

## **APPENDIX 7**

### **BEST MANAGEMENT PRACTICES (BMP) PLAN**

Existing permittees shall continue to implement and new permittees shall develop and implement a best management practices (BMP) plan for their hydroelectric generating facility. The BMP plan shall be prepared in accordance with good engineering practices.

A permittee with flood/high water discharges authorized under Parts 1.5 and 2.5 of this permit shall also develop and implement specific flood/high water practices and procedures to eliminate pollutants from areas of the facility that would be inundated during flood/high water events and that would reasonably be expected to add significant amounts of pollutants to the identified flood/high water discharges from the facility. Areas of the facility inundated by flood or high waters should be maintained to prevent pollutants from entering the surrounding surface waters during flood or high water events. These specific flood/high water practices and procedures shall be described and included in a flood/high water BMP plan for the facility following the appropriate items in Part D below. The permittee must also implement the provisions of this flood/high water BMP plan required under this Part as a condition of this permit.

#### **A. Deadlines for BMP Plan Preparation and Compliance**

1. New permittees shall develop and implement BMP plans, and except as provided elsewhere in this permit, shall provide for compliance with the terms of the permit and the BMP plan, no later than 180 days after the permit authorization date. Facilities with an existing BMP plan shall determine whether their plan requires revising and if it so determines, the BMP plan shall be revised within 90 days after the permit authorization date.
2. Upon a showing of good cause, the Director of EPA may establish, in writing, a later date for preparing and complying with a new or revised BMP plan.

#### **B. Signature and BMP Plan Review**

1. The BMP plan shall be signed in accordance with Appendix 6.D.2. (Signatory Requirement) and be retained on-site at the facility in accordance with Appendix 6.C.1.b. (Monitoring and Records) of this permit.
2. The permittee shall make its facility's BMP plan available upon request to the Director of EPA, or an authorized representative, as well as to the Commissioner of the MassDEP or NHDES, or their representatives.
3. The Director of EPA or the State Commissioner, or an authorized representative of either, may notify the permittee at any time that the BMP plan does not meet one or more of the

minimum requirements of this Part. Such notification shall identify those provisions of the permit which are not being met by the BMP plan, and identify which provisions of the BMP plan require modifications in order to meet the minimum requirements of this Part. Within sixty (60) days of such notification from the Director, (or as otherwise provided by the Director), or an authorized representative, the permittee shall make the required changes to the BMP plan and shall submit to the Director a written certification that the requested changes have been made.

C. Keeping BMP Plans Current

The permittee shall amend the BMP plan whenever there is a change in design, construction, operation, or maintenance procedure at the facility, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States or if the BMP plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Section D.2. (Description of Potential Pollutant Sources) or in otherwise achieving the general objectives of controlling pollutants in the internal facility drainage water discharges. Amendments to the BMP plan may be reviewed as described in Section B.

D. Contents of BMP Plan

The BMP plan shall include the following items, at a minimum:

1. Pollution Prevention Team - The BMP plan shall identify a specific individual or individuals within the facility organization as members of the Pollution Prevention Team that are responsible for developing the BMP plan and for assisting the facility manager in the implementation, maintenance, and revision of this plan. The responsibilities of each team member must be listed. The activities and responsibilities of the Pollution Prevention Team shall address all aspects of the facility's BMP plan.
2. Description of Potential Pollutant Sources - The BMP plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to internal facility drainage water discharges. The BMP plan shall identify all activities and significant materials which may be potentially significant pollutant sources. The BMP plan shall include, at a minimum:
  - a. Drainage
    - (1) A plot of the floor drainage of the facility's interior including sumps and oil/water (O/W) separators and locations where major spills or leaks identified under Section D.2.c. (Spills and Leaks) have occurred.

- (2) For internal facility drainage water discharges that could reasonably be expected to contain significant amounts of pollutants, a prediction of their direction of flow, and an identification of the types of pollutants which are likely to be present in these discharges. Factors to consider include the toxicity of pollutants; the quantity of pollutants used; the likelihood of contact with internal facility drainage water discharges; and the history of significant leaks or spills.
- b. Inventory of Exposed Materials - The BMP plan shall include an inventory of the types of materials handled at the facility. Such inventory shall include a narrative description of significant materials that are or have been handled, treated, stored or disposed in a manner to allow exposure to internal facility drainage water between the time of three years before the active date of permit coverage and the present; method and location of on-site material storage or disposal; materials management practices employed to minimize contact of materials with internal facility drainage water between the time of three years before the active date of permit coverage and the present; the location and description of existing structural and non-structural control measures to reduce pollutants in the internal facility drainage water discharges; and a description of any treatment that these discharges receive.
- c. Spills and Leaks - A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred, during the three -year period prior to the active date of permit coverage, at areas that drain to an outfall associated with any discharge authorized by this permit. This list shall be updated as appropriate during the term of the permit.
- d. Sampling Data - A summary of sampling data collected during the term of this permit for any permitted outfalls or internal locations.
- e. Risk Identification and Summary of Potential Pollutant Sources - A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; maintenance programs; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the facility and for each potential source, any pollutant or pollutant parameter (e.g. biochemical oxygen demand, etc.) of concern shall be identified.
3. Measures and Controls - The permittee shall develop a description of internal facility drainage water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a BMP plan shall reflect identified potential sources of pollutants at the facility. The description of internal facility drainage water management controls shall address the following minimum components, including a schedule for implementing such controls:

- a. Good housekeeping - Good housekeeping requires that all areas of the facility which may contribute pollutants to internal facility drainage water discharges be maintained to be clean and orderly.
- b. Preventive Maintenance - A preventive maintenance program shall involve at least annual inspection and maintenance of internal facility drainage water management devices (e.g., cleaning oil/water separators, pits, sumps) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.
- c. Oil/Water Separators - Proper operation of oil/water separators shall include inspections at least annually or at appropriate intervals as determined by the manufacturer's recommendations, by regularly scheduled maintenance, and by review of sampling data. Removal and proper disposal of oily and solid waste shall be conducted as necessary to avoid carryover of these materials to the receiving water. Detailed operating procedures for oil/water separators shall be maintained to insure the maximum design flow rate of the oil/water separators will not be exceeded.
- d. Spill Prevention and Response Procedures - Areas where potential spills, which can contribute pollutants to internal facility drainage water discharges, can occur and their accompanying drainage points shall be identified clearly in the BMP plan. Procedures shall be developed and implemented to eliminate and/or minimize the opportunity for oil leakage to enter the drainage system at the facility. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment in the BMP plan should be considered and implemented. Procedures for cleaning up spills shall be identified in the BMP plan and made available to the appropriate personnel. The necessary equipment to implement a clean-up must be available to personnel.
- e. Inspections - Facility personnel that are familiar with the facility's BMP plan shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the BMP plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to any findings of such inspections. Records of inspection shall be maintained.
- f. Employee Training - Employee training programs shall inform personnel responsible for implementing activities identified in the BMP plan or otherwise responsible for internal facility drainage water management, at all levels of responsibility, of the components and goals of the BMP plan. Training should address topics such as spill response, good housekeeping and material management practices. The BMP plan shall identify periodic dates for such training, which shall be conducted at least once per year.

- g. Record-keeping and Internal Reporting Procedures - A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of internal facility drainage water discharges shall be included in the BMP plan required under this Part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the BMP plan.
- h. Record-keeping and Reporting Procedures - An Annual Report summarizing the scope of permit compliance evaluations(s), personnel making the evaluations, the dates(s) of the evaluations, major observations relating to the implementation of the BMP plan and actions taken shall be prepared and retained as part of the BMP plan for at least three years after the date of the evaluations(s). A permit compliance evaluation shall be undertaken at least annually and involve the permittee's determination that the plan is current, that it includes all of the elements of Parts D.1 and D.2, and that all of the measures and controls in Part D.3 are being implemented.

These Annual Reports shall be retained on-site at the hydroelectric generating facility in accordance with Appendix 6.C.1.b. (Monitoring and Records) of this permit. The Annual Report shall identify any incidents of noncompliance with the permit or the BMP plan (such as oil spills, or other discharges of toxic or hazardous pollutants to the receiving waters). Where an Annual Report does not identify any incidents of noncompliance with the permit or the BMP plan, the Annual Report shall contain a certification that the facility is in compliance with the BMP plan and this permit. The Annual Report shall be signed in accordance with Appendix 6.D.2 (Signatory Requirements) of this permit.

- 4. Trash Racks or Intake Screens - The permittee shall develop and implement procedures to remove solid materials, with the exception of naturally occurring materials, from the trash racks or intake screens to the extent practicable in order to avoid releasing these materials back to the receiving water. Provisions shall be included and implemented to provide disposal for the removed solid materials in accordance with the Massachusetts Solid Waste Management Facility Regulations at 310 CMR 19.000 or the New Hampshire Solid Waste Rules at Env-Sw 100-2100, as appropriate. Inspections and maintenance of the trash racks and intake screens shall be scheduled and documented with the record-keeping included with the BMP plan and summarized in the Annual Report required under Section D.3.h. The permittee shall amend the removal procedures whenever there is a change in the design, construction, operation, or maintenance which has a significant effect on the deposition of solid material on the trash racks or intake screens.

The trash removal activities are to be performed where it is reasonable and feasible at the facility. These trash removal procedures are to include appropriate safety practices since the permittee is responsible for employee safety at the facility.

5. Backwash strainer - For those facilities with a backwash strainer on the cooling water intake line, the permittee shall develop and implement inspection and maintenance procedures specified in the BMP plan, at least once per quarter, to insure proper operation of the backwash strainer. Qualified facility personnel shall be identified to inspect this equipment. Records of the inspections and maintenance shall be maintained and summarized in the Annual Report required under Section D.3.h of this Appendix.

E. Optional Representative Outfall Sampling

A facility may contain two or more outfalls with substantially identical discharges. The permittee may sample a representative outfall in accordance with Parts 1.7.a and 2.7.a of this permit, provided the BMP plan includes the following items:

1. Identify Representative Outfalls - The permittee shall prepare a description of the locations of outfalls with substantially identical discharges at the facility, describe the operations contributing flow, explain why the discharges are expected to be substantially identical, and identify the selected representative outfall for effluent sampling under this permit. The other outfalls with discharges covered by the representative outfall sampling results shall be listed. The outfalls should be grouped and numbered using the system established in the Notice of Intent for the facility.
2. Amend Representative Outfall Information -The permittee shall amend the representative outfall information whenever such designated outfall is eliminated or ceases to be representative.