1. **Introduction** - This PMP provides specific actions to be taken by the Mid-Brazos Project in its development and implementation of an Environmental Management System (EMS) in compliance with Executive Order 13148 of April 21, 2000, ISO 14001, DOD, DA and USACE policies. This plan becomes effective upon approval by the Chief, Operations Division. Annual revisions of all or certain portions of this plan will be accomplished as needed or required on a scheduled basis.

2. **Objective** - The objective of the PMP is to identify and plan step-by-step actions that will enable the development and implementation of an EMS for the Mid-Brazos Project utilizing ISO 14001 standards.

3. **Regulatory Authority** - Executive Order (EO) 13148, “Greening the Government Through Leadership in Environmental Management,” directs all federal agencies as follows:
   
   - By 31 December 2005, each agency shall implement an [EMS] at all appropriate agency facilities based on facility size, complexity, and the environmental aspects of facility operations.
   - The facility [EMS] shall include measurable environmental goals, objectives, and targets that are reviewed and updated annually.
   - Once established, [EMS] performance measures shall be incorporated in agency facility audit protocols.

4. **Army Policy** - The Deputy Assistant Secretary of the Army signed an action memorandum on EMS, which directs appropriate facilities to meet the following requirements:
   
   - Adopt the internationally recognized management system standard, ISO 14001, as a goal.
   - Third party registration to the standard is not required.
   - Comply with EO 13148 by meeting the Army/Department of Defense (DoD) implementation metrics by 31 December 2005 (see below).
   - Use continual improvement to build the remaining parts of a mission-focused, ISO 14001–conformant EMS by December 2009.

5. **References** – Appendix B
6. **Definitions** – Appendix C
7. Scope

A. **Goal:** The goal of this effort is to implement an Environmental Management System for the Mid-Brazos Project Office, which includes Whitney Lake, Aquilla Lake, Waco Lake, Somerville Lake, Proctor Lake, Hord’s Creek Lake, O.C. Fisher Lake and Whitney Power Plant.

B. **Focus Areas:** There are six major business focus areas which will be included in the EMS: Hydropower, Recreation, Natural/Cultural Resource Management, Construction/Maintenance Activities, Administrative Activities

C. **Principles:** The Mid-Brazos EMS will be based on the following principles:
   - Cost Effective and economically viable,
   - Practical, usable and useful,
   - Focused on continual improvement;
   - Improvement rests on changing attitudes & behaviors
   - The EMS serves the organization and its mission, not the reverse
   - EMS becomes a process, not an event
   - The EMS is advanced and sustained by people & their actions, not dialog & aspirations
   - Starts at the top, implemented throughout

D. **Implementation Roadmap** – Appendix D

8. **Project Delivery Team** - The EMS Project Delivery Team (PDT) is comprised of individuals who represent the six major business focus areas of the EMS. These focus areas are divided into Sub-PDTs, which will consist of two to three members. Several members of Sub-PDTs are geographically co-located to effectively facilitate development of the EMS. The following is a list of the following team members and their Sub-PDT assignment.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone</th>
<th>Focus Area/Sub-PDT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anjna O’Connor</td>
<td>Environmental Specialist</td>
<td>254-622-3332</td>
<td>Project Manager/ Hydropower</td>
</tr>
<tr>
<td>Chris Byrd</td>
<td>Natural Resources Spec</td>
<td>817-886-1571</td>
<td>Administrative/Procurement</td>
</tr>
<tr>
<td>Cliff Brite</td>
<td>Park Ranger</td>
<td>325-625-2322</td>
<td>Recreation</td>
</tr>
<tr>
<td>Charles Burger</td>
<td>Operations Manager</td>
<td>254-622-3332</td>
<td></td>
</tr>
<tr>
<td>Lynn Cook</td>
<td>Pwrhouse Mechanic</td>
<td>254-622-3268</td>
<td>Hydropower</td>
</tr>
<tr>
<td>Ernest Eberle</td>
<td>Conservation Specialist</td>
<td>979-596-1622</td>
<td>Natural/cultural Resources</td>
</tr>
<tr>
<td>Willard Haning</td>
<td>Civil Engineering Tech</td>
<td>254-622-3332</td>
<td>Construction/Maintenance</td>
</tr>
<tr>
<td>Margie Higginbotham</td>
<td>Administrative Officer</td>
<td>254-622-3332</td>
<td>Administrative/Procurement</td>
</tr>
<tr>
<td>Al Joe Hunt</td>
<td>Recreation Specialist</td>
<td>254-879-2424</td>
<td>Recreation</td>
</tr>
<tr>
<td>Bill Keienburg</td>
<td>Park Ranger</td>
<td>979-596-1622</td>
<td>Natural/cultural Resources</td>
</tr>
<tr>
<td>Bill Key</td>
<td>Park Ranger</td>
<td>254-755-7173</td>
<td>Recreation</td>
</tr>
<tr>
<td>Eddie Lippe</td>
<td>Civil Engineering Tech</td>
<td>254-879-2424</td>
<td>Construction/Maintenance</td>
</tr>
<tr>
<td>Linda Mckethan</td>
<td>Contract Specialist</td>
<td>254-622-3332</td>
<td>Administrative/Procurement</td>
</tr>
<tr>
<td>David Rush</td>
<td>Civil Engineering Tech</td>
<td>325-625-2322</td>
<td>Construction/Maintenance</td>
</tr>
</tbody>
</table>
9. Work Breakdown Structure - WBS 90300

10. Funding - The Mid-Brazos Project Office is scheduled to receive $200K from HQUSACE (pass back dollars) in FY05 to implement the EMS. Due to the regulatory deadline, funding was requested in FY04 to begin training and purchase software. Under the contingency of reimbursement upon receipt of the FY05 funding, SAD and Mobile District provided the Mid-Brazos Project Office with $8300 startup funding in FY04.

11. Schedule - Details for each task are available in Appendix A.

<table>
<thead>
<tr>
<th>ISO 14001 Task/Milestone</th>
<th>Responsible Party</th>
<th>Suspense</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Commitment</td>
<td>PM/Charles Burger</td>
<td>August 2004-Continous</td>
<td></td>
</tr>
<tr>
<td>Structure and Responsibility</td>
<td>PM</td>
<td>August 2004</td>
<td></td>
</tr>
<tr>
<td>EMS Self Assessment</td>
<td>PM</td>
<td>August/September 2004</td>
<td></td>
</tr>
<tr>
<td>Funding</td>
<td>PM</td>
<td>August 2004</td>
<td></td>
</tr>
<tr>
<td>Aspects/Impacts workshop</td>
<td>PDT</td>
<td>August 2004</td>
<td>August 2004</td>
</tr>
<tr>
<td>Environmental Policy</td>
<td>PM</td>
<td>September 2004</td>
<td></td>
</tr>
<tr>
<td>Awareness Training</td>
<td>All Sub PDTs and PM</td>
<td>September/October 2004</td>
<td></td>
</tr>
<tr>
<td>Document Control</td>
<td>Sub-PDT</td>
<td>September 2004</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>Sub-PDT</td>
<td>October 2004</td>
<td></td>
</tr>
<tr>
<td>Legal and Other Requirements</td>
<td>PM</td>
<td>October 2004</td>
<td></td>
</tr>
<tr>
<td>Objectives and Targets</td>
<td>All Sub-PDTs</td>
<td>December 2004</td>
<td></td>
</tr>
<tr>
<td>Environmental Management Programs</td>
<td>PM</td>
<td>January 2005</td>
<td></td>
</tr>
<tr>
<td>Operational Controls</td>
<td>All Sub PDTs</td>
<td>February 2005</td>
<td></td>
</tr>
<tr>
<td>Competence Training</td>
<td>All Sub PDTs</td>
<td>February 2005</td>
<td></td>
</tr>
<tr>
<td>Monitoring and Measurement, Records</td>
<td>All Sub PDTs</td>
<td>March 2005</td>
<td></td>
</tr>
<tr>
<td>Nonconformance</td>
<td>Sub-PDT</td>
<td>March 2005</td>
<td></td>
</tr>
<tr>
<td>Emergency Preparedness</td>
<td>Hydropower &amp; Natural Res. Sub PDTs</td>
<td>April 2005</td>
<td></td>
</tr>
<tr>
<td>EMS Documentation</td>
<td>PM</td>
<td>May 2005</td>
<td></td>
</tr>
</tbody>
</table>
12. Project Quality Control Plan and Objectives – Internal and external audits will be conducted to assess how well the EMS meets established procedures. Quality assurance of the EMS will be based on the following responsibilities:

- Operations Manager - responsible for overall environmental policy quality
- EMS Project Manager – responsible for overall quality of Mid-Brazos Project Office EMS and environmental program.
- Lake Managers - responsible for lake office level EMS implementation
- Individual team members - responsible for EMS conformance in performing tasks

13. Acquisition Strategy

Training: Consulting services will be obtained for implementation training and for an aspects/impacts workshop. It is anticipated all procurement needs under $25K will be accomplished through the Mid-Brazos Project Office. Contract procurements and activities will be closely coordinated with CESWF-CT as necessary.

Software: EMS software will be procured to facilitate development of the EMS. Procurement strategy will be as described above.

14. Risk Analysis – Schedule delays will result in non compliance with requirements of the EO.

15. SOH Hazard Analysis and Monitoring – N/A

16 Change Management Plan – The development of an EMS is required by Executive Order (EO) 13148, “Greening the Government Through Leadership in Environmental Management”. The development of the Mid-Brazos EMS will be undertaken under current regulations and modified to reflect future regulation change/amendments set forth by the EO. Changes to scope, schedule and cost will be updated as required until the EMS is fully developed and implemented.

17. Communications Strategy-The PDT will communicate the progress of the EMS development to all staff members within Mid-Brazos. Each PDT member will provide monthly updates to their respective duty station team members and ensure everyone understands the project and its requirements. The PDT and PM will utilize a software package to maintain communication and task assignments.
Lake Managers – PM will provide Executive Summary and status of Mid-Brazos of EMS – January 2005

Lake Office and Powerhouse Staff – PDT and PM will provide EMS awareness training and EMS Policy distribution – January 2005

PDT Members – PDT Members will communicate EMS progress at local lake offices - Continuously

18. Value Management – In order to maximize the funding received for this project, the Sub-PDTs are organized in a manner, which will allow groups of two and three team members to work on specific focus areas. Distribution of the workload in such a manner will ensure completion of the project on time. The Sub-PDTs are also assigned in a manner which utilizes the geographic locations of the team members as means to collaborate easily. This will minimize travel costs for those Sub-PDT members who are co-located or closely positioned geographically. The use of Netmeeting will facilitate online meetings and sharing project documents. Consulting services will be obtained for those areas, which are labor intensive to lower startup labor costs.

19. Closeout Plan – Once the initial funding is expended, the respective account will be closed. If there are remaining activities, funding sources will be sought and/or will be accomplished with O&M funds as they become available. Once all the requirements of the EO have been met, the project will be closed out in P2.

20. Statement of Approval - By approving this document, the undersigned agree to follow the provisions of this Project Management Plan. Each will focus efforts and influence to provide complete comprehensive, up-front planning and to meet the objectives set forth by the EMS. Changes to this plan must be coordinated with and approved by the undersigned or their designated representatives.

__________________________________
Anjna O’Connor
Environmental Specialist (PM)

__________________________________
Charles L. Burger
Operations Manager

__________________________________
Kenneth M. Howell
Chief, Operations Division
<table>
<thead>
<tr>
<th>Task/Milestone</th>
<th>Task/Milestone Details</th>
<th>Suspense</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Commitment</td>
<td>• Appoint and train EMS Project Manager and Implementation Team</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Structure and Responsibility  | • Establish scope (fenceline) for EMS  
• Define roles for all employees  
• Org chart  
• EMS responsibilities table |          | August 2004 |
| EMS Self Assessment Funding   | • Complete Gap Analysis  
• Develop budget for EMS implementation  
• Determine percentage of time EMS Team will dedicate to the implementation process                                                                                                                                 |          | August 2004 |
| Aspects/Impacts workshop      | • Identify all activities, products and services within the scope of the EMS  
• Establish procedure(s) to determine the environmental aspects and impacts of activities, products and services  
• Implement procedure to determine environmental aspects and impacts Determine environmental aspects and impacts of activities, products or services within the scope of the EMS  
• Develop installation-specific criteria for determining the significance of environmental impactsComplete aspects and impacts determination.  
• Determine significant aspects/impacts |          | August 2004 |
| Environmental Policy          | • Obtain Operations Manager signature on Environmental Policy that includes commitments to continual improvement, P2 and compliance  
• Document Policy  
• Communicate Policy to all personnel  
• Make Policy available to the public  
• Establish procedure for implementation and maintenance of Environmental Policy |          | September 2004 |
| Awareness Training            | • Provide project-wide EMS awareness training                                                                                                                                                                          |          | September 2004 |
| Document Control              | • Identify all documents required by ISO 14001  
• Identify the appropriate locations where documents should be available  
• Establish procedures for controlling all documents required by ISO 14001  
• Implement document controls |          | September 2004 |
| Communication                 | • Establish procedures for internal and external communication on environmental aspects and the EMS                                                                                                                    |          | October 2004 |
| Legal and Other Requirements | • Review all current mechanisms for identification of legal requirements  
• Review current mechanisms for identification of DoD and other requirements  
• Review resources for accessing legal and other requirements  
• Establish a procedure for identification of and access to legal and other requirements for all activities, products and services within the scope of the EMS | October 2004 |
|---|---|---|
| Objectives and Targets | • Establish objectives and targets  
• Document objectives and targets  
• Designate responsibility for achieving objectives and targets at each relevant level  
• Determine the resources needed to achieve each objective/target and obtain funding  
• Establish a time frame for achieving each objective/target | December 2004 |
| Environmental Management Programs | • Inventory existing programs for relevance to the significant impacts and the EMS elements: Environmental Compliance, Pollution prevention  
• Develop EMPs for significant aspects if necessary  
• Establish procedure to ensure that environmental management applies to new or modified activities | January 2005 |
| Operational Controls | • Review operational controls for operations and activities associated with significant aspects/impacts  
• Establish procedures with operating criteria for those operations and activities  
• Document operational control procedures  
• Establish procedures for control of significant aspects of goods and services and communication with suppliers and contractors | February 2005 |
| Competence Training | • Identify training needs.  
• Set up training for staff in operations with significant impacts | February 2005 |
| Monitoring and Measurement Records | • Establish procedures to monitor and measure key characteristics, track performance and conformance with objectives and targets  
• Document procedures to monitor and measure  
• Establish procedures for the identification, maintenance and disposition of environmental records, including training records and the results of audits and reviews  
• Calibrate and maintain monitoring equipment and retain records of this process  
• Establish procedure for evaluating compliance with environmental laws and regulations. | March 2005 |
| Nonconformance | • Define responsibility and authority for managing findings of nonconformance | March 2005 |
| **Emergency Preparedness** | • Define responsibility for completing corrective and preventive action  
• Establish procedures for investigating non conformance and determining and implementing corrective or preventive action  
• Implement non conformance procedures | April 2005 |
|---------------------------|-------------------------------------------------------------------------------------------------|-----------|
| **Emergency Preparedness** | • Identify potential for accidents and emergency situations  
• Determine environmental impacts that may be associated with accidents and emergency situations  
• Establish procedures for emergency preparedness and response  
• Test procedures for emergency preparedness and response  
• Revise procedures as necessary | April 2005 |
| **EMS Documentation** | • Establish paper or electronic EMS documentation that:  
1. Describes the core elements of the system and their interaction  
2. Provides direction to related documentation | May 2005 |
| **EMS Audit Procedures** | • Identify responsibility and requirements for conducting EMS audits  
• Determine audit scope and frequency  
• Determine audit methodology  
• Establish procedures for periodic EMS audits | June 2005 |
| **EMS Audit** | • Conduct EMS internal audit  
• Report audit findings to management | August 2005 |
| **Management Review** | • Document Management Review | September 2005 |
| **Respond to Management Review Findings** | • Corrective Action, as required  
• Record any changes to procedures, policies | September 2005 |
| **Corrective/Preventative Action** | • Corrective Action, as required by audit findings  
• Record any changes to procedures, policies | October 2005 |
| **EMS Implementation Complete** | • Continual improvement cycle | December 2005 |
APPENDIX B – REFERENCES

EXECUTIVE ORDERS

DOD/ARMY POLICY
DOD EMS Policy of April 5, 2002
DA EMS Policy of August 6, 2001

ISO STANDARDS
ISO 14001 of 1996

US ARMY CORPS OF ENGINEERS GUIDANCE
U.S. Army Corps of Engineers Environmental Management System Implementation Guide (Draft)
Fact Sheet; from CECW-ON; Subject: Environmental Management Systems (EMS); 12 Mar 02
Army Corps of Engineers EMS Policy of May 19, 2003.
Army Corps of Engineers Environmental Operating Principles.
- ISO 14001 – Developed by the International Organization for Standardization (ISO) specifies requirements for an environmental management system, to enable an organization to formulate a policy and objectives taking into account legislative requirements and information about significant environmental impacts. It applies to those environmental aspects which the organization can control and over which it can be expected to have an influence. It does not itself state specific environmental performance criteria.

- Environmental Management System - Part of an organization’s overall management system that integrates environmental concerns and issues into the organization’s management processes.
  - Addresses organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing, and maintaining environmental policy.
  - An EMS enables an organization of any size or type to control the impact of its activities, products, or services on the natural environment, allowing it to not only achieve and maintain compliance with current environmental requirements, but to recognize and proactively manage future issues that might impact mission sustainability.
  - Generally will not require USACE elements to create an entirely new system. Many of the required elements of an EMS are already in place as part of existing programs. Whenever existing plans or programs are already in place that fulfill EMS requirements, they should be incorporated into the EMS to the maximum extent possible.

- Environmental aspect – element of an organization’s activities, products or services that can interact with the environment.

- Environmental impact – any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization’s activities, products or services.