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**Key**

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- O: Disapproved
- Q: Released
- D: Released w/Comments
- N/A: Not Applicable

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**Signature/Distribution**

- **Design Authority**: CE Shipler
- **Design Agent**: N/A
- **Cog Eng**: CE Shipler
- **Cog Mgr**: CE Shipler
- **QA**: N/A
- **Safety**: N/A

**DOE Approval (if required)**

- Approved
- Approved w/Comments
- Disapproved w/Comments
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Project Management Plan

For Work Management Implementation

C E Shlpler
CH2M HILL Hanford Group Inc Richland WA 99352
U S Department of Energy Contract DE AC06-99RL14047

Abstract  The purpose of this document is to provide a project plan for Work Management Implementation by the River Protection Project (RPP). Work Management is an information initiative to implement industry best practices by replacing some Tank Farm legacy systems with streamlined integrated system solutions and redesigning the business processes associated with them. The integrated work management solution is a subset of modules within Indus PassPort®: a commercial off-the-shelf software and database product.

1 PassPort is a registered trademark of Indus International, San Francisco, CA

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Approved for Public Release

A-6002-767 (10/99)
PROJECT MANAGEMENT PLAN
FOR
WORK MANAGEMENT IMPLEMENTATION

Prepared for
Office of River Protection
River Protection Program
CH2M HILL Hanford Group, Inc
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10 INTRODUCTION

11 Purpose and Scope

The purpose of this document is to provide a project plan for Work Management Implementation by the River Protection Project (RPP). Work Management is an information initiative to implement industry best practices by replacing some Tank Farm legacy systems with streamlined, integrated system solutions and redesigning the business processes associated with them. The integrated work management solution is a subset of modules within Indus Passport®, a commercial off-the-shelf software and database product.

The following Technical Basis Reviews (TBRs) provide budget and high-level schedule information for different aspects of Work Management Implementation:

- TBR 710 042 (Ref 8) “Productivity Improvement”, includes the technical implementation aspects of Work Management.
- TBR 190 943 (Ref 9) covers the functional implementation aspects (i.e., data population) of Work Management.

The scope of this project plan is to provide task, deliverable and schedule definition for the Work Management Implementation. Also included is data population that provides infrastructure for these modules. Reference Appendix B, Work Management Implementation Schedules, for a detailed view associated tasks and overall schedule.

- **Work Control** Implementation
  - Implement Corrective Maintenance (CM) – East Tank Farms and West Tank Farms (ETF/WTF)
  - Startup of Preventive Maintenance (PM) – (ETF/WTF)
- **Data Population**
  - Master Equipment List (MEL)
  - Materials Management
  - Work Standards
- Further Deployment of **Action Tracking**
- **Project Control**
- **Labor Entry**

---

1 Passport is a registered trademark of Indus International San Francisco CA
12  Project Overview

Implementation of Work Management Implementation began in FY99 and this project will continue to build on the foundation work performed in FY99. Business Process Improvement (BPI) sessions held for each of these modules produced a Work Flow Analysis Report which documents the findings and agreements as to how specific work processes are executed using Passport® Work Management tools (modules). The Master Equipment List data was put into production and provides the backbone of technical information necessary to implement the Passport® Work Management suite. The Work Management suite consists of major components, or modules, that build on the INDUS International Passport® Business Management System (BMS) implemented by the Project Hanford Management Contact in FY 1998 under the HANDI 2000 project.

The TBR 710 042 (Ref 8), Productivity Improvement, specifies the plan for acquisition, design, development, implementation, and life-cycle maintenance of an integrated River Protection Project information system. The TBR covers all FY 2000 integrated information systems initiatives, related process engineering and requirements definition activities, and life cycle maintenance support requirements. The TBR also describes a phased implementation of other Passport® modules. In FY 2001, Document Management, Engineering Change Control, Procurement Engineering, Lock & Tag, and Personal Qualifications Data will be implemented. In FY 2002, the Exposure Control will be implemented.

"Work Control Implementation" is to support Corrective Maintenance (CM) and Routine Work Requests for East and West Tank Farm. Corrective Maintenance is the process of identifying and repairing equipment to support ongoing day-to-day operations (e.g., repairing a broken leak detector in a tank farm). "The Work Control target completion date is November 15, 2000. On this date, it is expected that Corrective Maintenance work orders can be generated. Work Control will be evaluated and accepted by the Production Control organization. Therefore, this project plan will focus on evaluating user acceptance. Work Control Implementation to support Preventive Maintenance will follow (startup to begin in FY2001).

In parallel, "Data Population" of the MEL system database and Materials Management will continue to support the infrastructure to accommodate this implementation. Work Standards will be drafted to support Work Control. Further data population of the MEL database is ongoing and is a planned activity for FY 2000.

"Further Deployment of Action Tracking" will assure that actions are tracked and managed effectively by this information system. "Project Control" and "Labor Entry" will be taken to the point of analysis, conversion, interface design, and prototype testing. At that point, RPP management will make a decision to either complete implementation or not.
Phases and Deliverables

In FY 2000 the PassPort® Work Management software modules will be implemented in seven phases with specific deliverables. Refer to Table 1 “Phases and Deliverables”.

Several modules shall be installed during these phases including 1) Work Control, 2) Action Tracking, 3) Project Control, and 4) Labor Entry. The technical installation of the software includes required code table definition and system testing.

Work Control will complete all seven phases, prior to its deployment, for all RPP CM and PM activities. The Acceptance Criteria for Work Control (CM) is in Section 3.3. Deployment of the Action Tracking will follow completion of Work Control phases and shall support an approved process. Labor Entry and Project Control will not be executed until the completion of the fourth phase for Work Control.

All phases have associated deliverables. The phases cover all aspects of implementation including:

- Documented work flows
- Baseline data available in Passport®
- Updated Work Management procedures
- Test Plan
- Test Summary Report
- Operational Readiness Review
- Key personnel training complete
- Security Plan and profiles implemented
- Production ready Work Control System
The phases and associated deliverables are as follows

<table>
<thead>
<tr>
<th>Phases</th>
<th>Deliverables</th>
<th>Work Management Modules</th>
</tr>
</thead>
</table>

DP (Decision Point)  TBD (To Be Determined)

Refer to Section 5.1, “Work Packages” for a complete description of deliverables.
14 Definitions and Acronyms

Acceptance Criteria

Criteria established by the customer which are included in the test procedures during formal testing for purposes of acceptance

Development

A module that has been not released for system use because it is being developed

Module

An application that provides work management functionality to the user. Several modules exist and are accessible from the PassPort® Main Menu

Production

A system released for use following acceptance by the customer

Region

An area on a server, under configuration control, where the modules are released for specific use, such as demonstration, production, training or testing related

Software Requirement

Client defined functionality that becomes integral to the software once it is implemented. Software requirements are used as a mechanism to apply test cases to for purposes of software acceptance prior to production

Software Configuration Management

A set of management disciplines within the context of the software engineering process that applies technical and administrative direction and surveillance. It identifies and documents the functional and physical characteristics of a product, controls changes to those characteristics, and it records and reports the change processing and implementation

Validated Data

Data that have been analyzed to determine whether it conforms to certain
predefined parameters of completeness and consistency. Data validation is performed by the appropriate organizations (i.e., Engineering, Production Control, etc.)

**Acronyms and Abbreviations**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>AJHA</td>
<td>Automated Job Hazard Analysis</td>
</tr>
<tr>
<td>BMS</td>
<td>Business Management System</td>
</tr>
<tr>
<td>BOM</td>
<td>Bill Of Materials</td>
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<tr>
<td>BPI</td>
<td>Business Process Improvement</td>
</tr>
<tr>
<td>CHG</td>
<td>CH2M HILL Hanford Group, Inc</td>
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<tr>
<td>CM</td>
<td>Corrective Maintenance</td>
</tr>
<tr>
<td>COTS</td>
<td>Commercial Off The Shelf</td>
</tr>
<tr>
<td>ETF</td>
<td>East Tank Farms</td>
</tr>
<tr>
<td>FDH</td>
<td>Fluor Daniel Hanford</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal Year</td>
</tr>
<tr>
<td>HLAN</td>
<td>Hanford Local Area Network</td>
</tr>
<tr>
<td>IRM</td>
<td>Information Resource Management</td>
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<tr>
<td>LMHC</td>
<td>Lockheed Martin Hanford Company</td>
</tr>
<tr>
<td>LMSI</td>
<td>Lockheed Martin Services, Inc</td>
</tr>
<tr>
<td>MEL</td>
<td>Master Equipment List</td>
</tr>
<tr>
<td>ORP</td>
<td>Office of River Protection</td>
</tr>
<tr>
<td>PI</td>
<td>Performance Incentive</td>
</tr>
<tr>
<td>PM</td>
<td>Preventative Maintenance</td>
</tr>
<tr>
<td>ROI</td>
<td>Return On Investment</td>
</tr>
<tr>
<td>RPP</td>
<td>River Protection Project</td>
</tr>
<tr>
<td>TBR</td>
<td>Technical Basis Review (Document)</td>
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<tr>
<td>UTC</td>
<td>Uniquely Tracked Components</td>
</tr>
<tr>
<td>WFAR</td>
<td>Work Flow Analysis Report</td>
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<tr>
<td>WTF</td>
<td>West Tank Farms</td>
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<tr>
<td>WM</td>
<td>Work Management</td>
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</table>
2.0 PROJECT ORGANIZATION

2.1 Process Model

The work process models that support the implementation are found in the Work Flow Analysis Reports (WFARs) consisting of:

- Work Management, Preventative Maintenance, Materials & Equipment Management (Ref 7)
- Action Tracking (Ref 5)
- Labor Entry (Ref 6)
- Project Management (Ref 4)

The processes described in the WFARs provide the basis for software implementation, procedure revisions, user documentation, and system training. The Business Process Lead(s) review and approve the WFAR to ensure that required processes and appropriate detail are included. Prior to implementation, WFAR processes will be tested utilizing Passport End user personnel will conduct acceptance testing.

Procedures, desk instructions, and User Guides will be utilized during the testing to validate accuracy. The current MEL implementation is supported by an electronic User Guide/Desk Instruction, available on the Intranet, known as the "Navigator" and is available through the Hanford Intranet. The Navigator will be expanded to support this project.

The System Administration procedures and/or instructions will describe tasks to be performed by the Work Management System Administrator in sufficient detail to allow alternate or replacement administrators to perform required tasks.

2.2 Organizational Structure

The organizational structure is identified in Appendix C.

---

2 After approval the WFAR will be released via Document Control
2.3 Organizational Boundaries and Interfaces

Organizational boundaries for the project are:

- **Technical Implementation (R Nelson and J Ferguson)**
  The organizational boundary for the technical implementation is any and all work related to the product (all Work Management Modules) installation, associated regions, testing, data conversion, readiness reviews, and production turnover.

- **Functional Implementation (C Shipler)**
  The organizational boundary for the functional implementation is any and all work related to the business process definition (refinement), WFAR approvals, acceptance testing, procedures, training, data population, and user support.
## Responsibilities

<table>
<thead>
<tr>
<th>Project Management Role</th>
<th>Responsible Individual(s)*</th>
<th>Project Management Responsibilities</th>
</tr>
</thead>
</table>
| Program Manager              | D Allen (CHG)              | • Assigns Project Managers  
                                |                                                             | • Attends Senior Management Project status meetings and reports on behalf of the WM Team |
| ORP Project Manager          | R L Nelson (CHG IRM)       | • Project Management support as needed  
                                |                                                             | • Represents ORP Owner(s) in approvals  
                                |                                                             | • Approves budget to support technical implementation  
                                |                                                             | • Support as needed for resources and budget issues |
| RPP Project Manager          | C E Shupler J B Jech (CHG) | • Initiates, evaluates, and approves changes resulting from Baseline Change Requests  
                                |                                                             | • Statutes on cost, schedule and deliverables (weekly)  
                                |                                                             | • Supports the Technical Implementation Team  
                                |                                                             | • Supports the Functional Implementation Team  
                                |                                                             | • Overall responsibility for implementation |
| WM Project Lead (Deputy)     | D L Marquez (CHG IRM)      | • Develops Project Management Plan and Project Schedule  
                                |                                                             | • Organizes team to support implementation (interviews etc)  
                                |                                                             | • Supports the Technical Implementation Team and the Functional Implementation Team  
                                |                                                             | • Approves all final documentation (test plans, scripts etc)  
                                |                                                             | • Assigns Project Leads for Project Control and Labor Entry |
| LMSI Technical Support Lead  | K A Crace                  | • Coordinates Technical Team tasks Provides Project Management Support as needed  
                                |                                                             | • Supports the Technical Implementation Team  
                                |                                                             | • Obtains Production Readiness Review Board approval  
                                |                                                             | • Represents RPP to LMSI  
                                |                                                             | • Overall responsibility for Technical Implementation  
                                |                                                             | • Approves all final documentation (test plans, scripts, etc) |

* Appointed individual may be changed via internal memorandum or email signed by the organizational manager. Memo to be maintained in the WM file. Modification to PMP not req
## Technical Role

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<td>LMSI Data Analyst</td>
<td>L. C. Allison TBD</td>
<td>• Lead for developing the Navigator</td>
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<td>• Supports further data population of the MEL system database</td>
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<tr>
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<td>• Supports the Technical Implementation Team</td>
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<tr>
<td>LMSI Technical Support</td>
<td>B. S. Suyama</td>
<td>• Supports the Technical Implementation Team</td>
</tr>
<tr>
<td>Systems Analyst</td>
<td>D. L. Marquez TBD</td>
<td>• Works in conjunction with the LMSI Data Analyst</td>
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<td></td>
<td>• Supports the Technical Implementation Team</td>
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<tr>
<td>System Administrator</td>
<td>Jim Hamilton (CHG)</td>
<td>• Responsible for Systems Administration of Work Management in conjunction with FDH</td>
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<td></td>
<td></td>
<td>• Supports the Technical Implementation Team</td>
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<tr>
<td>Operations and Maintenance</td>
<td>FDH (TBD)</td>
<td>• Provides access to all regions</td>
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<td>Technical Support</td>
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<td>• Supports the Technical Implementation Team</td>
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<td>PassPort® Technical and Functional</td>
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<td>• Supports the Technical Implementation Team</td>
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<td>Support</td>
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<td>• Provides PassPort® Technical implementation expertise and consulting</td>
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<tr>
<td></td>
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<td>• Provides PassPort® interface designs and prototyping</td>
</tr>
<tr>
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<td>• Provides PassPort® Functional implementation expertise and consulting</td>
</tr>
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</table>

* Appointed individual may be changed via internal memorandum or email signed by the organizational manager. Memo to be maintained in the WM file. Modification to PMP not req
<table>
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<td>• Represents Business Process Owner(s) in approvals</td>
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<td></td>
<td>R L Brooks - Work Control (CHG)</td>
<td>• Ensures business processes (process models) are sufficient to support Corrective Maintenance in ETF/WTF</td>
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<td>TBD Project Control</td>
<td>• Ensures business processes (process models) are sufficient to support Preventive Maintenance in ETF/WTF</td>
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<td>Action Tracking</td>
<td>• Ensures business processes (process models) are sufficient to support Action Tracking in ETF/WTF</td>
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<td>Labor Entry</td>
<td>• Ensures business processes (process models) are sufficient to support Labor Entry in ETF/WTF</td>
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<td>• Approves or disapproves completed testing results from acceptance testing</td>
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<td></td>
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<td>• Completes the Procedure Impact Analysis</td>
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<td>• Supports the Technical Implementation Team</td>
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<tr>
<td></td>
<td></td>
<td>• Assists in resolving issues and by making business decisions</td>
</tr>
<tr>
<td></td>
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<td>• Drafts work standards</td>
</tr>
<tr>
<td>Business Process Support</td>
<td>T L Jenings (CHG)</td>
<td>• Supports Business Process Lead as necessary</td>
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<tr>
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<td></td>
<td>• Provides insight to Work Management implementation tasks</td>
</tr>
<tr>
<td>Training Specialist</td>
<td>J M Morris (CHG)</td>
<td>• Develops Training Plan and Develops Training Materials</td>
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<tr>
<td></td>
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<td>• Assists in developing the Navigator</td>
</tr>
<tr>
<td></td>
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<td>• Trains the end user</td>
</tr>
<tr>
<td>Procedure Manager</td>
<td>J W Comer (CHG)</td>
<td>• Coordinate procedure development and procedure changes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Finalize and issue procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ensures procedures support the process models</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Supports the Technical Implementation Team</td>
</tr>
<tr>
<td>Engineering Support (MEL)</td>
<td>D B Smet (CHG)</td>
<td>• Ensures ongoing data population of the Master Equipment List</td>
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<td></td>
<td>J C Danley (CHG)</td>
<td>• Supports the Technical Implementation Team</td>
</tr>
<tr>
<td>Material Coordinator</td>
<td>Lead - TBD</td>
<td>• Defines/renames data entry process for materials management</td>
</tr>
<tr>
<td></td>
<td>C S Spears (CHG)</td>
<td>• Ensures ongoing data population for the Materials Management data (Bill of Materials, Spare Parts Catalog IDs)</td>
</tr>
<tr>
<td>Functional Role</td>
<td>Responsible Individual(s)*</td>
<td>Functional Responsibilities</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Operations Support</td>
<td>C E Shipler</td>
<td>Represents Business Process Owner(s) in approvals</td>
</tr>
<tr>
<td></td>
<td>J B Jeck</td>
<td>Supports the Business Process Lead as necessary</td>
</tr>
<tr>
<td></td>
<td>(CHG)</td>
<td>Supports the Technical Implementation Team</td>
</tr>
<tr>
<td>Craft Support</td>
<td>TBD</td>
<td>Supports the Business Process Lead as necessary</td>
</tr>
<tr>
<td>Maintenance Support</td>
<td>T Erickson</td>
<td>Supports the Business Process Lead as necessary</td>
</tr>
<tr>
<td>Scheduler</td>
<td>M Miller</td>
<td>Maintains and updates the project schedule</td>
</tr>
<tr>
<td>Quality Assurance</td>
<td>Mike Tipps</td>
<td>Ensures that Quality Assurance is applied to the WM implementation</td>
</tr>
<tr>
<td>FDH Process Analyst</td>
<td>TBD</td>
<td>Ensures Business Management System (BMS) modules are represented as necessary when applied to the WM implementation</td>
</tr>
</tbody>
</table>

*Appointed individual may be changed via internal memorandum or email signed by the organizational manager. Memo to be maintained in the WM file. Modification to PMP not req...
3.0 MANAGERIAL PROCESS

3.1 Management Objectives and Priorities

2. Performance Incentive

Priorities also include the Performance Incentive (PI) written for TBR 710 042 (Ref 8). Performance Incentive ORP 10 1 2, incentive fee of $100K, states that

“100% of the FY2000 incentive fee for this PA may be earned by the Contractor for completing analysis, design, and key tests, as described in baseline TBR 710 042 (Ref 8), Rev 1, dated 8/30/99, for each of the following RPP software capabilities by September 15, 2000”

- Work Control
- Action Tracking
- Labor Entry
- Project Management
- Requirements Management
- Decision Support System

At the time of this writing, this PI is being modified to clarify “analysis, design, and key tests”

3. Productivity Gain

Productivity gains to be realized by implementing work management were initially described in HNF-3201, HANDI 2000 Work Management Business case (August 1998) (Ref 3). Measurable productivity improvements in FY2000 are 1) work order traceability so redundancy of work orders is eliminated, 2) combining field tasks by checking the WM system database to see if there are multiple work orders on one piece of equipment, 3) ability to background work orders (create a new work order from a previously prepared work order)

3.2 Assumptions, Dependencies, and Constraints

This subsection describes the assumptions, dependencies and constraints for the Work Management Implementation Assumptions
- It is assumed that the version of PassPort® currently in production will not change until after completion of the Work Management implementation in FY2000. If the site upgrades to a more current version, an analysis will be required to determine the effect on functionality of the software. From an analysis, a scope and schedule change may be required.

- It is assumed that organizational restructuring for transition to RPP will be defined early enough such that the code structure of the software can be performed without rework.

- It is assumed that the data provided by the affected Organizations (e.g., Engineering, Production Control) has been validated prior to populating the Work Management modules.

- It is assumed that Fluor Daniel Hanford will comply with the understanding in place to support a BPI/Demo RPP (Process Improvement) Region by March 1, 2000.

- It is assumed that Fluor Daniel Hanford will comply with the understanding in place to keep the existing Demo Region until March 1, 2000.

- It is assumed that Fluor Daniel Hanford will support the necessary technical support as necessary throughout the schedule.

- It is assumed that CH2M HILL Hanford Group, Inc. will support Work Management Implementation.

- It is assumed that all Work Flow Analysis Report will be approved with minimal changes.

- It is assumed that all Work Flow Analysis Reports will provide the basis for implementation of the modules.

- It is assumed that any additional resources and budget, identified as necessary, will be provided (baseline money defined in TBR 710 042 (Ref 8)).

- It is assumed that Fluor Daniel Hanford will continue to operate and maintain the BMS modules and accept the WM modules in their file server domain.

- It is assumed that existing file server capacity will support the WM implementation.
Increased capacity expected is minimal

- It is assumed that all WM modules are purchased and supported via Indus (including source code fixes, as necessary)

### 3.3 Acceptance Criteria

This subsection describes the acceptance criteria as defined by the Business Process Lead for the WM 1) Work Control and 2) Action Tracking Modules

#### 1) Work Control Acceptance Criteria

Corrective Maintenance (CM) is the process of identifying and repairing equipment to support ongoing day-to-day operations (e.g., repairing a broken leak detector in a tank farm). In order for this process to be “complete” or “accepted” use of the

- Inventory Module is necessary for BOM, Catalog IDs, and Material Requests
- Component data are going to be taken from the MEL. Implementation of CM for RPP is defined as user-ready for RPP Planners, Schedules, Material Coordinator, Operations, for all supporting organizations (i.e., Safety, Quality)

At a minimum, from the WFAR (Ref 7), the Section 3 Work Flows that must be completed are:

- Work Planning (W100)
- Identify Unplanned Work (W101)
- Work Planning (W110)
- Perform Minor Maintenance (W110 2)
- Plan Expedited Work Order (W110 3)
- Plan EWP Work Order (W110 4)
- Plan Non-EWP Work Order (W110 5)
- Request Clearance From Operations (W111)
- Approve Work Order (W120)
- Schedule Tasks (W130)
- Pre-Work Task Activities (W140)
- AHJEA, Permits, Requirements (W150)
- Prepare Lock and Tag (W160)
- Perform and Document Work (W170)
- Complete Work Order (W180)
- Scope Change (W190)
- Material Request (W310)
Bill of Materials (W320)
- Uniquely Tracked Components - UTC (W330)

Not necessary for completion are
- TBR Work Order Planning (W105 and W106)
- Job Preparation (W140 5)

Preventive Maintenance (PM) is the process of periodically recalling calibrations, ticklers, and equipment checks (i.e., leak detector functional checks done on a 92-day frequency). PM relies on data sheets, work standards, and model work orders (typically a non-planning required activity done on a recurrent basis) in order for this process to be "complete" or "accepted".

- Need to map current PM processes to PassPort® predefined parameters (conversion of existing data sheets to embed them in the Model Work Order, conversion of our current procedures to work standards (500+), and any additional PM panels in PassPort® (W080, W081)
- Preventative Maintenance Requirement (W210)
- Preventative Maintenance Work Order Generation (W220)
- Preventative Maintenance Worklists (W230)

2) Action Tracking Acceptance Criteria

Action Tracking (to support an approved process) is the process of defining actions as they relate to that process. In order for this process module to be "complete" or "accepted".

- Appropriate drop-down lists are accommodated
- End user has the ability to see individual actions assigned
- Ability to generate, track and close an action as needed during work order creation

3.4 Risk Management

Risks associated with this project are found in TBR 710 042 (Ref 8)

3.5 Monitoring and Controlling Mechanisms

Monitoring and controlling mechanisms include the weekly status meetings for both the
technical implementation and the functional implementation teams. The project manager conducts a weekly status meeting to review the schedule progress. Both teams may meet separately for specific task instructions, etc.

Individual budget status meetings are conducted monthly to review the spend forecast of TBR 710 042 (Ref 8) (Productivity Improvement for the Work Management Implementation portion).

3.6 Communication Plan

A communications document was written in FY99 and will be revised to include:

- Weekly Status Meetings
- Use of the RPP Intranet web page for Work Management Implementation Status

4.0 TECHNICAL PROCESS

4.1 Methods, Tools, and Techniques

The design approach for each Work Management module implementation is detailed in the Work Flow Analysis Reports. In general, the design approach begins with process improvement teams that simplify and minimize information and work flow requirements taking into consideration the functional capabilities of the procured WM system. A “To-Be Work Flow” results from the Business Process Improvement (BPI) sessions. Procedures are revised or written to support the operation of the revised information system. Data conversion programs and procedures are developed to transition from the existing system to the new Customizing software to meet PHMC or RPP needs will most likely be avoided, but, if customization is necessary, it has a significant return on investment. Interface Requirements to Work Management modules, will be identified in a System Requirements Specification generated prior to the interface activity.
4.2 Documentation

Currently, the following documentation has been identified for each Phase (refer to Table 1):

- Phase 2 -- Procedures: Procedures, Restart & Recovery Plan, Data Management Plan
- Phase 3 -- Conversion: Data Conversion Plan
- Phase 4 -- Testing: Test Scripts, Acceptance Test Report
- Phase 5 -- Readiness, etc.: Readiness Review Checklist
- Phase 6 -- Training: Training Plan, Training Materials
- Phase 7 -- Installation: Final Procedures

In Phase 3, the Fluor Daniel Hanford documents used for the BMS implementation (Restart & Recovery Plan and the Data Management Plan), shall be assessed and used where possible.

4.3 Configuration Control

Different regions will be used for configuration control purposes. The RPP region set up by March 1, 2000 will provide a place to set up and populate the code table values, security profiles and enable both the technical and functional teams to obtain information to complete deliverables. This region may also be used for training purposes.

The Acceptance Test region will be utilized to support acceptance testing. Only the code table values and security profiles will be moved to the Acceptance Testing region for purposes of testing. Data created during the learning process will not be allowed in this region prior to testing.

The Production region will be utilized after the acceptance testing is completed. Once all aspects of tests that failed are addressed, the code table values and security profiles be duplicated in production ready for turnover to the end user.

4.4 Acquisition

Acquisition of hardware and software is not necessary in FY00 (see Section 3.2 Assumptions).
4.5 Data Management

The data management processes to support the continued data population of the MEL system database and the Materials Management is necessary to ensure consistent data management practices in standardization, data entry efficiency, roles, responsibilities, data population, etc. Tasks associated with continued data population of the MEL and Materials Management have been identified in TBR 190 943.

5.0 WORK PACKAGES, SCHEDULES, AND BUDGET

5.1 Work Packages

Currently, the following Phases and deliverables have been identified, packaged into the WBS structure provides the plan for implementation. Refer to Table 1, for Module correlation.

Phase 1 Analysis

BPI Sessions

The BPI sessions will consist of each of the Passport® Work Management Modules broken down into subparts for each of the major steps in the module. A separate schedule has been developed and will be used to identify the topics of discussion and the people that should be in attendance. It is expected that the average number of RPP personnel in attendance will be between 6 and 10. Attendance by the people specified as critical will be mandatory in order to keep on schedule and complete the sessions on time without major rework. The BPI is considered the start of the analysis phase of the project. Each BPI precedes the Work Flow Analysis Report.

Work Flow Analysis Report

This activity is mainly an INDUS activity in which they take the final results from the BPI sessions and provide a report that shows the work flow path for each of the different topics in the BPI sessions. This is part of the analysis phase of the project. This report succeeds the BPI session and precedes the following activities: ROI Analysis, Data Mapping, and Data Conversion Plan.

Procedure Impact Analysis

This activity reviews the procedures that currently exist and narrow down to a list of procedures that are impacted by the process to be implemented. The lead is responsible for this review. The procedure impact analysis product is a report that identifies each of the procedures.
to be modified and a brief description of the type of change required. This is part of the analysis phase of the project. It succeeds BPI and precedes Modify/Approve Procedures.

**Phase 2 Procedures**

**Disaster Recovery Plan**
The module leads with support from INDUS documents (e.g., manuals, procedures, etc.) on how we would perform the work should a long-term outage of the computer systems happen. This activity is a part of the procedures phase of the project. It succeeds Procedure Impact Analysis and precedes completion of the Draft Procedure Changes.

**Draft Procedure Changes**
This activity encompasses the actual modification of affected procedures, development of new procedures and retirement of outdated procedures. This activity also supports the implementation of new business processes and fundamental change management decisions made by the management team. The Module lead will work with INDUS to review the outline, scope, and purpose for the procedures, draft the change to the procedure, and then conduct reviews/walk-thrus of the procedures with the procedure owners. Draft procedures will be submitted to the Procedure organization for review routing and then held until issuance once approved by the procedure owner. This activity is a part of the procedures phase of the project. This activity succeeds the Procedure Impact Analysis and precedes Training Materials.

**Security Definition Profiles**
This activity examines RPP job functions and levels of responsibility in order to develop standard user security profiles for appropriate access to Passport@. This activity is a part of the procedures phase of the project. It succeeds Data Loading and precedes the Training Plan.

**Phase 3 Conversion**

**Data Mapping Scheme**
This activity specifies the specific data that will be transferred (field by field) into the Passport® system. This activity also identifies what data will be modified, supplemented or created manually. LMSI, INDUS and support from the lead and BMS owners where applicable will perform this activity. This activity is part of the conversion phase of the project. It succeeds the WFAR and precedes the completion of Data Gathering.

**Data Conversion Plan**
This activity identifies all the sources of data that will need to be transferred into the Passport® system. It includes determining the minimum data required for production and how the data will be transferred. This activity is part of the conversion phase of the project.
and LMSI perform this activity with support from the module leads. It succeeds the Work Flow Analysis Report and precedes Data Mapping completion.

**Data Gathering and Cleaning**
This activity works in conjunction with Data Loading and is the gathering of the data sources that will be converted to PassPort®. This will include all electronic and paper data. This period is when data will be looked at to assure that it is valid data and ready to be converted. This also includes the loading of the information from the data sources into the Data Load region of the PassPort® and then performing reviews of the information that does not transfer over and determining and fixing the cause. The Module lead along with help from the experts who use the data and know where it is stored will coordinate with INDUS and LMSI to perform this activity. This activity is part of the conversion phase of the project. It succeeds the Data Conversion Plan and precedes Security Profile Definitions and Development of test scripts.

**Data Loading (codes)**
This activity includes developing and testing data extraction and data load programs. Based on INDUS provided baseline conversion programs, specifications are written to ensure converted data will work properly in the on-line system. Extract programs are then written to translate legacy system data formats to a standardized format for conversion. Another part of this activity is the determination of the code tables led by the module lead with support from LMSI and INDUS. This activity is a part of the conversion phase of the project. It is run in conjunction with Data Gathering and Cleaning and precedes Testing.

**Phase 4 Testing**

**Develop Test Scripts**
This activity creates scripts to support complete scenario testing of the fully integrated system. This is performed by the module lead with support by INDUS and follows a format as specified by the project manager. This activity is a part of the testing phase of the project. This activity succeeds Data Loading and precedes Testing.

**Testing**
This activity uses the structure for organizing, scheduling, and managing the testing as developed for the previous PassPort® module implementation. The module lead supported by INDUS and LMSI will use the plan to assure that the PassPort® system will meet software quality assurance and user functionality requirements. Testing will include as a minimum the following:

- Verify conversion program is fully operational,
- Perform initial testing of interfaces between PassPort® and other systems including work station and client-server applications,
Tests the security before the system is moved into production
Completion of the Test script runs to assure functionality of the system is as described by procedures and desk instructions. This activity is part of the testing phase of the Project. It succeeds Data Loading and precedes Integration testing.

Integration Testing
This activity tests purchased software packages, data conversion, interface programs and desktop system products, to ensure designated business functions are performed consistent with implementation goals. This is primarily a LMSI task. This activity is a part of the testing phase of the project. It succeeds testing and precedes the Quality assessment.

Phase 5 Readiness Review and Quality Assessment

Quality Assessment Findings
At the completion of testing, this activity by the Quality Assessment team makes the determination whether to move the system into production. This activity is part of the quality phase of the project. It succeeds Integration Testing and precedes Correct Assessment Findings.

Correct Assessment Findings
This activity corrects the findings made by the assessment team. The intent is to assure that the software testing review discrepancies are corrected prior to being placed in the production region. This activity is performed by the module lead with support from LMSI and INDUS. This activity is part of the quality phase of the project. It succeeds the Quality Assessment and precedes Production cutover.

Phase 6 Training

Training Plan
This activity provides a comprehensive plan for the development and delivery of the training necessary for implementation of new business processes as supported by PassPort®. The module lead will work with INDUS and the RPP training organization to perform this activity. This activity is a part of the training phase of the project. It succeeds the Security Profile Definitions and precedes Develop Training Materials. INDUS often refers to this Training Plan as an Education Plan.

Develop Training Materials
This activity develops the training materials that will be used for training implementation and delivery. This activity develops the customized materials (e.g., trainee handouts, checklists, Navigator training, etc.) as required for the training. INDUS and the Training Instructors incorporate BPI workflow changes into baseline materials as well as specialized user-specific.
training aids. This is primarily the work of Training Instructors with assistance from module leads and the INDUS representative. This activity is a part of the training phase of the project. It succeeds the Training Plan and precedes Pilot Training.

**Pilot Training**
This activity tests the training environment and training materials by doing a 'dry run'. This is a trainer's activity but is supported by the module lead. This activity is a part of the training phase of the project. It succeeds the Develop Training Materials and precedes adjusting the training based on the pilot activity.

**Adjust Training Based on Pilot**
This activity reviews the feedback from the training pilot and makes adjustments based on the feedback. The Instructor and the Module lead perform this activity. This activity is a part of the training phase of the project. It succeeds Pilot Training and precedes adjusting the training based on the pilot activity.

**Train users**
This activity provides end-user training for operating the system. The setting for the training can be in the form of classroom, interactive hands-on (in a computer lab), On-the-Job-Training instructions and through the Navigator. This activity will be conducted in accordance with the Training Plan. The Training Plan will identify the target groups, which need training and a schedule for that training. Training will be provided to individual end-user and technical staff on the Passport® system, ad hoc reporting, and prerequisite application skills as necessary. A designated training coordinator manages the training scheduling and reservations. Training will be recorded and tracked as required. This is primarily an Instructor and Training Coordinator task. This is a part of the training phase of the project. This activity should start as late as practical and succeeds the Adjust pilot training activity and precedes Implementation.

**Phase 7 Installation**

**Issue Procedures**
This activity covers the actual issuance and distribution of all affected and approved procedures, including new and revised procedures. The Project Manager coordinates the effort to issue the procedures within the customer organizations. The Module leads assist the Project Manager in the coordination of this task. This activity is a part of the Implementation phase of the project. This succeeds Draft Procedure Changes and precedes Production Cutover.

**Production Installation**
This activity is a LMSI and INDUS “technical” event of moving system data into a production environment. This activity is a part of the Implementation phase of the project. It succeeds the Quality Assessment and precedes Data Load Assessment.
Assess Data in Production
The module leads and process owners perform this activity to assure that the data that is loaded into the production region as expected. This activity is a part of the Implementation phase of the project. It succeeds the Production Cutover and precedes Implementation.

User Implementation
This activity is the actual transfer of use by the end user from the old software and process to the new. It is supported by the Project team with the module lead co-located with the implementation area such that the lead is immediately available to answer questions and provide a smooth transition to use of the PassPort® module(s). This activity is a part of the Implementation phase of the project. It succeeds the Production Installation and has no successors, as it is the last activity in the schedule.

5.2 Dependencies

The schedule identifies the actual predecessors and dependencies of tasks. The schedule is found in Appendix B – Work Management Implementation Schedules.

5.3 Resource Requirements
Minimum resource requirements are discussed in Section 2.4 Responsibilities.

5.4 Budget and Resource Allocation

Currently, the FY00 budget in TBR 710 042 (Ref 8) is funding the Work Management Implementation efforts. Resource allocations are from LMSI, LMHC, Indus, FDH, and contractor support as needed. It was determined that additional resources are necessary, per the schedule in Appendix B, to support this effort. A Baseline Change Request will be submitted for TBR 710 042 (Ref 8) and TBR 190 943 (Ref 9).

5.5 Work Control Module Timeline Schedule

The timeline schedule for the Work Control Module is in Appendix A, Work Control Implementation Timeline.
6.0 VALIDATION (TESTING) AND VERIFICATION (REVIEWS)

Validation (testing) of the Modules will occur prior to the integration and Work Management system acceptance testing. A test plan will be written for all Modules with guidance from “RPP Testing and Evaluation Management Plan”, HNF-2029, Rev 1 (Ref 2). Test scripts will be reviewed by the technical support. All test results will be documented in the Test Summary Report.

Verification reviews will be conducted during the Readiness Review and Quality Assessment, Phase 5, prior to final implementation of the Work Management system in the Installation, Phase 7.

7.0 REFERENCES


4) TWRS Work Flow Analysis Report, Project Management, Version 0.0, July 1999


6) RPP Work Flow Analysis Report, Labor Entry, Version 0.0, July 1999

7) TWRS Work Flow Analysis Report, Work Control, Version 0.0, July 1999

8) TBR 710 042, Productivity Improvement, Rev 0, Office of River Protection, River Protection Project, October 1999

APPENDIX B – Work Management Implementation Schedules
## Work Management Implementation Project Plan

### RPP-5512

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### Table: Project Task Schedule

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<thead>
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<th>Task</th>
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### Chart: Data Population - Master Equipment List

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APPENDIX C – Organizational Structure