Month</th> <th>Precipitation (inches)</th> </tr> </thead> <tbody> <tr><td>Jan</td><td>3.82</td></tr> <tr><td>Feb</td><td>2.94</td></tr> <tr><td>Mar</td><td>3.87</td></tr> <tr><td>Apr</td><td>3.86</td></tr> <tr><td>May</td><td>4.22</td></tr> <tr><td>Jun</td><td>3.97</td></tr> <tr><td>Jul</td><td>3.95</td></tr> <tr><td>Aug</td><td>4.13</td></tr> <tr><td>Sep</td><td>3.78</td></tr> <tr><td>Oct</td><td>3.91</td></tr> <tr><td>Nov</td><td>4.14</td></tr> <tr><td>Dec</td><td>3.76</td></tr> </tbody> </table>	Month	Precipitation (inches)	Jan	3.82	Feb	2.94	Mar	3.87	Apr	3.86	May	4.22	Jun	3.97	Jul	3.95	Aug	4.13	Sep	3.78	Oct	3.91	Nov	4.14	Dec	3.76
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*Data obtained from: National Climatic Data Center. *Climatology of the United States No. 85: Divisional Normals and Standard Deviations of Temperature, Precipitation, and Heating and Cooling Degree Days 1971-2000*. Obtained December 9th, 2005 from the World Wide Web: http://www5.ncdc.noaa.gov/climate_normals/clim85/CLIM85_PRCP02.pdf

3.7 *Inventory of Exposed Materials and Potential Pollutant Sources (pgs 6 and 7)*

Use Table 1 to list all areas and activities that are exposed to stormwater and the significant materials involved. This list should help you identify high risk areas on the site. Be sure that these areas are identified on the site map you created for your plan. Significant materials must include:

- material handling equipment
- industrial machinery
- raw materials
- finished products
- waste materials such as ashes, slag, and sludge
- liquids including fuels, solvents, and detergents
- fertilizers, pesticides

Use Table 2 to detail the physical description and stormwater pollutants that are contained in each significant material. This information is found on Material Safety Data Sheets. This information can be used during inspections to correlate stormwater contamination with its source.

3.8 *Inventory of Past Spills and Leaks (page 8)*

In the table, record any spills or chronic leaks that have occurred on-site for three years prior to this permit. When you develop stormwater controls for the facility you must consider measures that will prevent reoccurrence of spills. If there have been no spills or leaks on your site within the last three years, you may write “No past spills or leaks at this facility”.

4 Non-Stormwater Discharges

4.1 *Certification of Non-Stormwater Discharges (page 9 and Appendix A)*

All outfalls at the site need to be evaluated for the presence of non-stormwater discharges, including vehicle wash water, process water, and sanitary wastewater.

To complete the Non-Stormwater Discharge Certification (Appendix A), during dry weather, you must visually inspect all of the stormwater discharge locations on your site. It is recommended that you walk the perimeter of your facility to ensure that no discharges are overlooked. If the receiving water is nearby, you should also look for any pipes that may discharge waste from your facility directly into the waterbody.

1. Enter the date of the test
2. Enter the stormwater outfall number or description of the inspected area
3. Enter the method used to evaluate the discharge (i.e. visual inspection)
4. Enter the results of the inspection (i.e. no discharge or oily water flowing)
5. Enter the possible sources of the discharge

6. Enter the name of the person conducting the inspection
7. Sign and date the Certification

If you detect non-stormwater discharges, you must identify the action(s) taken to eliminate unauthorized discharge(s). For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for a cooling water discharge.

You must also certify that no interior building floor drains exist which are connected to any storm drainage system or which may otherwise direct interior floor drainage to exterior surfaces, unless such floor drain connection has been approved and registered with the Agency. To register a floor drain, please contact Jeff Fehrs, Wastewater Management Section at (802) 241-3831. If you are unable to provide the certification, you must notify the Agency 180 days after submitting an NOI describing why the certification is not possible, any test attempted, the results of such tests or other observations and all potential sources of non-stormwater discharges to the storm sewer.

You may also consult the following EPA fact sheet for help identifying and eliminating non-stormwater discharges at your facility: <http://www.epa.gov/owm/mtb/nonstorm.pdf>

If you are not able to certify that there are no non-stormwater discharges at your facility you must complete Worksheet 2: Non-Stormwater Discharge Failure to Certify Notification in Appendix A.

4.2 Allowable Non-Stormwater Discharges (page 9)

Discharges of certain sources of non-stormwater are allowed under this permit. If your facility has any of the following non-stormwater discharges, you must document them in the table on page 9.

- Discharges from fire-fighting activities (you do not need to include this in your SWPPP);
- Fire hydrant flushings;
- Potable water, including water line flushings;
- Uncontaminated air conditioning or compressor condensate;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
- Pavement wash waters where no detergents or chemicals are used, where sediment has been removed prior to washing, and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- Routine external building washdown that does not use detergents;
- Uncontaminated ground water or spring water;
- Foundation or footing drains where flows are not contaminated with process materials such as solvents; and

- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but NOT intentional discharges from the cooling tower (e.g., “piped” cooling tower blowdown or drains).

If your facility has mist blown from cooling towers among its allowable non-stormwater discharges, the SWPPP should assess the potential for chemicals used in the cooling tower to be discharged. The plan needs to demonstrate that this discharge will not constitute a violation of Water Quality Standards after appropriate BMPs have been implemented.

5 Best Management Practice (BMP) Identification (pages 10-16)

5.1 Source Protection BMPs (pages 10-12)

This section describes practices that will be implemented to prevent the materials used on-site from mixing with stormwater. You must implement the following types of BMPs at your facility. For each are at your facility consider using all or some of the following practices:

- **Good Housekeeping:** All exposed areas which could contribute pollution to stormwater should be kept clean and orderly. Common problem areas include trash containers, storage areas, and loading docks. Routine inspections for leaks and condition of storage containers as well as regularly scheduled waste removal should be included in this plan. Be specific. Identify how often inspections or other activities will occur.
- **Minimizing Exposure:** Wherever possible, industrial materials and activities should be protected from precipitation to prevent contamination of stormwater.
- **Preventative Maintenance:** All stormwater management devices and facility equipment should be inspected and receive maintenance on a regular basis to prevent system failures and reduced performance that could cause contamination of stormwater. Be specific. Identify how often maintenance will occur.
- **Spill Prevention and Response:** Reduce the risk of pollutant release by developing material handling procedures, inspecting and maintaining containers and tanks, and secondary containment of material storage. Proper spill response measures include having emergency spill kits available where materials are commonly handled and training material handlers in spill response procedures.

You must also implement any additional BMPs required for your Sector of industrial activity. Find your sector requirements in the permit at:

http://www.vtwaterquality.org/stormwater/htm/sw_msgpppermit.htm

5.1.1 Area Specific BMPs (pages 10-11)

For each area of your facility, list in the tables (5.1.1.1 – 5.1.1.5) the BMPs you will implement in that area. Use the above categories of BMPs as guides. You may also select BMPs from the BMP factsheets developed by the Agency. The factsheets can be found at: http://www.anr.state.vt.us/dec/waterq/stormwater/hwm/sw_msgp.htm. These lists are meant for your guidance, but you may find that other strategies are appropriate for your site.

5.1.2 Site-wide BMPs (page 12)

If there are other source protection BMPs which are not confined to any given area, you can list them here. A few practices which are common to most sites have been added to start you off. Other considerations in developing this plan include:

- Minimize tracking or blowing of raw, final, or waste materials into exposed areas.
- Install velocity dissipation devices at outfall locations to prevent erosive flows.
- Measures to prevent the adverse affects resulting from allowable stormwater discharges.
- Salt piles or piles containing salt must be enclosed or covered to prevent exposure to precipitation.

5.2 Spill Response (page 13)

Standard spill response procedures have been included in the fillinable SWPPP. If you have additional spill response procedures for your facility, include them here. Also, if you have a spill prevention and response plan for tanks, fuel pumps, or hazardous materials for your facility, attach it to the SWPPP.

5.3 Vehicle and Equipment Washing (page 14-15)

No wash waters from the cleaning of vehicles or equipment shall be allowed to enter the storm drainage system or waters of the state. The Wastewater Management's Vehicle and Equipment Washing guidelines are included in the fillinable SWPPP.

Circle the procedure (1- 4) that you will follow at your facility when washing vehicles or equipment.

5.4 Sediment and Erosion Control (page 15)

List all areas that experience active soil erosion (i.e. sand or dirt piles, unpaved parking areas). For each erosive area, develop a plan for controlling erosion. Examples of BMPs that limit and control sediment and erosion include:

- leaving as much vegetation onsite as possible
- minimizing the time that soil is exposed
- stabilizing the disturbed soils as soon as possible
- slowing down the runoff flowing across the site
- providing drainage ways for the increased runoff
- removing sediment from stormwater runoff before it leaves the site.
- preventing runoff from flowing across disturbed areas and diverting the flow to vegetated areas

5.5 Structural BMPs (page 16)

The previously listed BMPs are designed to prevent the contact of stormwater with pollutants. Contamination of stormwater can still occur in spite of source protection. List all of the existing and planned structural stormwater controls to treat this residual pollution. For existing structures, discuss their effectiveness at reducing contamination of discharges. Typical practices include:

- Stormwater runs onto vegetated areas and infiltrates
- Runoff is routed to a detention or retention basin
- Runoff from parking or storage area is passed through an Oil/Grit separator
- Runoff goes to dry wells
- A biofilter or bioremediation is used to treat runoff.

6 BMP Implementation (page 17)

6.1 Routine Inspections (page 17 and Appendix B)

All areas of the facility where industrial materials or activities are exposed to stormwater must be inspected at least once a month, unless it is documented in this plan that less frequent inspections are appropriate. Inspection of all BMP's should be performed to ascertain that they are in proper operating condition. Complete the Routine Facility Inspection form found in Appendix B when conducting the inspection.

1. Enter how often inspections will be completed (at least once a month)
2. Enter the name of the person who will conduct the inspections

6.2 **Employee Training (page 17 and Appendix C)**

A program must be developed to train employees in stormwater pollution prevention. Topics that need to be included are good housekeeping procedures, proper materials handling, preventative maintenance, and spill prevention and response. A sample list of topics has been included; add to it as necessary. This training can be combined with other employee training already in place. A schedule for training should be provided and a record of attendance kept with this plan in Appendix C.

1. Enter how often employee training sessions will occur (at least once a year)
2. Enter the period of time that new employees will be trained within after they start work.

7 **Monitoring Requirements (pages 18 – 19)**

There are several types of monitoring requirements your facility may be subject to under this permit:

- visual inspection
- benchmark monitoring
- effluent limitations monitoring
- impaired waters monitoring
- area-specific monitoring for limitations including water quality standards; and antidegradation and water quality certification requirements

Part 4, Section A through Section AD of the permit specifies monitoring requirements applicable to each sector of industrial activity. You must comply with the requirements stipulated in the relevant sector-specific section. When stormwater from co-located activities is co-mingled, you must comply with monitoring requirements for all applicable sectors.

Where more than one limitation for a specific parameter applies to a discharge, compliance with the more restrictive limitation is required. When monitoring requirements overlap, e.g., total suspended solids once per year for an effluent limitation and once per quarter for benchmark monitoring, you may use a single sample to satisfy both monitoring requirements.

For information regarding how to sample, when to sample, and finding a laboratory to process your samples refer to the Stormwater Sampling Guide found on the Vermont MSGP website: http://www.anr.state.vt.us/dec/waterq/stormwater/htm/sw_msgp.htm

1. Enter the name of your facility, where monitoring will occur

7.1 Quarterly Visual Monitoring (page 18 and Appendix D)

You must visually inspect all of your stormwater discharges once per quarter, every year. (Once every Jan – March, April – June, July – Sept, Oct – Dec) Use a clear glass jar to collect a sample within the first 30 minutes to one hour of when stormwater or snowmelt begins discharging from your facility.

In order to satisfy the record keeping requirements of the permit, use the sample form in Appendix D of the SWPPP to record the results of your quarterly visual inspections. The completed copies of the form should be kept in Appendix D as well.

Look for and document the presence of all of the following characteristics in your stormwater discharge:

- color
- odor
- clarity
- floating solids
- settled solids
- suspended solids
- foam
- oil sheen
- other obvious indicators of stormwater pollution.

1. Enter the name or title of the person who will conduct the visual monitoring

7.2 Benchmark Monitoring (page 18 and Appendix E)

Consult the sector specific requirements in Appendix 4 of the general permit for parameters that require benchmark monitoring at your facility. Monitoring is required on a quarterly basis for the first year of coverage.

1. In the table, enter the parameters that your facility is required to monitor for and the benchmark cutoff concentrations.
2. Enter the name of the person or company that will be collecting the samples
3. Enter the name of the lab that will be processing the samples

Keep a record of your monitoring results in Appendix E of the SWPPP. Each time you conduct monitoring, record the date and storm information in the Storm Event Data table in Appendix E. Appendix E also includes a copy of the Discharge Monitoring Report (DMR) that must be submitted to the Agency. Keep a copy of the DMR for each sample taken in Appendix E of your SWPPP.

7.3 Effluent Limitations (page 19)

Use the following table to determine if your facility is subject to stormwater effluent limitation guidelines. If your MSGP Sector is listed in the table and you conduct the listed activity, see your Sector specific information to determine the effluent limitation.

If there are no effluent limitations associated with your SIC code, you may simply write “No effluent limitations associated with this site”.

Discharges subject to Effluent Limitations	MSGP Sector
Runoff from material storage piles at cement manufacturing facilities	E
Runoff from phosphate fertilizer manufacturing facilities	C
Coal pile runoff	any
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	A
Mine dewatering discharges at crushed stone mines	J
Mine dewatering discharges at construction sand and gravel mines	J
Mine dewatering discharges at industrial sand mines	J
Runoff from asphalt emulsion facilities	D
Runoff from landfills	K, L

7.4 Monitoring Associated with Discharges to Impaired Waters (page 19)

Monitoring is required if your facility discharges to an impaired water. If your facility discharges stormwater to an impaired receiving water, you must monitor for the pollutant of concern once per year.

To determine if your receiving water is impaired, look in the State’s list of impaired and priority surface waters. First look in the 303(d) List found at:

http://www.vtwaterquality.org/stormwater/docs/msgp/sw_pl_2006.partA.pdf

Next look in Part B and Part D of the List of Priority Surface Waters found at:
http://www.vtwaterquality.org/stormwater/docs/msgp/sw_pl_2006.partsB-G.pdf

If you need assistance in determining whether or not your receiving water is impaired, please contact the Stormwater Section at (802) 241-3370.

8 Compliance Evaluation (page 20 and Appendix F)

The entire site must be inspected for compliance with this SWPPP at least once a year. The person conducting the evaluation should be someone who is knowledgeable of all the operations and BMPs at the facility. If possible, these inspections should take place during a precipitation event.

9 Endangered Species (page 20)

To maintain coverage under the MSGP, you must demonstrate that your stormwater discharges do not adversely affect any endangered or threatened species. To do this you must determine if your facility meets one of the criteria listed in Appendix E of the general permit.

To determine if state or federally-listed species are in “proximity to your facility”, first check the Stormwater site map at:

http://www.anr.state.vt.us/dec/waterq/stormwater/htm/sw_permitviewer.htm

A species is in “proximity” to a storm water or allowable non-storm water discharge when the species is located in the path or down gradient area through which or over which the point source discharge flows from industrial activities to the point of discharge into the receiving water, and once discharged into the receiving water, in the immediate vicinity of, or nearby, the discharge point. A species is also in “proximity” if it is located in the area of a site where discharge-related activities occur.

If you determine there are no species in proximity to the storm water or allowable non-storm water discharges, or discharge-related activities, then there is no likelihood of jeopardizing the species and you are eligible for permit coverage, having satisfied your compliance obligations under Criterion A.

If there are listed species or critical habitat on or near your project area you should contact the Vermont Department of Fish and Wildlife at 802-241-3700. The VT Dept of F&W will help you to assess whether or not there will be an impact to the endangered or threatened species of concern. Please attach any additional materials or correspondence that supports their and your determination.

If you need assistance in determining whether or not your stormwater discharges affect endangered or threatened species, please contact the Stormwater Section at (802) 241-3770.

Compliance and screening procedures relating to species listed and critical habitat designated under the Endangered Species Act

Appendix E of the MSGP

The Secretary may determine that non-compliance with the requirements of this Appendix results in ineligibility under this permit. You must meet one or more of the following six criteria (A-F) in order to comply with this permit:

- Criterion A. No state or federally-listed threatened or endangered species or their federally-designated critical habitat are in proximity to your facility; or
- Criterion B. Consultation has been performed for a separate federal action regarding your facility under Section 7 of the federal Endangered Species Act between a Federal agency and the federal Fish and Wildlife Service and/or the National Marine Fisheries Service (together, the “Services”). Consultations can be either formal or informal, and would have occurred only as a result of a separate action (e.g., during application for an individual wastewater discharge permit, the issuance of a wetlands dredge and fill permit, or as a result of a NEPA review).

The consultation must have addressed the effects of the facility’s stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities on state and federally-listed threatened or endangered species and federally-designated critical habitat, and resulted in either:

- i. a biological opinion finding no jeopardy to federally-listed species or destruction/adverse modification of federally-designated critical habitat; or
 - ii. written concurrence from the Services with a finding that the facility’s stormwater discharges associated with industrial activity and allowable non-stormwater discharges are not likely to adversely affect any federally-listed species or federally-designated critical habitat; or
- Criterion C. In the case that a State listed species is identified, the industrial activities are authorized through the issuance of an Endangered and Threatened Species permit under 10 VSA section 5408 and that authorization addresses the effects of the stormwater discharges associated with industrial activity and allowable non-stormwater discharges on state-listed species. In the case that a Federally listed species is identified, the industrial activities are authorized through the issuance of a permit under section 10 of the ESA and the issuance of an Endangered and Threatened Species permit under 10 VSA section 5408, and those authorizations address the effects of the stormwater discharges associated with industrial activity and allowable non-stormwater discharges on listed species and designated critical habitat; or
- Criterion D. Coordination between the operator and the Services has been concluded or between the operator and Vermont Fish and Wildlife has been concluded. The coordination must have addressed the effects of the facility’s storm water discharges associated with industrial activity and allowable non-storm water discharges on federally-listed threatened or endangered species and federally-

designated critical habitat, or upon State listed threatened or endangered species as required. The result of the coordination must be a written statement from the Services or from the State, as applicable, that there are not likely to be any adverse effects to federally-listed species or federally-designated critical habitat, or State-listed species as applicable. Any conditions or prerequisites deemed necessary to achieve no adverse effects become compliance conditions for MSGP coverage; or

Criterion E. Stormwater discharges associated with industrial activity and allowable non-stormwater discharges are not likely to adversely affect any state or federally-listed endangered and threatened species or federally designated critical habitat; or

Criterion F. The facility's stormwater discharges associated with industrial activity and allowable non-stormwater discharges were already addressed in another operator's SWPPP under Criteria A-D which included the industrial activities and there is no reason to believe that state and federally-listed species or state and federally-designated critical habitat not considered in the prior certification may be present or located in proximity to the facility. To certify compliance under this criterion there must be no lapse of coverage in the other operator's certification. By certifying compliance under this criterion, you agree to comply with any measures or controls upon which the other operator's certification was based. You must comply with any applicable terms, conditions, or other requirements developed in the process of meeting the eligibility requirements of the criteria in this section to remain in compliance with this permit. Such terms and conditions must be documented and incorporated into your Stormwater Pollution Prevention Plan (SWPPP).

Assessing Your Facility Discharges

You must follow these procedures to assess the potential effects of stormwater discharges and stormwater discharge-related activities on state and federally listed species and the critical habitat of any federally-listed species. When evaluating these potential effects, you must evaluate your entire facility. For purposes of these procedures, the term "facility" is inclusive of the term "Action Area." Action area is defined in 50 CFR §402.02 as all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. This includes areas beyond the footprint of the facility that may be affected by stormwater discharges and stormwater discharge related activities. "Facility" is defined in Appendix A. Note that dischargers who are able to certify compliance under Criterion B, C, D, or F because they have both a previously issued ESA section 10 permit and an Endangered and Threatened Species permit under 10 VSA section 5408 , a previously completed ESA section 7 consultation and consultation with the Vermont Department of Fish and Wildlife, or because their activities were already addressed in another discharger's certification of compliance, may proceed directly to Step Four.

Step One: Determine if Listed Threatened or Endangered Species and Federally Designated Critical Habitat are Present On or Near Your Facility.

You must first determine whether state or federally-listed species commonly reside in your area. The Vermont Agency of Natural Resources maintains a web site showing the location of all State and Federally listed species in Vermont. If you know the location or the latitude and longitude of your facility, you can visit: <http://www.anr.state.vt.us/site/html/maps.htm> and obtain the necessary information. A species is in “proximity” to a storm water or allowable non-storm water discharge when the species is located in the path or down gradient area through which or over which the point source discharge flows from industrial activities to the point of discharge into the receiving water, and once discharged into the receiving water, in the immediate vicinity of, or nearby, the discharge point. A species is also in “proximity” if it is located in the area of a site where discharge-related activities occur. If you determine there are no species in proximity to the storm water or allowable non-storm water discharges, or discharge-related activities, then there is no likelihood of jeopardizing the species and you are eligible for permit coverage, having satisfied your compliance obligations under Criterion A. If there are listed species or critical habitat on or near your project area you should contact the Vermont Department of Fish and Wildlife at 802-241-3700 and you will need to do one or more of the following:

- Conduct visual inspections. This method may be particularly suitable for facilities that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for facilities that discharge directly into municipal separate storm sewer systems; or
- Conduct a formal biological survey (typically performed by environmental consulting firms). In some cases, particularly for larger facilities with extensive stormwater discharges, biological surveys may be an appropriate way to assess whether species are located on or near the project area and whether there are likely adverse effects to such species. A biological survey may in some cases be useful in conjunction with Steps Two, Three or Four of these instructions; or
- Conduct an environmental assessment under the National Environmental Policy Act (NEPA), if applicable. Such reviews may indicate if listed species are in proximity to the facility. Coverage under this MSGP may trigger such a review for new sources (that is, dischargers subject to New Source Performance Standards under section 306 of the Clean Water Act). Other facilities might require review under NEPA for other reasons, such as federal funding or other federal involvement in the facility. If listed threatened or endangered species or critical habitat are present in the project area, you must look at impacts to species and/or habitat when following Steps Two through Four. Note that many but not all measures imposed to protect listed species under these steps will also protect critical habitat. Thus, meeting the compliance requirements of this MSGP may require measures to protect critical habitat that are separate from those to protect listed species.

Step Two: Determine if your facility’s Stormwater Discharge Associated With Industrial Activity or Allowable Non-Stormwater Discharges Are Likely to Adversely Affect Listed Threatened or Endangered Species or Designated Critical Habitat

To ensure MSGP compliance, you must assess whether your stormwater discharges associated with industrial activity or allowable non-stormwater discharges are likely to adversely affect listed threatened or endangered species or designated critical habitat that are present on or near your facility. Potential adverse effects from stormwater discharges associated with industrial activity include:

- **Hydrological.** Stormwater discharges may cause siltation, sedimentation or induce other changes in receiving waters such as temperature, salinity or pH. These effects will vary with the amount of stormwater discharged and the volume and condition of the receiving water. Where a stormwater discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely. Industrial activity itself may also alter drainage patterns on a site where construction occurs that can impact listed species or critical habitat.
- **Habitat.** Site development, grading or other surface disturbances from industrial activities, including storage of materials and the installation or placement of stormwater BMPs, may adversely affect listed species or their habitat. Stormwater may drain or inundate listed species habitat.
- **Toxicity.** In some cases pollutants in stormwater may have toxic effects on listed species.

The scope of effects to consider will vary with each site. If you are having difficulty determining whether your facility is likely to adversely affect listed species or critical habitat, or the State of Vermont Department of Fish and Wildlife or a Federal agency has already raised concerns with your discharge, you must contact the appropriate office for assistance. For all threatened or endangered species, contact the VT Dept of Fish and Wildlife at 802-241-3700. In addition, if the threatened or endangered species is Federally listed, contact the US Fish and Wildlife Service, Attn: Anthony Tur, 70 Commercial St. Suite 300, Concord, NH 03301. If adverse effects are not likely, you have ensured compliance under Criterion E and can apply for coverage under the MSGP. If your stormwater discharge may adversely affect listed species or critical habitat, you must follow Step Three.

Step Three: Determine if Measures Can Be Implemented to Avoid Adverse Effects.

If you make a preliminary determination that adverse effects to listed species and/or critical habitat are likely to occur, you can still ensure compliance under Criterion E if immediate measures are undertaken to avoid or eliminate the likelihood of adverse effects and such measures are included in your SWPPP. These measures may be relatively simple, e.g., re-routing a stormwater discharge to bypass an area where species are located, relocating BMPs, or changing the “footprint” of the industrial activity. If you cannot ascertain which measures to implement to avoid the likelihood of adverse effects, you must follow Step Four (iii).

Step Four: Determine if the Compliance Requirements of Criterion B, C, D or F Can Be Met.

Where adverse effects are likely and you are uncertain about how to avoid or eliminate the likelihood of adverse effects, you must contact the Vermont Department of Fish and Wildlife and/or a Federal agency (see subpart iii below). However, you may still ensure compliance with

the MSGP if any likely adverse effects can be addressed through meeting Criterion B, C, D, or F as follows:

- i. A consultation under ESA Section 7 has been performed for your industrial activity (see Criterion B).
- ii. In the case that a State listed species is identified, an Endangered and Threatened Species permit under 10 VSA § 5408 has been issued (see Criterion C). Stormwater discharges from your industrial facility may be in compliance with this MSGP if some activity is authorized through the issuance of a permit under 10 VSA § 5408 and that authorization addressed the effects of your stormwater discharges on state-listed species and any designated habitat.
In the case that a Federally listed species is identified, you must have both the Endangered and Threatened Species permit under 10 VSA § 5408 listed above and an incidental taking permit under Section 10 of the ESA that has been issued for your activity (see Criterion C). Stormwater discharges from your industrial facility may comply with this MSGP if some activity is authorized through the issuance of a permit under both 10 VSA § 5408 and section 10 of the ESA. These authorizations must address the effects of your stormwater discharges on state and federally-listed species and federally designated critical habitat. You must follow FWS and/or NOAA Fisheries Service procedures when applying for an ESA Section 10 permit (see 50 CFR §17.22(b)(1) for FWS and §222.22 for NOAA Fisheries Service). Application instructions for section 10 permits for FWS and NOAA Fisheries Service can be obtained by accessing the FWS and NOAA Fisheries Service websites (<http://www.fws.gov> and <http://www.nmfs.noaa.gov>) or by contacting the appropriate FWS and NOAA Fisheries Service regional office.
- iii. In the case of a state-listed species you have coordinated your activities with the Vermont Department of Fish and Wildlife (see Criterion D). In the absence of any other conditions set forth in Step Four, you may still be able to comply with the MSGP if the Vermont Department of Fish and Wildlife provides a letter or memorandum concluding that the direct and indirect effects of permitting your stormwater discharges will be unlikely to adversely affect listed species or to adversely modify designated critical habitat. If you adopt measures to avoid or eliminate adverse effects, per the Vermont Department of Fish and Wildlife requirements or recommendations, you must abide by those measures for the duration of your coverage under the MSGP. Any such measures must be described in the Stormwater Pollution Prevention Plan and are enforceable MSGP conditions and/or conditions of this permit. In the case of a federally listed species, you must have coordinated your activities with the Vermont Department of Fish and Wildlife as stated above and you must have coordinated your activities with the appropriate Federal agency (see Criterion D). In the absence of any other conditions set forth in Step Four, you may still be able to comply with the MSGP if a Federal agency provides a letter or memorandum concluding that the direct and indirect effects of permitting your stormwater discharges will be unlikely to adversely affect listed species or to adversely modify designated

critical habitat. If you adopt measures to avoid or eliminate adverse effects, per the Service's requirements or recommendations, you must abide by those measures for the duration of your coverage under the MSGP. Any such measures must be described in the Stormwater Pollution Prevention Plan and are enforceable MSGP conditions and/or conditions of this permit.

- iv. You are covered under the compliance certification of another operator for the project area (see Criterion F). Your stormwater discharges were already addressed in another discharger's certification of compliance under Criteria A through E, which also included your facility and determined that state and federally listed endangered or threatened species or federally designated critical habitat would not be jeopardized. To certify compliance under this criterion there must be no lapse of coverage in the other operator's certification. By certifying compliance under Criterion F, you agree to comply with any measures or controls upon which the other discharge certification under Criterion B, C, or D was based.

You must comply with any terms and conditions imposed under the compliance requirements of Criterion A through F to ensure that your stormwater discharges are protective of listed species and/or federally-designated critical habitat. Such terms and conditions must be incorporated in the project's Stormwater Pollution Prevention Plan (SWPPP). If the compliance requirements cannot be met, then you are in violation of this permit and the Secretary may determine that you are not eligible for coverage under this MSGP. In these instances, you may consider applying to State of Vermont for an individual permit.

10 General Requirements (pages 20 – 21)

10.1 Record Keeping and Reporting (page 20)

You must send a copy of your SWPPP to the Stormwater Section and keep the original at your facility. This plan will be made available upon request to the Agency, operator of a municipal separate storm sewer receiving the discharge, and to the public if requested in writing to do so.

10.2 Maintaining the Updated SWPPP (page 20)

You must review, and amend your SWPPP as appropriate whenever there is: construction or a change in design, operation or maintenance at your facility such that these situations have a significant impact on the discharge, or potential for discharge, of pollutants from your facility; whenever your routine inspection or compliance evaluation determines deficiencies in your BMPs; whenever an inspection by the Agency determines that modifications to your SWPPP are necessary; whenever you have a spill, leak or other release at your facility; or any time there is an unauthorized discharge from your facility.

SWPPP modifications must be made within 14 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified BMPs must be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the Secretary. The amount of time taken to modify a BMP or implement additional BMPs must be documented in your SWPPP.

If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release; the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. If the SWPPP modification is based on a release or unauthorized discharge, you must provide the Agency with a copy of your modified SWPPP. Unauthorized releases and discharges are subject to the reporting requirements of Part 3.5.1 of the permit.

10.3 Certification (page 21)

The certification must be signed by an “authorized representative”, someone who has the authority to certify this type of document. The SWPPP should be re-certified and dated each time it is amended.

Authorized representatives include:

1. For a corporation: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (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, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations;

the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
3. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

11 Summary of Updates (page 22)

You must keep a record of changes to the SWPPP that are required as a result of monitoring, inspections, or at the request of Agency personnel. Use the table in the fillinable SWPPP to keep track of your plan updates.