

DRAFT

BEST MANAGEMENT PRACTICES PLAN

For

WILSON CITY POWER STATION

ABACO, BAHAMAS

**EXAMPLE PLAN  
TO BE PREPARED  
AT COMPLETION OF FACILITY**

OCTOBER 2008

# BEST MANAGEMENT PRACTICES PLAN

## TABLE OF CONTENTS

- I. BMP POLICY AND OBJECTIVES
- II. BMP COMMITTEE
- III. RISK IDENTIFICATION AND ASSESSMENT
- IV. REPORTING OF BMP INCIDENTS
- V. MATERIALS COMPATIBILITY
- VI. GOOD HOUSEKEEPING
- VII. PREVENTIVE MAINTENANCE
- VIII. INSPECTIONS AND RECORDS
- IX. SECURITY
- X. EMPLOYEE TRAINING

### ATTACHMENT A

BMP Committee (To be completed later)

### ATTACHMENT B

Source Risk Assessment Inventory List (To be completed)

### ATTACHMENT C

BMP Site Drawing (To be furnished later)

### ATTACHMENT D

Storm Water Pollution Prevention Plan (To be furnished later)

BMP APPROVAL

PLANT MANAGER: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

REVISION LOG

Revision	Description	Date	Plant Manager Signature
0.0	First issuance after construction/start-up & commercial operation		
1.0			
2.0			
3.0			
4.0			
5.0			

## **I. BMP POLICY AND OBJECTIVES**

The Best Management Practices Plan (BMP) for the Wilson City Power Project is developed to heighten management and employee awareness of potential pollution causing spill situations, and develop practices to reduce their risk of occurrence.

The BMP for the Wilson City Power Project addresses all toxic pollutants and hazardous substances used at the site. The BMP is an umbrella document that includes the Stormwater Pollution Prevention Plan (SWPPP). See the Table of Contents for all attachments to be included in the BMP.

The objective of the BMP is to evaluate the potential contaminate sources at the site and recommend procedures and practices, where needed, to lessen the potential for pollutant discharges reaching ecological resources including wetlands and groundwater. The BMP will be fully implemented when the plant becomes operational and should be annually reviewed and updated as site changes necessitate.

## **II. BMP COMMITTEE**

A BMP Committee exists in order to effectively implement the EMP Plans. The committee will be comprised of Wilson City Power's Environmental Safety & Health representative and power plant personnel including the Plant Manager.

The BMP Committee meets quarterly (rotating representation by one crew per quarter) to carry out the primary functions listed below.

1. The BMP Committee will advise site management, which has overall responsibility and accountability for the plan, on technical matters. The BMP Committee will assist site management in implementation, to update and maintain the plan.

2. The committee will evaluate the BMP Plan relative to the safe handling and identification of toxic substances and hazardous materials used at the site. The committee will also review potential spill sources and communicate updates/changes to Wilson City Power's management.
3. The BMP Committee is responsible for the overview of procedures, practices and training, developed or provided by site personnel. These include:
  - (a) Incident reporting procedures
  - (b) BMP inspections and record keeping procedures
  - (c) Personnel training programs
  - (d) Incident response and review with Wilson City Power Project's Emergency Response (HAZMAT) Team
  - (e) Clean-up, disposal and notification procedures with Wilson City Power Project's Emergency Response (HAZMAT) Team
  - (f) Good housekeeping, security practices and preventive maintenance measures.
4. The BMP Committee will review all Wilson City site environmental incidents to determine the need for revision or corrections of deficiencies in this Wilson City BMP Plan, and will assist in any interdepartmental coordination of the plan.
5. The BMP Committee will meet as necessary, but at least quarterly. Additional meetings will be held in case of any reportable spill or other incident, to discuss changes or improvements to the BMP Plan, and/or changes in the use of toxic substances or hazardous materials at the Wilson City Power Project site.

### **III. RISK IDENTIFICATION AND ASSESSMENT**

Sources of toxic substances and hazardous materials used at Wilson City Power Project Station are identified and evaluated in this BMP. These sources are identified in Attachment B. Each source is evaluated for its potential risk of discharge to receiving waters.

Each point source is evaluated for its risk to the environment, its potential flow path if spilled, secondary containment features, the proposed action to contain or control the spill, and current or recommended measures for reducing the risk of release to the environment via various BMP controls.

Toxic substances and hazardous material locations at Wilson City Power Project are shown on the Wilson City Power Project Site BMP plan drawing. Contaminant locations shown on the drawing are identified according to the Source Risk Assessments given in Attachment B. The latest risk assessment will be incorporated in each BMP Plan revision.

An evaluation of each stored material at the site is given in Attachment B. For nearly all the assessments, the potential risk to the environment was considered to be very low. Since dikes do not exist, drainage systems route spills to sumps, oil tank traps, or site basins where the capability exists to contain, isolate and clean-up spills before they can migrate off site.

Site inspections, good housekeeping, and maintenance of equipment and systems are described in more detail later in this plan. The practices are also important in reducing the potential for leaks or spills of toxic substances and hazardous materials to the environment.

#### **IV. REPORTING OF BMP INCIDENTS**

The responsibility for initial control and reporting to appropriate site personnel of all hazardous material leaks, spills or other improper discharges, rests with the employee who first detects the incident. All spills will be reported to the Wilson City Power Project Station Control Room, following action to stop the leak or spill from worsening. The control room operators inform the plant manager and the Environmental Safety and Health representative.

#### **V. MATERIALS COMPATIBILITY**

Proper knowledge of the compatibility of the materials that are kept on site is a key component in the prevention of spills and other pollution causing incidents. Incompatibility of materials can cause

immediate danger to human health and the environment and can result in equipment failure due to corrosion, fire, or explosion.

Therefore, it is essential that personnel be made knowledgeable about those hazardous materials that are incompatible with each other, and the effects they have on containment or conveyance-systems. It is also important to be familiar with compatibility of containers with their environment.

The following elements of material compatibility will be considered:

- The use of existing knowledge of standard industry practices regarding the compatibility of material including, but not limited to, MSDS (Material Safety Data Sheets)
- The proper cleaning of vessels prior to being used to store or handle incompatible chemicals and prior to mixing compatible chemicals.
- Operation of plant equipment and vessels per engineering specifications.

## **VI. GOOD HOUSEKEEPING**

The following procedures are pursuant to good housekeeping, to lessen the risk of a spill or pollution-causing incident:

- All containers of hazardous materials/waste are sealed/closed and are labeled and managed according to all applicable laws and regulations. Dry chemicals are not stored in open or punctured bags. Dry chemicals found to be in inappropriate containers are repackaged or sealed using a suitable method for the product.
- Drums, bags, or other containers will be stacked according to container limitations and arranged to facilitate inspection for leaks or spills.
- Walkways and pathways will be maintained free of obstruction.
- Bags storing dry chemicals will be raised off the floor, preferably on pallets, to prevent any unwanted interaction of chemical with materials (liquid or solid), which may be on the floor.

- Spilled liquids shall be controlled immediately to prevent run-off into storm water drains, natural waterways, or ground water.
- Horizontal surfaces will be vacuumed or swept to control dry (solid) spills.
- All new or used oil storage areas will be clearly marked and maintained in covered drums or containers, and stored in designated areas. All containers are clearly labeled indicating the contents.
- Storage areas are inspected at least weekly for leaks, spills, and/or degrading containers. Containers are inspected at least quarterly to ensure the expiration date has not been exceeded.
- Returnable containers are returned to the vendor when empty. For containers with removable liners, the liners are removed, classified, and then disposed properly; the containers may then be used for other purposes, recycled, or disposed. All other containers are triple rinsed; these containers may then be reused, recycled, or disposed.

## **VII. PREVENTIVE MAINTENANCE**

Wilson City Power Project Station has a variety of audit and site assessment practices to assist with detection of potential problems, which are included in BEC's EMS. These practices are standard operating procedure to ensure proper operation and maintenance of Wilson City Power Project Station equipment and materials, and prevention of a spill or pollution-causing incident at the plant site. For additional information, refer to Wilson City Power Project Station Procedures Manual.

## **VIII. INSPECTIONS AND RECORDS**

Inspections play an important role in identifying actual or potential problem areas that could cause a spill or pollution incident at Wilson City Power Project Station. As described in section VII, a variety of audits, site assessments, and inspections take place on a scheduled basis to ensure environmental compliance and to avoid any spill or pollution causing incidents.

Records of these activities are kept on file in the Administrative Building, Wilson City Power Project. They are available for inspection by any regulating agency.

## **IX. PLANT SECURITY**

Wilson City Power Project is never left unattended. The site is enclosed by perimeter steel, chain-link fencing. During night shift, the perimeter gate is closed and locked. Employees gain access to the plant through the secured gate and attendant guard. Company badging is required of every employee.

Adequate lighting is available around the site to assist in detection of non-employee persons as well as possible vandals. In case of a spill or pollution-causing incident, outdoor night lighting is sufficient on-site for control, mitigation and clean up.

## **X. EMPLOYEE TRAINING**

Training programs is essential for providing employees with a complete understanding of the BMP plan and its objectives. Training stresses notification and immediate response to spill.

Training is given to all new employees and periodically thereafter. BMP Plan refresher training is given according to a Wilson City Power Project Station operator's work or job assignment, through communications with the Environmental Safety and Health Department and the designated Wilson City personnel-training provider. The type and quantity of training depends on the employee's work assignment as it relates to managing hazardous materials. All employees receive general overview training while those that are involved in the clean up of hazardous materials spills receive the required Occupational Health and Safety Administration (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) training (or equivalent). The general overview training may be as little as an hour, while the training for those involved in emergency response and clean-up must be as much as 40 hours.

## ATTACHMENT A

BMP COMMITTEE EFFECTIVE DATE\*

[TO BE SUPPLIED LATER]

\* Meetings are held quarterly in the months to be determined. Technicians attend one quarter of four according to designated work or shift schedule. Quorum for a BMP meeting is four Wilson City Power Project Station team members, one of who must be the Senior Wilson City personnel/ or operator.

## ATTACHMENT B

Risk Identification Assessment  
(To be completed)

## ATTACHMENT C

Bmp site Plan (to be attached)

## ATTACHMENT D

Storm water Pollution Prevention plan  
(To be completed)