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# Risk Management Plan for Tank Farm Restoration and Safe Operations, Project W-314

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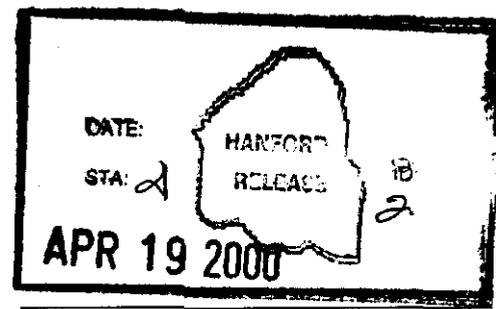
**Abstract:** The Risk Management Plan for Project W-314 describes the systems, processes and procedures for implementation of applicable risk management practices described in HNF-0842, Volume IV, Section 2.6, "Risk Management". This plan is tailored specifically for use by Project W-314.

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**Approved For Public Release**

**RISK MANAGEMENT PLAN**  
**For**  
**TANK FARMS RESTORATION**  
**AND SAFE OPERATIONS**  
**PROJECT W-314**

Prepared for the  
U.S. Department of Energy  
Office of River Protection  
by  
CH2M HILL Hanford Group, Inc.

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**TABLE OF CONTENTS**

1.0 INTRODUCTION..... 1  
    1.1 Purpose..... 1  
    1.2 Scope..... 1  
2.0 ROLES AND RESPONSIBILITIES..... 2  
3.0 IMPLEMENTATION..... 2  
    3.1 Risk Management List ..... 4  
    3.2 Risk List Review and Update..... 4  
    3.3 Contingency Allocation ..... 4  
4.0 REFERENCES ..... 5

**LIST OF TABLES**

Table 2-1: Roles and Responsibilities.....3

**ACRONYMS and ABBREVIATIONS**

CHG	CH2M HILL Hanford Group, Inc.
ORP	U.S. Department of Energy, Office of River Protection
PEP	Project Execution Plan
RML	Risk Management List
RMP	Risk Management Plan
RPP	River Protection Projects
SEMP	Systems Engineering Management Plan
SME	Subject Matter Expert
TBR	Technical Basis Review

## 1.0 INTRODUCTION

This document provides a project-level Risk Management Plan (RMP), which is in accordance with the requirements of River Protection Project's (RPP) procedure HNF-IP-0842, Volume IV, Section 2.6, *Risk Management*.

Project W-314, Tank Farm Restoration and Safe Operations (TFRSO), is a Fiscal Year (FY) 1997 new start line item project within the RPP strategic system. Project W-314 provides upgrades for the existing tank farms waste transfer, instrumentation, ventilation, and electrical support systems, and supports the upgrades necessary for the waste feed delivery to the Privatization Contractor for vitrification and waste disposal.

Risk Management for the Project involves creation of a work environment where risks are identified, understood, and managed. The primary tool for communicating Project risks is the Project W-314 Risk Management List (RML), which identifies risk events and mitigation actions. The mitigating action and risks may be further defined and placed on a separate risk/action list for "real-time" management as risks and mitigation actions evolve.

Project risks affecting the program's Technical Basis Review (TBRs) or critical program missions will follow, as applicable, the steps presented in the RPP procedure, *Risk Management*, and are included in Section 8.0, Risk Events – Scope, Schedule and/or Cost, of the applicable TBRs.

Risk management is an integral part of the project management function, which is to allocate resources to achieve certain goals with minimum risk. The primary objective of project risk management is to identify risks related to the successful completion of the project, the mitigation strategy to be employed, and management activities and responsibilities. The mitigation strategy allows the project to assign appropriate project cost and schedule contingencies for the identified risks.

The risk analysis process described in this document applies to both Phase 1 and Phase 2 of the Project

### 1.1 Purpose

The purpose of this RMP is to define the strategy to be used by Project W-314 to implement the requirements of RPP's procedure *Risk Management*.

### 1.2 Scope

Project risk management is applied to project planning that reflects prioritization of the tank farm upgrades defined by ORP's RPP organization. The project planning necessary to execute this prioritization has been established using a "phased upgrades" approach.

## 2.0 ROLES AND RESPONSIBILITIES

This section includes Table 2-1 which describes the anticipated roles and responsibilities of the various managers in implementing the RMP. It also describes the specific administrative actions required to manage project risks and maintain risk management tools for tracking risk management activities. These are generic positions as described in the RPP procedure, *Risk Management*. However, the Project W-314 equivalent is noted for each. The W-314 RML assigns individual responsibilities.

## 3.0 IMPLEMENTATION

The steps shown below present a typical summary of how a Risk Management List (RML) can be generated, maintained, and utilized, as applicable, by Project W-314. The steps shown are not necessarily performed in sequence but rather can be performed as dictated by the information available at the time

### Risk Assessment

- 1 Assess Risk Elements
- 2 Identify Risk Events

### Risk Analysis

- 3 Determine Risk Impacts
- 4 Develop Handling Actions
- 5 Determine Residual Risk Impacts
- 6 Analyze Risk Events
- 7 Prepare Risk Lists

### Risk Handling

- 8 Implement Handling Actions
- 9 Monitor Handling Actions
- 10 Close Handling Actions

**Table 2-1: Roles and Responsibilities**

<b>W-314 Position</b>	<b>Position Description and Administrative Actions</b>
<b>DOE-ORP Point-of-Contact</b>	The DOE-ORP W-314 Point-of-Contact evaluates program risks, establishes customer requirements and priorities, and assists in the mitigation of risks for institutional issues (scope, schedule or budget changes from federal budgets, Environmental Impact Statements, Tri-Party Agreements etc.).
<b>W-314 Project Manager</b>	Initial duty of the W-314 Project Manager is to implement this RMP and coordinate activities with the ORP Point-of-Contact, when necessary. The Project Manager is responsible for review of the RML with the project team members. The Project Manager is also responsible for assigning the risk owners, risk handlers, and risk analysts for critical risks. In many instances, the Project Manager acts as risk owner for risks associated with his/her project.
<b>Risk Owner</b>	The Risk Owner is responsible for overseeing the risk item and tracking the Action Items to completion, ensuring personnel complete actions assigned, providing support and coordination where needed, keeping the project manager informed of the status of the risk handling efforts, and closing out of the Risk Action Plan. The Risk Owner is responsible for the success of a subsection of the project and controls the resources required to effect that outcome.
<b>Risk Handler</b>	The Risk Handler is responsible for ensuring that assigned risk handling actions are completed within the expected due date, keeping the Risk Owner informed on a routine basis of the status of the assigned action items, and elevating problems to management for quick resolution when the need arises. Although individual tasks can be delegated, the responsibility is not delegable.
<b>Systems Engineer</b>	The Systems Engineer is primarily responsible for maintaining and disseminating the RMP and RML. An additional responsibility is maintenance of the RML Database and generation of needed reports.
<b>Technical Contributors</b>	These engineers and technicians are responsible for working with the Project Manager and Risk Owners/Handlers to identify and mitigate risks associated with their tasks. Identified risks are added to the RML. The Technical Contributors are also responsible for providing activity status to the Risk Owners. Within W-314, the engineers in each of the four disciplines (ventilation, waste transfer, electrical, instrumentation) fulfill these positions.
<b>Risk Analyst</b>	The Risk Analyst assists in the identification of risk data and the development of risk management data products (e.g., project risk model, completed Risk Handling Action Plan Worksheets, Risk Analysis Data Sheets, Project Risk List, etc.) for each program or project.

The primary risk assessment and analysis technique to be employed on Project W-314 is expert interviews. This technique is applicable for use in gathering the information needed in Steps 1, 2, 3, 4, and 5. Appropriate Subject Matter Experts (SMEs) are questioned about the potential risks, and their consequences, in their area of expertise, as related to W-314.

Descriptions and the implementation process for the 10 steps above are found in the RPP procedure, *Risk Management*, and used as applicable.

### **3.1 Risk Management List**

Once the risk events are identified and risk handling actions defined, as applicable, the events are added to the W-314 RML. The W-314 RML is a summary of the W-314 risk events with the status of related risk management (mitigation/control) efforts.

The W-314 RML is a part of a larger hierarchy of risks which are identified in the program's TBRs. Risks considered programmatic in nature will be considered for elevation to a higher management level. In addition, broader programmatic risks may also be identified and added onto each successively higher level list. Such addition of risks to the higher level risk lists shall be made at the discretion of the managers responsible for those lists.

### **3.2 Risk List Review and Update**

The W-314 RML is a "living document," which will be updated quarterly, or earlier as needed. The update is conducted to add or remove items from the list, and to ensure that the identified actions are accomplishing their intended purpose. New risks can be added to the RML at any time deemed necessary.

### **3.3 Contingency Allocation**

Project W-314 included contingency allocations for Phase 1, and 2, as addressed in HNF-3781 and HNF-5109 rebaseline reports. Contingency allocations were based on quantification of the risks identified, cost of mitigation, and potential residual costs after mitigation. Similarly, Project risk information is also derived and submitted with the TBRs during Program's yearly planning effort.

#### 4.0 REFERENCES

HNF-3939, Revision 0, *Risk Management List and Supporting Information for Project W-314*

HNF-3781, *Phase 1 Rebaseline Report for Tank Farm Restoration and Safe Operations*

HNF-5109, *Phase 2 Rebaseline Report for Tank Farm Restoration and Safe Operations*

HNF-IP-0842, Volume IV, Section 2.6, *Risk Management*

HNF-SD-WM-SEMP-002, *River Protection Projects Systems Engineering Management Plan*

