INDUSTRIAL HYGIENE AND SAFETY REGULATORY PLAN



June 30, 2000

Office of Safety Regulation of the RPP-WTP Contractor

U.S. Department of Energy Richland Operations Office P.O. Box 550, A4-70 Richland, Washington 99352

PREFACE

The Department of Energy's (DOE) Richland Operations Office (RL) issued the *TWRS Privatization Request for Proposal* (RFP) for Hanford Tank Waste Remediation System (TWRS) Privatization in February 1996. Offerors were requested to submit proposals for the initial processing of the tank waste at Hanford. Some of this adioactive waste has been stored in large underground storage tanks at the Hanford Site since 1944. Currently, approximately 54 million gallons of waste containing approximately 240,000 metric tons of processed chemicals and 250 mega-curies of radionuclides are being stored in 177 tanks. These caustic wastes are in the form of liquids, slurries, saltcakes, and sludges. The wastes stored in the tanks are defined as high-level radioactive waste (10 CFR Part 50, Appendix F) and hazardous waste (Resource Conservation and Recovery Act).

The contract concept was for DOE to enter into a fixed-price contract for the contractor to build and operate a facility to treat the waste according to DOE specifications. The TWRS Privatization Program was divided into two phases, Phase I and Phase II. Phase I was a proof-of-concept/commercial demonstration-scale effort the objectives of which were to (a) demonstrate the technical and business viability of using privatized contractors to treat Hanford tank waste; (b) define and maintain adequate levels of radiological, nuclear, and process safety; (c) maintain environmental protection and compliance; and (d) substantially reduce life-cycle costs and time required to treat the tank waste. The Phase I effort consisted of two parts: Part A and Part B.

Part A consisted of a twenty-month development period to establish appropriate and necessary technical, operational, regulatory, business, and financial elements. This included identification by the TWRS Privatization Contractors and approval by DOE of appropriate safety standards, formulation by the Contractors and approval by DOE of integrated safety management plans, and preparation by the Contractors and evaluation by DOE of initial safety assessments. Of the twenty-month period, sixteen months were used by the Contractors to develop the Part-A products and four months were used by DOE to evaluate the products.

Part B was to consist of a demonstration period to provide tank waste treatment services by the TWRS Privatization Contractors who successfully completed Part A. Demonstration was to address a range of wastes representative of those in the Hanford tanks. Part B was to be 10 to 14 years in duration. Within Part B, wastes were to be processed during a 5- to 9-year period resulting in treatment of 6 to 13 percent of the Hanford tank waste.

Phase II was to be a full-scale production phase in which the remaining tank waste would be processed on a schedule that would accomplish removal from all single-shelled tanks by the year 2018. The objectives of Phase II were to a) implement the lessons learned from Phase I; and b) process all tank waste into forms suitable for final disposal.

In May 2000, DOE chose to terminate the privatization contract and seek new bidders under a different contract strategy. The program name was also changed from the Tank Waste Remediation System to the River Protection Project (RPP). The RPP is under the direction of the Office of River Protection, which was created by Congress in 1998 to assume programmatic responsibility for the entire Tank Waste Remediation System, including the waste treatment plant (WTP).

A key element of the River Protection Project Waste Treatment Plant (RPP-WTP) is DOE regulation of safety through a specifically chartered, dedicated Regulatory Unit (RU) at RL. This regulation by the RU is authorized by the document entitled *Policy for Safety Regulation of the RPP-WTP Contractor* (referred to as the Policy) and implemented through the document entitled *Memorandum of Agreement for the*

Execution of Safety Regulation of the RPP-WTP Contractor (referred to as the MOA). The Under Secretary of Energy; the Assistant Secretary for Environment, Safety and Health (ASEH); and the Assistant Secretary for Environmental Management (ASEM) signed the Policy. The MOA is signed by the ASEH and the ASEM. The nature and characteristics of this regulation are also specified in these documents. The MOA details certain interactions among RL, the ASEH, and the ASEM as well as their respective roles and responsibilities for implementation of this regulation.

The authority of the RU to regulate the RPP-WTP Contractor is derived solely from the terms of the RPP-WTP Contract. Its authority to regulate the Contractor on behalf of DOE is derived from the Policy. The nature and scope of this special regulation (in the sense that it is based on terms of a contract rather than formal regulations) is delineated in the MOA, the RPP-WTP Contract, and the documents, listed below, which are incorporated into the Contract. This special regulation by the RU in no way replaces any legally established external regulatory authority to regulate in accordance with duly promulgated regulations nor relieves the Contractor from any obligations to comply with such regulations or to be subject to the enforcement practices contained therein.

The Policy, the MOA, the RPP-WTP Contract, and the documents incorporated in the Contract define the essential elements of the regulatory program, which are being executed by the RU and to which the RPP-WTP Contractor must conform. The four radiological, nuclear and process safety-related documents incorporated in the Contract (and also incorporated in the MOA) are:

Concept of the DOE Process for Radiological, Nuclear, and Process Safety Regulation of the RPP Waste Treatment Plant Contractor, DOE/RL-96-0005,

DOE Process for Radiological, Nuclear, and Process Safety Regulation of the RPP Waste Treatment Plant Contractor, DOE/RL-96-0003.

Top-Level Radiological, Nuclear, and Process Safety Standards and Principles for the RPP Waste Treatment Plant Contractor, DOE/RL-96-0006, and

Process for Establishing a Set of Radiological, Nuclear, and Process Safety Standards and Requirements for the RPP Waste Treatment Plant Contractor, DOE/RL-96-0004.

The two non-radiological safety documents are:

Industrial Hygiene and Safety Regulatory Plan, RL/REG-2000-04, and

Regulatory Unit Position on Regulation of the Contractor's Industrial Hygiene and Safety Program, RL/REG-99-11.

In the execution of the regulatory program, the RU considers not only the relevant approaches and practices of DOE but also those of the U.S. Nuclear Regulatory Commission (NRC) and the Occupational Safety and Health Administration (OSHA). The Policy states that

"It is DOE's policy that the RPP-WTP Contractor activities be regulated in a manner that assures adequate safety by application of regulatory concepts and principles consistent with those of the Nuclear Regulatory Commission and the Occupational Safety and Health Admin istration."

To this end, the RU interacts with the NRC and the OSHA during development and execution of the regulatory program.

All documents issued by the Office of Safety Regulation of the RPP-WTP Contractor are available to the public through the DOE/RL Public Reading Room at the Consolidated Information Center, Room 1012, Richland, Washington. Copies may be purchased for a duplication fee.

RECORD OF REVISION

Document Title: Industrial Hygiene and Safety Regulatory Plan

Document Number: RL/REG-2000-04

	D · · · · · · ·	
Revision Date	Revision Number	Reason for Revision
05/10/00	0	New issue.
06/30/00	1	Modified to reflect new contracting arrangement and to update regulatory program description

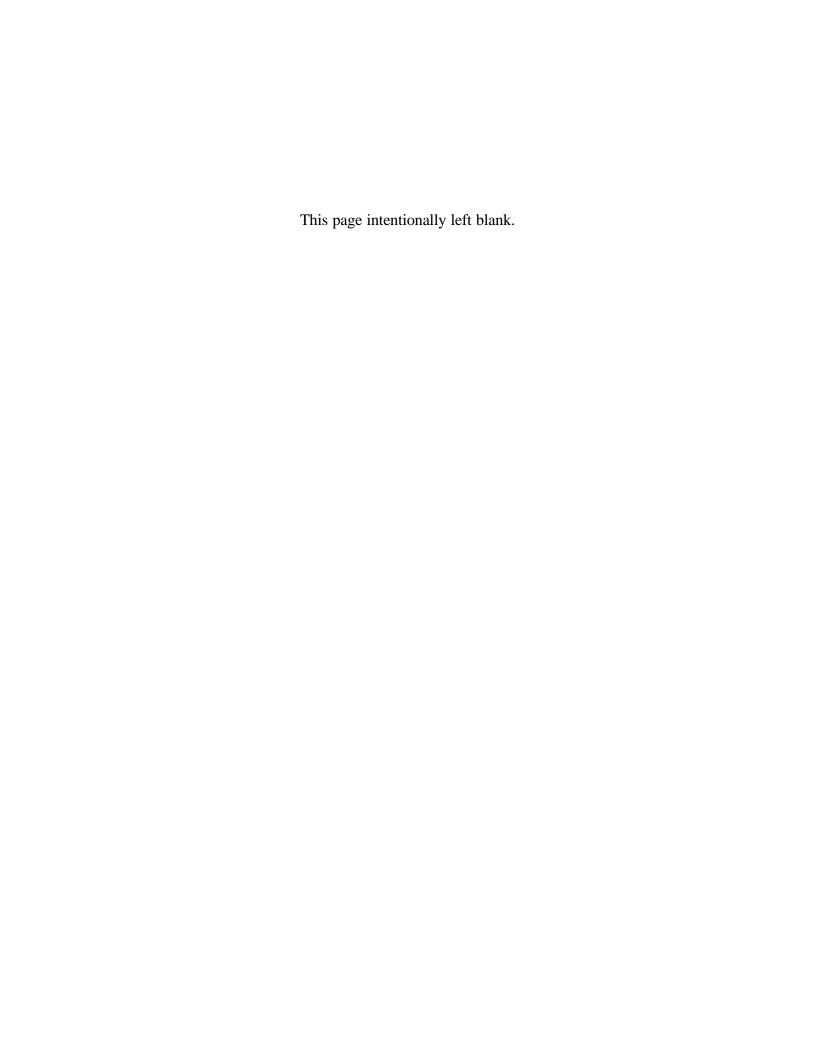


Table of Contents

1.0	INTE	RODUCTION	1
	1.1	Goals and Expectations	1
	1.2	Interfaces	2
2.0	REG	ULATING INDUSTRIAL HYGIENE AND SAFETY	3
	2.1	Regulatory Scope	3
	2.2	Regulatory Process	
	2.3	Responsibilities and Authorities	
		2.3.1 Regulatory Official (RO)	
		2.3.2 Project Management Official (PMO)	5
		2.3.3 Safety Review Official (SRO)	
		2.3.4 Verification and Confirmation Official (VCO)	
		2.3.5 Policy and Training Advisor (PTA)	
		2.3.6 RU Staff	
	2.4	Schedule	
	2.5	Resources	
	2.6	Quality Assurance	
3.0		S PROCEDURES	
3.0			
	3.1	Corrective Action Program	
	3.2	IH&S Reporting	
		3.2.1 Applicability of the Procedure	
		3.2.3 RU-Generated Material	
		3.2.4 Review of IH&S Prior to Limited Construction and Construction	
		3.2.5 Voluntary Protection Program (VPP)	
	3.3	Design Review	12
	3.4	Incident Reporting	13
	3.5	Safety Allegation Procedure	13
	3.6	Variance Procedure	13
		3.6.1 The Contractor Requests Variance	14
		3.6.2 RU Responds to the Variance Request	
	3.7	Training Procedure	15
4.0	INSF	ECTION PROGRAM	16
	4.1	Purpose of the Inspection Program	16
	4.2	IH&S Inspection Principles	16
	4.3	IH&S Inspection Protocols and Elements	17
		4.3.1 Inspection Planning and Scheduling	18
		4.3.2 Entrance and Exit Meetings	
		4.3.3 Inspection Preparation	
		4.3.4 Inspection Performance	
		4.3.5 Inspection Documentation and Records	
		T.J.O Inspection and Anegation Follow-up	19

5.0	4.4 DEFIN	Specifi 4.4.1 4.4.2 4.4.3	Inspector Qualification c IH&S Inspection Procedures Routine IH&S Verification Inspections Periodic IH&S Program Review Reactive-Incident Followup Inspections S	20 20 20 21
6.0	REFEI	RENCE	S	22
7.0	LIST (OF TER	MS	26
			Figures	
Figure	1. RU	Organiz	cation Structure	4
Figure	2. IH&	S Progr	ram Development Schedule	7
			Tables	
Table 1	l. Requ	uiremen	ts for Contractor-Generated Material	10
Table 2	2. Vari	ance Ev	aluation Report Outline	15
			Appendix	
Append	<u>dix A -</u>	<u>Industri</u>	al Hygiene And Safety Requirements	27
			Exhibits	
Exhibit	t 1. IH	&S Bud	get Components	39

INDUSTRIAL HYGIENE AND SAFETY REGULATORY PLAN

1.0 INTRODUCTION

This plan provides guidance to Office of Safety Regulation (Regulatory Unit) staff and its contract personnel on how the RU will regulate industrial hygiene and safety (IH&S) for the River Protection Project Waste Treatment Plant (RPP-WTP) Contractor. This document is based on contractually imposed requirements from the following:

- Department of Energy (DOE) Order 440.1A, Worker Protection Management for DOE Federal and Contractor Employees
- DOE Order 225.1A, Accident Investigations
- DOE Order 231.1, Change 2, *Environment, Safety and Health Reporting*.

The essential elements of RU regulation are the federally mandated codes and standards defined in 29 CFR 1910, "Occupational Safety and Health Standards for General Industry," and 29 CFR 1926, "Safety and Health Regulations for Construction." The specific IH&S requirements to which the Contractor is committed by Contract are provided as Appendix A.

Based on the policy in DOE/RL-96-25, *Policy for Safety Regulation of the RPP-WTP Contractor*, the Manager of the U.S. Department of Energy (DOE), Richland Operations Office (RL) is responsible and accountable for formulating and executing the regulatory program for the safety regulation of the RPP-WTP Contractor. The Manager of the Office of River Protection (ORP) is the principal DOE official responsible for program performance (Program Official) and is accountable for successfully executing the tank waste cleanup mission. This separation is consistent with the regulatory principle of independence. The RL Manager has delegated regulatory responsibility to the Regulatory Official (RO), who heads the Regulatory Unit (RU).

The RU's position on and expectations of the RPP-WTP Contractor's IH&S program are documented in a position paper, RL/REG-99-11, *Regulatory Unit Position on Regulation of the RPP-WTP Industrial Hygiene and Safety Program*. The fundamental concept established in the position paper is that the Contractor is responsible for performing work safely. The paper also defines the RU's regulatory authority.

1.1 Goals and Expectations

The RPP-WTP Contract¹ requires that the Contractor be responsible for "providing safe and healthful working conditions for employees, and all other persons under the Contractor's control who work in the general vicinity of the Contractor site, including subcontractors."

_

¹ Contract DE-AC27-96RL13308 between DOE and BNFL Inc., Section C.3, "Regulatory Environment," dated August 24, 1998.

The RU's goal is to provide oversight of the Contractor's integrated standards-based nonradiological safety and health (IH&S)² program. This oversight will ensure that the Contractor promotes and employs adequate safety practices, protective systems, equipment, and engineered barriers to properly protect its employees from undue risk of illness and injury.

1.2 Interfaces

The RU maintains several interfaces in its role as IH&S regulatory authority, as listed below. Additional interfaces may be identified as the program is developed and implemented and as the project proceeds from construction to operations.

- Contractor Manager of Industrial Safety The Contractor Manager of Industrial Safety is the primary contact for questions regarding IH&S programs and for planned RU oversight activities related to IH&S.
- ORP The RU provides information on IH&S regulatory activities to the management and staff of the ORP safety organization.
- Occupational Safety and Health Administration (OSHA) and the Washington State
 Department of Labor and Industries (L&I) The RU may cooperate with OSHA and L&I in the areas listed below:
 - Interpretation and policy using the expertise of the L&I and OSHA organizations for variances and interpretations
 - Incident response defining arrangements for responding to and investigating significant accidents and near-miss incidents or accidents
 - Inspection providing inspection results and using specialized expertise, where appropriate
 - Training sharing training opportunities
 - Inquiries responding to inquiries.
- DOE-Headquarters (HQ) The RU responds to requests for information from and provides periodic updates on regulatory program status to the Office of the Deputy Assistant Secretary for Project Management (EM-40). The RU works with the Office of Occupational Safety and Health Policy (EH-51) to do the following:
 - Resolve policy questions
 - Address technical issues

RL/REG-2000-04, Rev. 1

² This document uses the more commonly accepted term "industrial hygiene and safety," or IH&S, in preference to the Contract term "non-radiological worker safety and health" or the term "occupational safety and health." The RU considers the terms equivalent.

- Provide interpretations of DOE worker safety and health and DOE-adopted OSHA standards.

The RU responds to DOE-HQ oversight of the RU IH&S program by the Deputy Assistant Secretary for Oversight (EH-2).

• Other regulators - The RU may interface with other entities holding licensing and permitting authority for areas such as pressure vessel inspection, elevator inspection, potable water protection, and utilities tie-in. The requirement and responsibilities/ authorities for acceptance testing³ are not currently established and may result in an additional contract requirement.

2.0 REGULATING INDUSTRIAL HYGIENE AND SAFETY

This section defines the scope of IH&S regulation and how the RU executes IH&S regulatory responsibilities. The basic tenet of the RU regulatory approach is to achieve compliance with the contractually required IH&S codes, standards, and processes.

2.1 Regulatory Scope

The RPP-WTP Contract⁴ specifies the IH&S requirements that the Contractor shall meet. The RPP-WTP Contract⁵ also requires the following:

"The Contractor shall develop and implement an integrated standards based safety management program. The Contractor's safety management program shall reflect proven principles of safety management and work planning that promote accident prevention, employee involvement, and sound hazard analysis and control."

As noted, the Contractor must develop, implement, and maintain an integrated standards-based safety management program that meets the Contract requirements noted above. The Contract⁶ requires that the Contractor document this program and submit the document for RU approval.

2.2 Regulatory Process

The RU regulates IH&S using the same principles used for regulating radiological, nuclear, and process safety (RNPS). These principles draw from the DOE program for integrated safety management and the U.S. Nuclear Regulatory Commission's principles for good regulation: openness, independence, efficiency, clarity, and reliability. The RU's regulatory principles are defined in detail in DOE/RL-96-26, *Memorandum of Agreement for the Safety Regulation of the RPP-WTP Contractor*.

³ Also known as IH&S-related construction or building inspection.

⁴ Contract No. DE-AC27-96RL13308, Part I, Section C.3, p. C-7.

⁵ Ibid., Standard 4, "Safety, Health, and Environmental Program."

⁶ Ibid., Modification No. A006, Table C4-2.1, Item B-1-31.

In defining the IH&S regulatory process, the RU has adopted or adapted existing RU policies and procedures where practicable. Existing policies and procedures were modified only to the extent necessary to incorporate IH&S requirements. Where no equivalent administrative procedures existed, the RU developed the procedures included in this document. The RU has integrated to the extent practicable IH&S programs with RNPS programs to minimize the impact of regulation.

2.3 Responsibilities and Authorities

The legal and contractual basis for the RU's regulation of IH&S is defined in RL/REG-99-11. The RU's structure is shown in Figure 1. Responsibilities for IH&S regulation are assigned within the RU, as described in the following subsections.

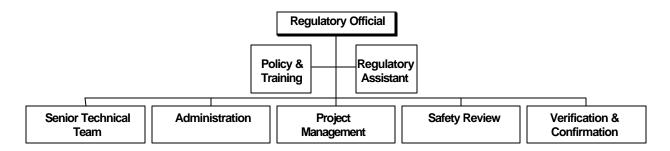


Figure 1. RU Organization Structure

2.3.1 Regulatory Official (RO)

Through independent regulation sanctioned by DOE, the Manager, DOE/RL delegates to the RO responsibility for verifying the Contractor's safety⁷ performance. The RO, who reports directly to the RL Manager, verifies safety regulation occurs according to defined and open regulatory practices that support an orderly and predictable regulatory process. The RO is responsible for formulating, planning, developing, implementing, and managing safety regulation. The RO authorizes (i.e., grants the Contractor permission to perform) activities as specified by the Contract between DOE and the Contractor. The RO verifies the adequacy of the Contractor's safety commitments before activities are performed.

The Regulatory Assistant assists the RO in his/her responsibilities. The Senior Technical Team consists of technical experts who are assembled by the RO, as needed. They may be asked to review, analyze, or resolve technical safety matters. The Administration function provides the breadth of management functions, such as budgeting, finance, document control, and contracting.

_

⁷ In the context of this plan, "safety" specifically relates to "industrial hygiene and safety." More broadly, the responsibilities stated here apply to RNPS as well.

2.3.2 Project Management Official (PMO)

The PMO is the principal point of contact with the Contractor and with external regulatory agencies regarding safety. The PMO serves as the review team leader, using technical expertise provided by the Safety Review Official and staff, for reviews of Contractor submittals, including specifically the Contractor's integrated, standards-based IH&S safety program. The purpose of the PMO-led reviews is to ensure that the Contractor is prepared and competent to perform the contracted services. The PMO is also the primary point of contact with other government, private, and public organizations; other regulatory entities; and Tribal Nations, stakeholders, and the public. The PMO maintains contacts with DOE-HQ, OSHA, and L&I.

2.3.3 Safety Review Official (SRO)

The SRO is the RU authority on safety standards and requirements, technical safety issues, and the authorization basis, including IH&S.⁸ The SRO leads technical evaluations of Contractor submittals to ensure that the authorization basis (1) provides for adequate safety; (2) complies with applicable laws, regulations, and requirements; and (3) conforms to DOE-stipulated top-level safety standards and principles.

2.3.4 Verification and Confirmation Official (VCO)

The VCO is the RU authority for the Contractor's safety performance and for the condition and status of its activities. The VCO develops, manages, and implements the regulatory activities of inspection, investigation, review, and evaluation. The VCO's responsibility is to determine the Contractor's compliance to requirements and commitments. If unsafe conditions or noncompliances are identified, the VCO initiates appropriate corrective actions, including stopping work for appropriate cause. The VCO defines the RU inspection program for safety, including IH&S.

2.3.5 Policy and Training Advisor (PTA)

The PTA is responsible for two essential elements of the IH&S program: (1) verifying that the changes required by incorporating IH&S program elements into the existing RU regulatory program are consistent with RU policy and practice, and (2) ensuring that the IH&S training defined for RU staff is implemented.

2.3.6 RU Staff

Technical staff who review the Contractor's IH&S submittals (see Section 3.2) or inspect IH&S activities may be drawn from any part of the RU organization. RU staff members who review or inspect the Contractor's IH&S activities will possess a minimum requisite competence to fulfill

⁸ The authorization basis is the composite of information provided by the Contractor in response to safety requirements and forms the basis upon which the RU grants permission to perform regulated activities.

job-related duties and responsibilities in IH&S regulation. Each staff member involved in IH&S review or inspection is required to complete IH&S training or otherwise demonstrate competency. The objective of the training is to obtain a level of competence that permits RU staff to be able to recognize when the special skills of an IH&S expert are essential, without necessarily having the same level of expertise. This training and any site-specific training required by the Contractor must be completed before RU staff are permitted access to the Contractor's site to conduct an IH&S inspection involving the application of codes and standards. Training requirements are described in Section 3.7.

2.3.7 Contract Personnel

RU staff members responsible for IH&S regulation are trained to identify issues requiring expert review. Contract personnel, who are used as needed, may provide IH&S technical expertise. These consultants report to the SRO or the VCO, who are responsible for the technical elements of the RU's scope of work and the inspection program, respectively. The PMO will verify that contract personnel do not have a conflict of interest when overseeing the Contractor.⁹

Contract personnel must have appropriate credentials. Contract personnel represent the RU in reviewing Contractor compliance with IH&S requirements and must provide all necessary measuring and sampling devices needed to support their scope of work. Accredited laboratories will be used to analyze samples.

2.4 Schedule

The current schedule for implementing IH&S regulation for the RPP-WTP Project is shown in Figure 2.

_

⁹ Alternatively, the RU may use DOE personnel qualified under the Technical Qualification Program functional areas "Occupational Safety" or "Industrial Hygiene" or individuals qualified under Office of Personnel Management rules for job series 018 (Industrial Hygiene Series) and 690 (Safety and Occupational Health Management Series).

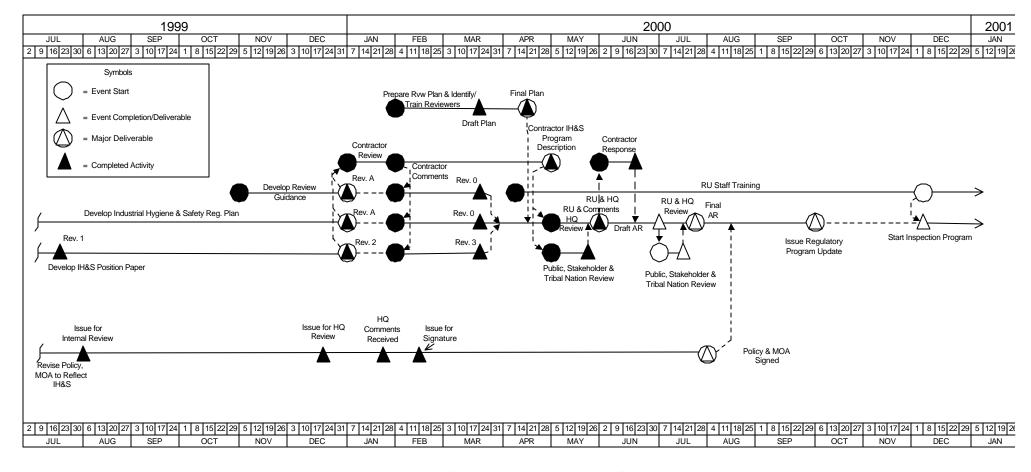


Figure 2. IH&S Program Development Schedule

2.5 Resources

The significant activities and related funding necessary to implement IH&S regulation are shown by fiscal year (FY) in Exhibit 1, attached. Costs are separated by program direction (PD) and program support (PS). 10 Combining IH&S regulatory activities with RNPS regulatory activities creates the opportunity for cost efficiencies. In addition, the RU previously anticipated looking at some aspects of IH&S as an integral part of radiological safety.

The RU recognizes that certain IH&S measurement equipment may need to be accessed, including sampling pumps, explosivity meters, sound level survey meters, organic vapor analyzers, and heat stress instruments. The RU anticipates obtaining needed equipment by budgeting for a utilization fee payable through support contract funding and does not expect to directly own any IH&S measurement equipment. The RU may purchase one or more cameras for inspectors to use.

2.6 Quality Assurance

The RU will contract only with companies that demonstrate that all instruments and other sampling apparatus are maintained, calibrated, and operated according to the latest vendor data for the specific instrument or instrument configuration. Also, the companies must conduct monitoring and sampling according to established National Institute of Occupational Safety and Health requirements.

3.0 IH&S PROCEDURES

This section describes the procedures that the RU will use to implement IH&S regulation. Only a brief description and reference to the procedure is provided where existing procedures, as modified to include IH&S, are adequate. Where no procedure existed, this section provides the full procedure. The procedures presented or referenced apply to RU staff or contract personnel performing IH&S-related activities.

- Corrective Action Program (Section 3.1)
- IH&S reporting (Section 3.2)
- Design review (Section 3.3)
- Incident reporting process (Section 3.4)
- Safety allegation procedure (Section 3.5)
- Variance procedure (Section 3.6)
- Training procedure (Section 3.7).

3.1 Corrective Action Program

The RU executes a Corrective Action Program that ensures regulatory requirements are met. The RU monitors identification, implementation, and effectiveness of corrective actions taken by

¹⁰ PD costs are those associated with the federal staff. PS costs are all other costs, including contract personnel.

the Contractor to correct and prevent recurrence of failures to meet regulatory requirements. If the Contractor fails to meet a regulatory requirement, the RU Corrective Action Program is used to determine what regulatory action is warranted. The RU staff will follow MD and Handbook 5.3, "Corrective Action Program Implementation," to document, track, and verify closure of deficiencies in the Contractor's IH&S program and practices.

3.2 IH&S Reporting

The purpose of this procedure is as follows:

- Document the IH&S reporting required from the Contractor
- Describe how the DOE will use the reported information
- Describe what documentation the RU will generate to adequately discharge its role as IH&S regulator.

This procedure does not address the process of reporting information required by the contractual commitment¹¹ that the Contractor comply with DOE/RL-94-02, *Hanford Site Emergency Response Plan*. The RU's role and responsibilities as they relate to DOE/RL-94-02 are addressed in Management Directive 5.4, "Regulatory Unit Emergency Response (in preparation)." All IH&S information (incoming and outgoing) is managed and controlled according to MD and Handbook 2.1, "Information Management."

3.2.1 Applicability of the Procedure

This procedure applies to contractual commitments made by the Contractor to the client (Office of River Protection) and to written commitments made to the RU concerning IH&S reporting.

3.2.2 Contractor-Generated Documents

In general the Contractor must meet the reporting requirements of OSHA Standards 29 CFR 1910 and 1926. Appendix A, Item 21, "Reporting" specifies the DOE forms to be used for selected reports. Appendix A, Item 21 also specifies reporting frequency and where in DOE the information is submitted. The OSHA standards, the Contract, or existing Contractor commitments require that the Contractor prepare the additional documents shown in Table 1. The table shows the source of the requirement. All these documents, except employee safety complaints, should be available for review at the Contractor's location and for use in planning, training, and inspection activities. Because of safety implications, RU staff involved in IH&S field activities must be familiar with these documents.

¹¹ Contract No. DE-AC27-96RL13308, Table S4-1, Footnote 2.

Table 1. Requirements for Contractor-Generated Material

Document Required	Description	Source of Requirement or Commitment			
Hazardous Waste	A plan outlining the risks and mitigation actions related	29 CFR 1910.120			
Operations Safety Plan	to a treatment, storage, and disposal facility.	(29 CFR 1926.65)			
Process Hazards Analysis –	A plan describing highly hazardous chemical process	29 CFR 1910.119(c)			
Process Safety (Highly	risks and the associated engineering controls, monitoring	(29 CFR 1926.64)			
Hazardous Chemicals)	instrumentation, and protective requirements for				
	employees and the public. 12				
Carcinogen-Specific	A program that identifies the material locations within the	29 CFR 1910.1028(b)			
Control Plan	plant, engineering controls, and workplace practices.				
Written Hazards	A comprehensive plan that informs all employees of the	29 CFR 1910.1200(e)			
Communication Plan	chemical risks and provides a roadmap they can use to	(29 CFR 1926.59)			
	easily access the information.				
Respiratory Protection	A document describing how respiratory protection is ad-	29 CFR 1910.134(c)			
Program	ministered plant-wide; who (by name) is responsible; and	(29 CFR 1926.103)			
	the essential elements of using, controlling, and				
	maintaining equipment and devices.				
Employee safety	Concerns originated by Contractor or subcontractor	DOE Order 5480.29 ¹³			
complaints	employees related to inadequate safety and related				
	information on the Contractor's response to these				
	concerns.				
Employee Emergency	Written published plans that tell employees how to	29 CFR 1910.38			
Plans and Fire Protection	respond to an emergency or a fire; the plans cover	(29 CFR 1926.35)			
Plans	signals, means of egress and exit, and accountability.				
Variance implementation	Periodic documents that show the status of variance	29 CFR 1905			
status	implementation.				
Near-Miss Report	A report indicating incidents that in and of themselves	29 CFR 1910.119(m)(1);			
	did not cause harm or property damage but that could	ISMP, Sections 1.3.17,			
	have caused a fatality, serious injury, and/or property	3.16.3, and 5.6.7; and			
	damage in another instance or condition. Reporting is	ISAR, Section 3.7			
	done according to the referenced requirements.				
Non-radiological Worker	Description of the Contractor's integrated, standards-	Contract deliverable B-1-			
Safety and Health [Plan] ¹⁴	based, safety management program addressing non-	31, Table C4-2.1, "Part			
	radiological worker safety and health.	B-1 Deliverables."			

The PMO will request that the Contractor advise the RU when the documents in Table 1 are created or revised to ensure that RU staff involved in IH&S field activities are knowledgeable of the latest safety conditions. Where proprietary processes are described in the documents, the RU will control information according to existing procedures for controlling proprietary information. The RU will establish a process for controlling illness/injury data because this information is only to be given to interested parties by the employer, not the regulating agency.

This "process hazards analysis" is not the same as the broader process hazards analysis required for the
 Preliminary Safety Analysis Report and Final Safety Analysis Report submittals.
 DOE Order 5480.29 is cited in the Contract in reference to the Contractor's Employee Concerns Management

¹³ DOE Order 5480.29 is cited in the Contract in reference to the Contractor's Employee Concerns Management System deliverable. The RU defines the following submittal expectation in RL/REG-96-03, *Guidance for Review of the RPP-WTP Contractor Employee Concerns Management System*: "The Contractor's ECP [Employee Concerns Program] submittal should provide mechanisms for responsive treatment of concerns consistent with the DOE program standards found in DOE Order 5480.29, Section 9."

Letter CCN 007550, Attachment 2, Item 7, refers to an "Environmental, Health and Safety Plan for Construction Activities," dated November 8, 1999.

Other Contractor-generated documents that may typically be accessed by the RU personnel are as follows:

- As-built drawings/processes
- Internal safety audits and inspections
- Job safety analyses
- Accident/property loss data with Contractor analyses and corrective actions
- Procedures
- Results of environmental, chemical, or physical agent monitoring.

In most cases, these documents can be reviewed at the construction site or facility. However, in investigations of serious incidents, access to such information at a central Contractor location may be necessary (see Appendix A, Item 20, "Type A and Type B Accident Investigations").

3.2.3 RU-Generated Material

The RU will generate IH&S documents, including the following:

- Inspection reports
- Accident/near-miss and property loss investigation reports
- Variance progress inspections
- Employee complaint inspections
- Industrial hygiene sampling and monitoring results
- Instrument calibration logs and records. 15

The RU may generate reports as follows:

- The RU will review injury/illness and property loss data as part of executing its regulatory authority.
- During the operation phase, the RU anticipates that the radiological safety requirements
 and the traditional IH&S requirements may sometimes provide different approaches to
 employee protection (e.g., for personal protective equipment or for sampling and
 analysis). The resolution of such conflicts will be documented and placed in the public
 record.
- The RU will review, validate, and respond to information concerning abatement and variance progress and completion.

¹⁵ All sampling and environmental monitoring devices used for performing RU requested analyses shall be maintained, calibrated, and field challenged by contract personnel providing the devices according to appropriate procedures. The RU will include the records as an attachment to the inspection report.

3.2.4 Review of IH&S Prior to Limited Construction and Construction

The Contract¹⁶ requires that the Contractor develop and implement an integrated standards-based safety management program that addresses non-radiological worker safety and health. The Contract¹⁷ also requires that the Contractor document this program and submit the document for RU approval.

The RU will review the Contractor's submittal and make the results of this review available to the RO. The RO may use this information as part of the readiness for limited construction and readiness for construction decisions. This approach is consistent with that taken for RNPS regulation.

Because construction hazards are largely independent of whether the Contractor is requesting authorization to perform limited construction or construction, the RU will use the same general review process for both authorizations. The review approach is described in RL/REG-2000-03, Industrial Hygiene and Safety Review Guidance for the RPP-WTP Limited Construction and Construction Authorization Requests.

3.2.5 Voluntary Protection Program (VPP)

The Contractor has committed (ISMP, Section 7.2, "Occupational Health and Safety Interface) to have an OSHA-qualified VPP. How DOE will evaluate this program, including RU involvement, and what submittals will be required will be defined later. However, if the Contractor qualifies for Merit or STAR status under the DOE VPP program, the VPP qualification program defined by the Deputy Assistant Secretary for Worker Health and Safety (EH-5)- which is equivalent to OSHA protocol- will be used.

3.3 Design Review

An element of RU safety regulation is oversight of Contractor design reviews. The RU's position is that systematic and thorough design reviews that consider IH&S will ensure early detection and resolution of noncompliances with established occupational safety and health standards. The RU intends to maintain adequate and current knowledge of the evolving RPP-WTP design.

RU staff members follow the information provided in RL/REG-99-07, *Design Review Guidelines*. The RU will conduct IH&S design review oversight commensurate with the project development. For example, at the conceptual phase, IH&S design review oversight is limited by the detail available for review. As the design progresses, additional IH&S considerations are appropriate.

¹⁶ Contract No. DE-AC27-96RL13308, Modification No. A006, Part I, Section C, Standard 4.

¹⁷ Ibid., Modification No. A006, Table C4-2.1.

3.4 Incident Reporting

RU staff members will follow the information provided in Inspection Technical Procedure (ITP) I-161, "IH&S Incident Response," see Section 4.4.3.

3.5 Safety Allegation Procedure

RU staff members follow the information provided in MD and Handbook 5.1, "Management of Safety Allegations." The purpose of this directive is to provide the necessary guidance for the RU and the RU contractor personnel to respond to allegations received from Contractor employees, former employees, employee representatives, or the public.

3.6 Variance Procedure

The purpose of this procedure is to provide guidance for requesting, evaluating, and responding to variances from the contractually prescribed IH&S codes and standards (standards). This procedure applies to temporary and permanent variances from the IH&S requirements defined in Appendix A. This procedure also applies to interpreting standards and their applicability. RU staff may obtain advice from OSHA, DOE (through the Response Line), and L&I on questions of interpretation and applicability.

This procedure describes how the RU responds to variances that are submitted to the RU. The procedure delineates the differences between temporary and permanent variances and defines the information the Contractor must provide. The Contractor may request variances from the RU in the following situations:

- The Contractor is unable to comply with a standard because of temporary unavailability of employees, materials, and/or equipment or an inability to complete necessary construction or alteration of facilities.
- The Contractor wants to use an alternate standard that meets or exceeds the level of protection provided by the requirements defined in Appendix A.

Temporary variances may be granted if the Contractor demonstrates it is effectively safeguarding employees against the hazards covered by the standard and has an effective program for complying with the standard. Permanent variances may be granted if the Contractor can show that the conditions, practices, means, methods, operations, or processes used or proposed to be used meets or exceeds the level of protection provided by the applicable standard.

The process for requesting, evaluating, and responding to variances is described in the following subsections.

3.6.1 The Contractor Requests Variance

The Contractor applies for a variance by submitting the following information, by letter, ¹⁸ to the RO:

- The standard from which the Contractor is seeking a variance
- A statement that the Contractor is unable to comply with the standard or wishes to adopt an alternate standard and a statement providing the following information:
 - Temporary variance requests A statement of the steps the Contractor has taken and will take to protect employees from the hazards covered by the standard and a description of the Contractor's program for complying with the standard as quickly as possible
 - Permanent variance requests An evaluation and statement that the conditions, practices, means, methods, operations, or processes used or proposed to be used provide as safe a workplace as would be provided if the Contractor complied with the applicable standard. Evaluations should be documented in enough detail that a knowledgeable person reviewing the evaluation can identify the technical issues considered during the evaluation and the basis for the determination.
- A statement that the Contractor has informed employees of the variance request by (1) giving a copy to their authorized representative (where applicable); (2) posting, at places where notices to employees are normally posted, a summary of the request and specifying where a copy may be examined, or (3) other appropriate means. The Contractor will inform employees that they may comment on the request to the RO and will provide contact information.

3.6.2 RU Responds to the Variance Request

The RO receives the variance request and assigns a responsible RU staff member to evaluate the request. This evaluation is normally completed within 60 calendar days. The responsible RU staff member completes the following steps:

- 1. Evaluate the completeness of the Contractor's submittal. If there are deficiencies, generate a rejection letter identifying the deficiencies.
- 2. Determine whether precedents exist in previous interpretations using resources available from OSHA, DOE, and L&I.
- 3. Communicate as necessary with the Contractor and/or workers to resolve concerns and receive supplemental information to complete the safety evaluation. (Any additional information used to develop RU conclusions must be appropriately referenced and available to the public.)

RL/REG-2000-04, Rev. 1 06-30-00

_

 $^{^{18}}$ All steps of this process are public; all documents exchanged are placed in the public reading room.

- 4. Communicate with cognizant staff in DOE's Office of Environmental Management (EM) and EH-5 to determine their interest. Variances that involve changes to the policy and deliverable requirements of Appendix A may require EH-5 approval.
- 5. Prepare a variance evaluation report that includes the sections shown in Table 2.

The RO, in concert with EM and EH-5 where appropriate, grants or denies the variance request by formal letter to the Contractor. A temporary variance may be in effect for no longer than the period necessary for the Contractor to achieve compliance with the standard or one year, whichever is shorter. A temporary variance may be renewed; however, the variance request must be resubmitted and re-evaluated.

Section	Description of Section
Introduction	A brief description of the Contractor's variance request; note any supplementary submittals.
Background	A summary of relevant regulatory issues, including a comparison of the applicable standard and the current situation (for temporary variances) or proposed standard (for permanent variances) – This information forms the basis for the dis position of the variance request. This section may also summarize the Contractor's rationale for the proposed variance and answer the question, "Why is the variance being requested?"
Evaluation	A documentation of the basis for the disposition of the variance request – The safety evaluation is performed to establish whether the variance results in reduced employee health or safety protection. In addition to providing the basis for the RU's action, the evaluation communicates the regulatory process to the public. The evaluation should be written to be understandable by interested members of the public. The responsible RU staff member should use his/her experience to perform sufficient research and address the relevant issues to provide a clear, coherent, and technically sound evaluation.
Conclusion	Unless the evaluation suggests the variance be denied, the conclusion takes the following form: "On the basis of the considerations described above, the RU concludes there is reasonable assurance that the health and safety of workers will not be adversely affected by this variance." The responsible RU staff member should make a specific recommendation regarding granting or denying the variance for action by the RO and note any limitations on the variance, if granted.
References	A listing of cited references - Cited references must be identified and be publicly available.

Table 2. Variance Evaluation Report Outline

3.7 Training Procedure

The RU requires that staff members who review or inspect the Contractor's IH&S activities possess a minimum requisite competence. This competence is required to fulfill job-related duties and responsibilities in the area of IH&S regulation. Each of these staff members is required to complete IH&S training or otherwise demonstrate competency. The objective of the training is to obtain a level of competence that permits RU staff members to be able to converse with experts in the field of IH&S, without having themselves reached the same level of expertise.

The specific training requirements for each staff member are contained in their individual development plan. Before RU personnel are permitted to access the Contractor's site to conduct

RL/REG-2000-04, Rev. 1 06-30-00 15

¹⁹ The RO acts under authority granted by letter, Dr. C.L. Huntoon to Messrs. K. Klein and R. French, "Occupational Safety and Health Regulation of the Hanford Privatization Contractor," dated October 13, 1999.

an IH&S inspection, they must complete RU-required IH&S training specified in the individual development plan and any site-specific training required by the Contractor. Each staff member also must satisfy the requirements of RL/REG-98-07, *Regulatory Unit Policy for Training and Training Plan*, and MD 4.1, "Staff Competence." Training and/or other developmental activities will be provided to RU staff members who do not meet requirements. Training and developmental activities will be based on learning objectives.

RU staff members who have job duties or responsibilities in the area of IH&S regulation also must meet, as a minimum, all education, training, experience, and other relevant requirements that apply to technical personnel in the RU. Qualification requirements may result from the need to perform IH&S evaluations or inspections (with the assistance of IH&S experts) of the Contractor facilities or designs.

4.0 INSPECTION PROGRAM

This section presents the RU inspection program for IH&S. This program is distinct from the inspection program for RNPS. This separation recognizes the more limited nature of IH&S inspection and the more deterministic nature of IH&S standards. However, the elements of the IH&S inspection program are consistent with those for RNPS as defined by RL/REG-98-05, *Inspection Program Description for the Regulatory Oversight of the RPP-WTP Contractor*, and RL/REG-98-24, *Inspection Program Implementation Plan for the Regulatory Oversight of the RPP-WTP Contractor*. These documents contain information on the regulatory background for inspection, including an analysis of inspection authority, which is not repeated here.

Although distinct from the RNPS inspection program, the RU will perform IH&S inspections in conjunction with the RNPS inspection program. For example, trained RNPS inspectors will perform IH&S inspections as an ancillary duty during routine construction inspections. The RU will incorporate the results of the routine IH&S inspections into the applicable inspection reports used to document RNPS inspections. The RU will perform periodic IH&S program reviews using lead RNPS inspectors, supplemented as necessary by technical experts in IH&S. Lead RNPS inspectors will also follow up on IH&S events with IH&S technical experts as needed.

4.1 Purpose of the Inspection Program

The purposes of the RU IH&S inspection program are to (1) confirm that the Contractor is in compliance with the requirements of Appendix A and with Contractor-defined policies and procedures for protecting employees from conventional workplace hazards; (2) ensure timely identification and implementation of corrective actions; and (3) confirm that the Contractor IH&S program reflects proven principles of safety management and work planning that promote accident prevention, employee involvement, and sound hazard analysis and control.

4.2 IH&S Inspection Principles

The RU IH&S inspection program is based on the premise that the Contractor is directly responsible for the safety of its activities and that the RU's function is to ensure that the

Contractor fully discharges its safety responsibility. The IH&S inspection program has a life-cycle scope, initiated during construction and continuing throughout operation and deactivation. It has the capability to incorporate evolving knowledge and understanding of the work, associated hazards, and appropriate hazards controls. The IH&S inspection program has three major elements:

- 1. Inspection input to major regulatory decisions (e.g., start of construction or start of operations)
- 2. General inspection of ongoing Contractor IH&S performance; these inspections will generally be done as an adjunct to a planned RNPS inspection
- 3. Response to specific events or conditions (e.g., incidents, unusual events, or allegations).

For efficiency and effectiveness, the IH&S inspection program does not replace the Contractor's self-assessment program but rather evaluates its effectiveness. The program encourages self-identification, self-reporting, and self-correction of safety issues and noncompliances.

The IH&S inspection program focuses on areas of greatest safety significance while relying on a planned approach to ensure that the balance of the Contractor's safety performance is addressed. The RU's tailored approach to inspection is based on an understanding of the Contractor's work, the nature and level of the associated hazards, technical approaches to controlling the hazards (including standards for effecting the control), and the Contractor's management processes (particularly self-assessment). The program also focuses inspection efforts on areas that have indications of lagging safety performance and reduces the level of inspection effort in areas that have indications that the Contractor's safety performance is strong and the Contractor's self-assessment program is effective.

Consistent with the openness principle ²⁰ under which the RU operates, inspection observations and actions must be based on objective, unbiased assessment of information- documented with reasons explicitly stated- and fully available to the public. Consistent with the clarity principle, ²¹ the program is defined to the level of specific inspection procedures. This information is available to the Contractor and the public. (Specific IH&S inspection procedures are in development and will be posted on the RU website as they become available.)

4.3 IH&S Inspection Protocols and Elements

The IH&S inspection program is executed in a planned, disciplined, and cost-effective manner. Inspection protocols describe the RU and Contractor process of interaction. The applicable protocols from RL/REG-98-24 are used for this purpose.

The RU IH&S inspection program is conducted according to existing RU administrative practices, where practicable. The RU adopts or adapts existing Inspection Administrative

²⁰ DOE/RL-96-25, Item 2, p. 2.

²¹ DOE/RL-96-26, Section 2.2.4, p. 3.

Procedures (IAPs) wherever possible. Elements of the IH&S inspection program are defined in the following sections. These elements are consistent with RL/REG-98-24 and the RU's IAPs.

4.3.1 Inspection Planning and Scheduling

The RU's VCO is responsible for planning and scheduling announced IH&S inspections. Inspections are scheduled to include each significant aspect of the project (i.e., site preparation, construction, operation testing and readiness, full operations, and deactivation). Inspection planning and scheduling are conducted according to IAP A-101, "Inspection Planning and Scheduling." Planning and scheduling for announced inspections include informing key Contractor managers and individuals of the inspection's purpose, scope, and approximate length and any logistical requirements necessary to complete the inspection.

Some IH&S inspections will be unannounced to the Contractor. The scheduling of unannounced inspections will be internally coordinated within the RU and then approved by the RO consistent with IAP A-102, "Announced and Unannounced Inspections and Information Requests."

4.3.2 Entrance and Exit Meetings

Entrance and exit meetings associated with each specific IH&S inspection are arranged and conducted according to IAP A-103, "Entrance and Exit Meetings." For unannounced inspections, a briefing is held with essential personnel and managers (including subcontractors) when the inspectors arrive. The inspectors will describe the inspection's purpose, scope, and particular areas of interest (if applicable) and will ask if there are any questions or concerns or any particular safety and health requirements necessary for the inspectors to follow while in the facilities.

For inspections involving immediate action and response (e.g., response to specific events or conditions such as incidents, unusual events, or allegations²²), the RU will follow Inspection Technical Procedure I-161, "IH&S Incident Response."

4.3.3 Inspection Preparation

Inspection preparation is performed according to IAP A-104, "Inspection Preparation," and includes the following:

- Designating a qualified lead inspector
- Obtaining approved inspection procedures that meet the objectives for the given inspection area

RL/REG-2000-04, Rev. 1 06-30-00

²² An allegation is a declaration, statement, or assertion of impropriety or inadequacy associated with RU-regulated activities, the validity of which has not been established. This term includes all concerns identified by individuals or organizations, or through inspection and audit efforts.

- Obtaining necessary information before the inspection starts and writing the inspection plan
- Scheduling the entrance meeting, establishing points of contact, and addressing logistical considerations.

4.3.4 Inspection Performance

IAP-105, "Inspection Performance," describes the process for performing inspections. In general, IH&S inspections will validate or verify the Contractor's ability to perform work that is according to the applicable requirements of Appendix A and that complies with its own published policies and procedures.

Most IH&S inspections will be brief (less than one day), performed in conjunction with RNPS inspections, and topic-specific (e.g., fall protection or lock and tag). However, comprehensive IH&S program inspections may be separate and take up to a week to complete. Results from environmental/industrial hygiene analysis or sampling conducted during the inspection may not be received for up to two weeks. The final IH&S inspection report may take up to a month to deliver to the Contractor from the time the inspection is completed.

Allegations received by the RU are processed according to MD 5.1, "Management of Safety Allegations." Inspections as a result of allegations are conducted according to IAP-110, "Inspections to Review Allegations."

4.3.5 Inspection Documentation and Records

IH&S inspections are documented according to IAP A-107, "Inspection Documentation." Inspection documentation is the formal record of regulatory action; therefore, it must be accurate and complete. A report will be written for each IH&S inspection.

In most cases, the inspections should conclude that the Contractor was in or out of compliance with the applicable Appendix A requirements. The appropriate regulatory citation is provided for every noted noncompliance item. All media resulting from the inspection are archived according to MD 2.1, "Information Management."

4.3.6 Inspection and Allegation Follow-up

The IH&S inspection program follows IAP A-108, "Inspection Follow-up System," to track and close identified deficiencies. Allegations related to IH&S are followed to closure according to MD 5.1, "Management of Safety Allegations" and IAP-110, "Inspections to Review Allegations."

4.3.7 Inspector Qualification

All IH&S inspectors must be qualified according to IAP A-109, "Inspector Qualification Program," before they are authorized to perform inspections. RU staff responsible for IH&S regulation is also trained to identify issues requiring expert review (see Section 3.7). The RU may enlist the support of IH&S specialists to augment the inspection team.

4.4 Specific IH&S Inspection Procedures

Inspection of IH&S will contain three distinct activities: routine inspections, periodic program reviews, and reactive IH&S incident followup inspections. The general scope, rationale, and basis for the three inspection areas are summarized in the following subsections.

4.4.1 Routine IH&S Verification Inspections

The Contractor's implementation of the IH&S program will be inspected according to IAP A-111, "IH&S Routine Oversight." This inspection procedure will assess the Contractor's provisions and worker activities as they relate to worker safety requirements of applicable IH&S requirements. These inspections will typically be performed in conjunction with routine RNPS construction inspections as required in approved inspection plans.

Inspections in this area will allow the RU to assess the Contractor's implementation and performance regarding worker safety as described in the Contractor's IH&S plan and required by IH&S regulations. Verification that the IH&S plan is being appropriately implemented is essential to ensure worker safety and compliance with applicable regulations.

The applicable requirements in Appendix A and, especially, 29 CFR 1926 and 29 CFR 1910 form the basis for this inspection.

4.4.2 Periodic IH&S Program Review

A periodic IH&S program review will be performed before construction starts, including limited construction, and periodically thereafter. The frequency for performing these inspections will depend, in part, on the results of routine IH&S verification inspections and the occurrence and significance of IH&S incidents. These program reviews will be performed according to Inspection Technical Procedure (ITP) I-160, "IH&S Program Review." In particular, the inspection will assess the programs outlined in the Contractor's submittal titled "Non-radiological Worker Safety and Health Plan for the River Protection Project – Waste Treatment Plant." ²³

Inspections in this area will assist the RU in assessing the Contractor's implementation of its IH&S plan. Verification that the IH&S plan is being appropriately implemented is an important

²³ PL-W375-IS00001, Rev. 0, April 11, 2000.

element in the RU's ability to assess the Contractor's activities as they relate to ensuring worker safety and compliance with applicable regulations.

The applicable requirements in Appendix A form the basis for this inspection.

4.4.3 Reactive IH&S Incident Followup Inspections

Following IH&S incidents outside Type A or B incident investigations scope, the RU will perform followup inspections according to ITP I-161, "IH&S Incident Follow-up Inspection." This inspection procedure will be used to review serious IH&S incidents to determine if violations of IH&S safety requirements occurred.

Inspections in this area will allow the RU to assess the Contractor's implementation and performance regarding worker safety as described in the Contractor's IH&S plan and required by IH&S regulations. Verifying that the IH&S plan is being appropriately implemented and that IH&S requirements are being followed is essential to ensure worker safety.

The applicable requirements in Appendix A form the basis for this inspection.

5.0 **DEFINITIONS**

Allegation	A declaration, statement, or assertion of impropriety or inadequacy associated with RU-regulated activities, the validity of which has not been established. This term includes all concerns identified by individuals or organizations.
authorization basis	The composite of information provided by the Contractor in response to safety requirements and the basis upon which the RU grants permission to perform regulated activities.
Imminent danger	A situation where substantial probability exists that death or serious physical harm could result to any employee or inspector.
job safety analysis	A process to identify and evaluate operational activities and associated hazards. The process includes implementing control measures to eliminate or reduce each hazard to an acceptable level (<i>Health and Safety Plan Guidelines</i> , Appendix A).
near miss	An incident that in and of itself did not cause harm or property damage but that could have caused a fatality, serious injury, and/or property damage in any other instance or condition.
Project Management Official (PMO)	The principal RU point of contact with the Contractor; other government, private, and public organizations; other regulatory entities; and Tribal Nations, stakeholders, and the public.

Regulatory Official (RO)

The RU Director assigned responsibility by the DOE/RL

Manager for the safety regulation of the Contractor.

Safety Review Official (SRO) The RU authority on matters of safety standards and

requirements, technical safety issues, and the authorization

basis.

variance An allowed deviation (exception) from the requirements of

Appendix A where the Contractor substitutes measures that affords an equal or alternate means or degree of safety and

health protection in the workplace.

Verification and Confirmation

Official (VCO)

The RU authority on Contractor safety performance and on the

condition and status of Contractor activities.

6.0 REFERENCES

29 CFR 1903, "Inspections, Citations and Proposed Penalties," *Code of Federal Regulations*, as amended.

29 CFR 1904, "Recording and Reporting Occupational Injuries and illnesses," *Code of Federal Regulations*, as amended.

29 CFR 1905, "Rules of Practice for Variances, Limitations, Variations, Tolerances, and Exemptions Under the Williams-Steiger Occupational Safety and Health Act of 1970," *Code of Federal Regulations*, as amended.

29 CFR 1910, "Occupational Safety and Health Standards for General Industry," *Code of Federal Regulations*, as amended.

29 CFR 1926, "Safety and Health Regulations," Code of Federal Regulations, as amended.

29 CFR 1960, "Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters," *Code of Federal Regulations*, as amended.

DOE Order 5480.29, Employee Concerns Management System, January 15, 1993.

DOE/RL-94-02, *Hanford Site Emergency Response Plan*, Rev. 1, U.S. Department of Energy, Richland Operations Office, 1995.

DOE/RL-96-25, *Policy for Safety Regulation of the RPP-WTP Contractor*, Rev. 1, U.S. Department of Energy, Richland Operations Office, 1998.

DOE/RL-96-26, *Memorandum of Agreement for Safety Regulation of the RPP-WTP Contractor*, Rev. 1, U.S. Department of Energy, Richland Operations Office, 1998.

Health and Safety Plan Guidelines, Appendix A, U.S. Department of Energy, Washington, D.C., 1994.

Initial Safety Analysis Report, BNFL-5193-ISAR-01, Rev. 0, BNFL Inc., 1998.

Integrated Safety Management Plan, BNFL-5193-ISP-01, Rev. 4, BNFL Inc., 1998.

Occupational Safety and Health Act of 1970 (29 U.S.C. 657, 673) Public Law 91-596, as promulgated in 29 CFR 1900, et. Seq.

RL/REG-96-03, *Guidance for Review of RPP-WTP Contractor Employee Concerns Management System*, Rev. 0, U.S. Department of Energy, Richland Operations Office, 1996.

RL/REG-97-05, *Regulatory Unit Management Directives*, U.S. Department of Energy, Richland Operations Office, 1998.

MD 2.1, Rev. 2, "Information Management"

MD 4.1, Rev. 2, "Staff Competence"

MD 5.1, Rev. 2, "Management of Safety Allegations"

MD 5.3, Rev. 0, "Corrective Action Program Implementation"

RL/REG-98-05, *Inspection Program Description for the Regulatory Oversight of the RPP-WTP Contractor*, Rev. 3, U.S. Department of Energy, Richland Operations Office, 1999.

RL/REG-98-07, *Regulatory Unit Policy for Training and Training Plan*, Rev. 1, U.S. Department of Energy, Richland Operations Office, 1999.

RL/REG-98-24, *Inspection Program Implementation Plan for the Regulatory Oversight of the RPP-WTP Contractor*, Rev. 1, U.S. Department of Energy, Richland Operations Office, 2000.

RL/REG-98-25, *Inspection Administrative Procedures* (IAP), U.S. Department of Energy, Richland Operations Office.

A-101, Rev. 0, "Inspection Planning and Scheduling"

A-102, Rev. 0, "Announced and Unannounced Inspections and Information Requests"

A-103, Rev. 0, "Entrance and Exit Meetings"

A-104, Rev. 0, "Inspection Preparation"

A-105, Rev. 0, "Inspection Performance"

A-107, Rev. 0, "Inspection Documentation"

A-108, Rev. 2, "Inspection Follow-up System"

A-109, Rev. 1, "Inspector Qualification Program"

A-110, Rev. 1, "Inspections to Review Allegations"

RL/REG-98-26, *Inspection Technical Procedure* (ITP), U.S. Department of Energy, Richland Operations Office, 1998.

I-160, Rev. 0, "IH&S Program Review"

I-161, Rev. 0, "IH&S Incident Follow-up Inspection"

I-111, Rev. 0, "IH&S Routine Oversight."

RL/REG-99-07, *Design Review Guidelines*, Rev. 1, U.S. Department of Energy, Richland Operations Office, 1999.

RL/REG-99-11, Regulatory Unit Position on Regulation of the RPP-WTP Contractor's Industrial Hygiene and Safety Program, Rev. 2, U.S. Department of Energy, Richland Operations Office, 2000.

RL/REG-2000-03, *Industrial Hygiene and Safety Review Guidance for the RPP-WTP Limited Construction and Construction Authorization Requests*, Rev. 0, U.S. Department of Energy, Richland Operations Office, 2000.

Washington Industrial Safety and Health Act, Chapter 49.17, Revised Code of Washington.

This page intentionally left blank.

7.0 LIST OF TERMS

AR Assessment Report

DOE U.S. Department of Energy ECP Employee Concerns Program

EH-2 Deputy Assistant Secretary for Oversight

EH-5 Deputy Assistant Secretary for Worker Health and Safety

EH-51 Office of Occupational Safety and Health Policy EM DOE's Office of Environmental Management

EM-40 Office of the Deputy Assistant Secretary for Project Completion

FY fiscal year HQ Headquarters

IAP Inspection Administrative Procedure

IH&S industrial hygiene and safety
 ISAR Initial Safety Analysis Report
 ISMP Integrated Safety Management Plan
 ITP Inspection Technical Procedure

L&I Washington State Department of Labor and Industries

MD Management Directive

OSHA Occupational Safety and Health Administration

PD program direction

PMO Project Management Official

PS program support

PTA Policy and Training Advisor RL Richland Operations Office

RNPS radiological, nuclear, and process safety

RO Regulatory Official

RPP-WTP River Protection Project – Waste Treatment Plant

RU Regulatory Unit

SRO Safety Review Official

VCO Verification and Confirmation Official

VPP Voluntary Protection Program

Appendix A - Industrial Hygiene and Safety Requirements

The contractor shall comply with the requirements below.²⁴

- 1. Implement a written worker protection program that:
 - a. Provides a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees; and
 - b. Integrates all requirements contained in this attachment and other related sitespecific worker protection activities.
- 2. Establish written policy, goals, and objectives for the worker protection program.
- 3. Use qualified worker protection staff to direct and manage the worker protection program.
- 4. Assign worker protection responsibilities, evaluate personnel performance, and hold personnel accountable for worker protection performance.
- 5. Encourage employee involvement in the development of program goals, objectives, and performance measures and in the identification and control of hazards in the workplace.
- 6. Provide workers the right, without reprisal, to:
 - a. Accompany DOE worker protection personnel during workplace inspections;
 - b. Participate in activities provided for herein on official time;
 - c. Express concerns related to worker protection;
 - d. Decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious bodily harm to that individual, coupled with a reasonable belief that there is insufficient time to seek effective redress through the normal hazard reporting and abatement procedures established in accordance with the requirements herein;
 - e. Have access to DOE worker protection publications, DOE-prescribed standards, and the organization's own worker protection standards or procedures applicable to the workplace;
 - f. Observe monitoring or measuring of hazardous agents and have access to the results of exposure monitoring;

²⁴ Items 1 through 19 are from DOE Order 440.1A, "Worker Protection Management for DOE Federal and Contractor Employees." Item 20 is from DOE Order 225.1A, "Accident Investigations." Item 21 is from DOE Order 232.1, Change 2, "Environment, Safety and Health Reporting."

- g. Be notified when monitoring results indicate they were overexposed to hazardous materials; and
- h. Receive results of inspections and accident investigations upon request.
- 7. Implement procedures to allow workers, through their supervisors, to stop work when they discover employee exposures to imminent danger conditions or other serious hazards. The procedure shall ensure that any stop work authority is exercised in a justifiable and responsible manner.
- 8. Inform workers of their rights and responsibilities by appropriate means, including posting the appropriate DOE Worker Protection Poster in the workplace where it is accessible to all workers.
- 9. Identify existing and potential workplace hazards and evaluate the risk of associated worker injury or illness.
 - a. Analyze or review:
 - (1) Designs for new facilities and modifications to existing facilities and equipment;
 - (2) Operations and procedures; and
 - (3) Equipment, product, and service needs.
 - b. Assess worker exposure to chemical, physical, biological, or ergonomic hazards through appropriate workplace monitoring (including personal, area, wipe, and bulk sampling); biological monitoring; and observation. Monitoring results shall be recorded. Documentation shall describe the tasks and locations where monitoring occurred, identify workers monitored or represented by the monitoring, and identify the sampling methods and durations, control measures in place during monitoring (including the use of personal protective equipment), and any other factors that may have affected sampling results.
 - c. Evaluate workplaces and activities (accomplished routinely by workers, supervisors, and managers and periodically by qualified worker protection professionals).
 - d. Report and investigate accidents, injuries, and illnesses and analyze related data for trends and lessons learned.
- 10. Implement a hazard prevention/abatement process to ensure that all identified hazards are managed through final abatement or control.
 - a. For hazards identified either in the facility design or during the development of procedures, controls shall be incorporated in the appropriate facility design or procedure.

- b. For existing hazards identified in the workplace, abatement actions prioritized according to risk to the worker shall be promptly implemented, interim protective measures shall be implemented pending final abatement, and workers shall be protected immediately from imminent danger conditions.
- c. Hazards shall be addressed when selecting or purchasing equipment, products, and services.
- d. Hazard control methods shall be selected based on the following hierarchy.
 - (1) Engineering controls.
 - (2) Work practices and administrative controls that limit worker exposures
 - (3) Personal protective equipment.
- 11. Provide workers, supervisors, managers, visitors, and worker protection professionals with appropriate worker protection training.
- 12. Comply with the following worker protection requirements:
 - a. Title 29 of the Code of Federal Regulations (CFR), Part 1910, "Occupational Safety and Health Standards."
 - b. Title 29 CFR, Part 1926, "Safety and Health Regulations for Construction."
 - c. Title 10 CFR, Parts 820, "Procedural Rules for DOE Nuclear Facilities," 835, "Occupational Radiation Protection," and 850, "Chronic Beryllium Disease Prevention Program."
 - d. American Conference of Governmental Industrial Hygienists (ACGIH),
 "Threshold Limit Values for Chemical Substances and Physical Agents and
 Biological Exposure Indices" (most recent edition), when ACGIH Threshold
 Limit Values (TLVs) are lower (more protective) than Occupational Safety and
 Health Administration (OSHA) Permissible Exposure Limits. When ACGIH
 TLVs are used as exposure limits, the contractor shall nonetheless comply with
 other provisions of any applicable OSHA expanded health standard. The TLVs
 for exposures to laser emissions in the ACGIH Indices are excluded from this
 requirement.
 - e. American National Standards Institute (ANSI) Z136.1, Safe Use of Lasers. [Only the exposure limits and technical requirements apply. Programmatic components of ANSI Z136.1 do not apply.]
 - f. ANSI Z88.2, Practices for Respiratory Protection.
 - g. ANSI Z49.1, Safety in Welding, Cutting and Allied Processes, Sections 4.3 and E4.3 (of the 1994 edition).

- h. NFPA 70E, Electrical Safety Requirements for Employee Workplaces.
- 13. Ensure that subcontractors performing work on DOE-owned or -leased facilities comply with this Contractor Requirements Document and the contractor's own site worker protection standards.
- 14. Construction Safety
 - a. The following requirements and responsibilities apply:
 - (1) Hazard Analyses. For each construction operation presenting hazards not experienced in previous project operations or for work performed by a different subcontractor, the construction contractor shall prepare a hazard analysis and have it approved prior to commencement of affected work. These analyses shall identify foreseeable hazards and planned protective measures, provide drawings and/or other documentation of protective measures that a Professional Engineer or other competent person is required to prepare, and define the qualifications of competent persons required for workplace inspections.
 - (2) Worker Hazard Awareness. Workers shall be informed of foreseeable hazards and the required protective measures described within the approved hazard analysis prior to commencement of work on the affected construction operation.
 - (3) Workplace Inspections and Hazard Abatement. During periods of active construction, the construction contractor shall have a designated representative on site at all times. This individual shall conduct and document daily inspections of the workplace to identify and correct hazards and instances of noncompliance with project safety and health requirements. If immediate corrective action is not possible or the hazard falls outside of project scope, the construction contractor shall immediately notify affected workers, post appropriate warning signs, implement interim control measures, and notify the construction manager of actions taken.
 - (4) Project Safety and Health Plan. The construction contractor shall prepare and have approved prior to commencement of any on-site project work a written project safety and health plan that provides a proposal for implementing the above requirements. The construction contractor shall also designate the individual(s) responsible for on-site implementation of the plan, specify qualifications for those individuals, and provide a list of those project operations for which a hazard analysis is to be performed.
- 15. Industrial Hygiene. Implement a comprehensive and effective industrial hygiene program to reduce the risk of work-related disease or illness. Industrial hygiene programs shall include the following elements:

- a. Initial or baseline surveys of all work areas or operations to identify and evaluate potential worker health risks.
- b. Coordination with planning and design personnel to anticipate and control health hazards that proposed facilities and operations would introduce.
- c. Periodic resurveys and/or exposure monitoring as appropriate.
- d. Documented exposure assessment for chemical, physical, and biological agents and ergonomic stressors using recognized exposure assessment methodologies and use of accredited industrial hygiene laboratories.
- e. Specification of appropriate engineering, administrative, work practice, and/or personal protective control methods to limit hazardous exposures to acceptable levels.
- f. Worker education, training, and involvement.
- g. Coordination with cognizant occupational medical, environmental, health physics, and work planning professionals.
- h. Use of respiratory protection equipment tested under the DOE Respirator Acceptance Program when National Institute for Occupational Safety and Health-approved respiratory protection does not exist for DOE tasks.
- i. Policy and procedures to mitigate the risk from identified and potential occupational carcinogens.
- j. Use of appropriate industrial hygiene standards.
- k. Professionally and technically qualified industrial hygienist to manage and implement the industrial hygiene program.

16. Occupational Medical

- a. Integration.
 - (1) The establishment of a contractor occupational medical program shall be a basic worker protection requirement.
 - (2) A formal, written contractor occupational medical program detailing the methods and procedures used to implement the occupational medical requirements necessary for worker protection and the promotion of a healthful work environment shall be established, maintained, reviewed, and updated.
 - (3) The contractor occupational medical program shall provide occupational health services to contractor employees. The goal of these services shall

- be the earliest possible detection and mitigation of occupational illness and injury.
- (4) To carry out this goal, the contractor occupational medical professional staff shall participate as members of a worker protection team.
- b. Implementation. The physician responsible for delivery of medical services shall be responsible for the planning and implementation of the occupational medical program.
- c. Maintenance of a Healthful Work Environment.
 - (1) Occupational medical physicians and selected medical staff shall:
 - (a) Coordinate with other safety and health professionals (industrial hygienists, health physicists, safety specialists/managers) to identify work-related or work site hazards and their possible health risks to employees;
 - (b) Possess a current knowledge of actual or potential work-related hazards (physical, chemical, biological, ergonomic);
 - (c) Perform targeted examinations based on an up-to-date knowledge of work site risk and as identified by the Contractor's ES&H Department and in accordance with applicable laws and collective bargaining agreements;
 - (d) Identify potential or actual health effects resulting from worksite exposures; and
 - (e) Consistent with requirements for maintaining confidentiality of employee medical records, communicate the results of health evaluations to the Contractor responsible for mitigating worksite hazards.
 - (2) Contractor management shall provide to the physician responsible for delivery of medical services:
 - (a) General job task and hazard analysis information;
 - (b) Summaries of potential worksite exposures of employees before mandatory health examinations; and
 - (c) The opportunity to participate in worker protection team meetings and committees.
- d. Employee Health Examinations.

- (1) Health examinations shall be conducted by an occupational health examiner under the direction of a licensed physician in accordance with current sound and acceptable medical practices.
- (2) The content of health examinations shall be the responsibility of the physician responsible for the delivery of medical services, but shall be in accordance with applicable regulations.
- (3) The following classes of examinations are required for the purpose of providing initial and continuing assessment of employee health as determined by the physician responsible for delivery of medical services:
 - (a) Preplacement in accordance with the Americans with Disabilities Act (42 United States Code 12101),
 - (b) Qualification examinations,
 - (c) Fitness for duty,
 - (d) Return to work health evaluations, unless released without restrictions by the employee's treating physician,
 - (e) Termination examinations where required by statute.
- (4) The physician responsible for the delivery of medical services or his/her designee shall inform contractor management of appropriate employee work restrictions.

e. Monitored Care.

- (1) The occupational medical program shall be responsible for the review of all monitored care of ill and injured employees to maximize their recovery and safe return to work, and to minimize lost time and its associated costs. [A 3rd party may handle this.]
- (2) Contractor management shall notify the physician responsible for the delivery of medical services or their designee when an employee has been absent because of a job related injury or illness for more than 5 consecutive workdays.
- f. Employee Counseling and Health Promotion. The physician responsible for delivery of medical services shall:
 - (1) Review and approve the medical aspects of contractor-sponsored or supported employee assistance, alcohol, and other substance abuse rehabilitation programs (this does not include programs sponsored by the Building Trades);

- (2) Approve and coordinate all contractor-sponsored or -supported wellness programs; and
- (3) Ensure that immunization programs for blood-borne pathogens and biohazardous waste programs conform to OSHA regulations and Centers for Disease Control guidelines for those employees at risk to these forms of exposure.

g. Medical Records.

- (1) An employee medical record shall be developed and maintained for each employee for whom medical services are provided.
- (2) The confidentiality of all employee medical records shall be observed.
- (3) Employee medical records shall be adequately protected and stored permanently.
- h. Emergency and Disaster Preparedness.
 - (1) The physician responsible for the delivery of medical services shall be responsible for the medical portion of the site emergency and disaster plan.
 - (2) The medical portion shall be integrated with the overall site plan and with the surrounding community emergency and disaster plan.
- i. Organizational Staffing.
 - (1) The physician responsible for the delivery of medical services shall be a graduate of a school of medicine or osteopathy who meets the licensing requirements applicable to the location in which the physician works.
 - Occupational medical physicians, occupational health nurses, physician's assistants, nurse practitioners, psychologists, and other occupational health personnel shall be graduates of accredited schools and shall be licensed, registered, or certified as required by Federal or State law where employed.

17. Pressure Safety

- a. Establish safety policies and procedures to ensure pressure systems are designed, fabricated, tested, inspected, maintained, repaired, and operated by trained and qualified personnel in accordance with applicable and sound engineering principles.
- 18. Motor Vehicle Safety. Implement a Motor Vehicle Safety Program to protect the safety and health of all drivers and passengers in Government-owned or -leased motor vehicles

and powered industrial equipment (i.e., fork trucks, tractors, platform lift trucks, and other similar specialized equipment powered by an electric motor or an internal combustion engine). The Motor Vehicle Safety Program shall be tailored for the individual DOE site or facility, based on an analysis of the needs of that particular site or facility, and shall address the following areas:

- a. Minimum licensing requirements (including appropriate testing and medical qualification) for personnel operating motor vehicles and powered industrial equipment.
- b. Requirements for the use of seat belts and provision of other safety devices.
- c. Training for specialty vehicle operators.
- d. Requirements for motor vehicle maintenance and inspection.
- e. Uniform traffic and pedestrian control devices and road signs.
- f. On-site speed limits and other traffic rules.
- g. Awareness campaigns and incentive programs to encourage safe driving.
- h. Enforcement provisions.
- 19. Suspect and Counterfeit Item (S/CI) Controls. Implement S/CI controls as part of the contractor's Quality Assurance Program to the extent commensurate with the risks posed by the facility and ensure that the controls contribute to a hazard-free workplace.
 - a. Management systems shall include:
 - (1) Assurance that all items meet the requirements for their intended use;
 - (2) Mechanisms to continually update information on S/CIs and associated suppliers;
 - (3) Control of the introduction and use of S/CIs through design, procurement, and inspection/maintenance; no S/CI shall be used or introduced intentionally unless found acceptable through the disposition process;
 - (4) Identification and disposition of S/CIs in safety systems and applications that create potential hazards (safety systems are those systems, components, or structures whose failure could adversely affect the environment, safety, or health of the public or the health or safety of workers);
 - (5) Maintaining current, accurate information on S/CIs and associated suppliers using all available sources and disseminating relevant information on S/CIs to field organizations and contractors;

- (6) Training and informing managers, supervisors, and workers of S/CI controls, including prevention, detection, and disposition of S/CIs; and
- (7) Assurance that the standards and methods used in determining the acceptability of items is based on consensus standards and/or commonly accepted industry practices, unless inconsistent with applicable law or otherwise impractical.

b. S/CI controls shall include:

- (1) Engineering involvement in the procurement process, particularly in development of specifications during inspection and testing, and when replacing, maintaining, or modifying equipment.
- (2) Implementation of procurement procedures that preclude the introduction of S/CIs by:
 - (a) Identifying technical and quality assurance requirements in procurement specifications;
 - (b) Only accepting items that comply with the procurement specifications; and
 - (c) Inspecting inventory and storage areas to identify, control, and disposition S/CIs.
- c. Development and implementation of procedures for inspection, identification, evaluation, and disposition of S/CIs installed in safety systems. Engineering evaluations of S/CIs installed in safety systems or in applications that create potential hazards shall consider potential risks to the public and worker, cost/benefit considerations, and include a schedule for replacement, if replacement is required.
- d. Routine maintenance cycles and/or inspection activities for non-safety systems shall include provisions for the identification of S/CIs. S/CIs identified during these activities shall be reported, evaluated, and dispositioned.
- e. Before destroying or disposing of S/CIs, the Inspector General (IG) shall be consulted to determine whether there is need to retain them in the event of litigation.
- f. Testing of procured or in-place S/CIs as necessary. Engineering personnel shall approve testing methods.
- g. Reporting S/CIs to the responsible program office and the IG shall be in accordance with contract requirements for reporting fraud, waste and abuse.

- h. Conducting trend analysis and issuing lessons learned for use in improving all S/CI activities.
- 20. Type A and Type B Accident Investigations
 - a. In the performance of this contract, the contractor shall support Type A and Type B [as defined by DOE O 225.1A] investigations of accidents at sites under their cognizance. Type A and Type B investigations are conducted by formally appointed DOE Accident Investigation Boards comprised of DOE employees, supplemented by advisors and consultants.
 - b. The contractor shall establish and maintain readiness to respond to accidents, mitigate the consequences, assist in collecting and preserving evidence, and assist with the conduct of the investigation. This shall include preserving the accident scene to the extent that it is under the control of the contractor, documenting the accident scene through photography and other means, providing office space and equipment for the Accident Investigation Board, meeting regularly with the Board for discussions of issues surrounding the accident, and providing general administrative assistance.
 - c. The contractor shall also prepare, implement, and track to completion approved corrective action plans that satisfy judgments of need identified by the Accident Investigation Board.
- 21. Reporting. The contractor is required to ensure that essential environment, safety and health information, which is reliable, and comprehensive, is collected and made available efficiently. The reports listed below shall be filed in accordance with the noted requirements.
 - (1) The contractor shall record, in accordance with 29 CFR 1904.2 through 1904.5, 1904.11, 1904.12, 1904.14, and 1904.21, occupational fatalities, injuries, and illnesses occurring among their employees arising out of work primarily performed at DOE-owned or -leased facilities. The contractor shall comply with guidance provided in the latest edition of the Department of Labor (DOL) publication, Office of Management and Budget (OMB) No. 1220-0029, "Recordkeeping Guidelines for Occupational Injuries and Illnesses."
 - (2) DOE Form 5484.3, "Individual Accident/Incident Report" shall be used in lieu of the "Supplementary Record of Occupational Injuries and Illnesses" (OSHA No. 101) to record and report quarterly all work related cases. Part A of DOE F 5484.4, "Tabulation of Work-Hours, Vehicle Usage, and Property Valuation," shall be used to report quarterly work hours and vehicle usage. Forms should be submitted in accordance with paragraph (5) below.
 - (3) The contractor shall report accident information (DOE forms 5484.3 and 5484.4) for subcontractors who perform work on DOE-owned or -leased facilities. DOE F 5484.4, "Tabulation of Work-Hours, Vehicle Usage, and Property Valuation," should be submitted only for subcontracts with more than \$10,000 in estimated

- cost. All recordable injuries or illnesses must be reported on DOE F 5484.3, regardless of the cost of the subcontract.
- (4) The contractor shall report estimated loss or damage to DOE property or other property amounting to \$5,000 or more, or estimated costs of \$5,000 or more for cleaning (including decontamination), renovating, replacing, or rehabilitating structures, equipment, or property. Estimated damage of \$1,000 or more that involves Government-owned, -rented, or -leased vehicles or privately owned vehicles operated while on official business, shall be considered a "recordable case" and shall be reported. Excluded are commercial rental motor vehicles and private motor vehicles used for short periods of time (1 to 14 days) by employees on official travel status, and on which mileage records are not kept. Part A of DOE Form 5484.4 shall be used to record and report property and vehicle damage accidents.
- (5) Completed copies of DOE Form 5484.3 and 5484.4 shall be mailed to the CAIRS Data Coordinator, U.S. Department of Energy, EH-72, Building 270 Corporate Center, 19901 Germantown Road, Germantown, Maryland 20874-1290. Quarterly reports should be submitted for receipt on or before the 25th of the month following the end of the quarter (each January, April, July and October). Upon request from the Office of Environment, Safety, and Health, the annual estimate of property valuation should be submitted on Part B of DOE F 5484.4, "Tabulation of Work-Hours, Vehicle Usage, and Property Valuation."
- (6) Annual Summary of Fire Damage in the format provided by Appendix F of DOE M 231.1. Annually report fire damage to the DOE fire protection authority having jurisdiction by March 31, of the following calendar year.

Exhibit 1. IH&S Budget Components

(\$ in thousands)

	Cost	FY 2000			FY 2001		FY 2002	
Work Task	Account	PD	PS	.	PD	PS	PD	PS
IH&S Inspection Procedure Development	RU901	\$10	\$65		\$20	\$50	\$10	\$25
IH&S Program Development	RU203	\$15	\$25		\$5	\$10	\$5	\$10
Contract/Policy/MOA Modifications	RU203	\$15						
Review BNFL IH&S Program Description/Updates	RU203	\$25	\$110		\$10	\$10	\$10	\$10
IH&S Inspections	RU902				\$60	\$75	\$100	\$125
Design Review Oversight	RU501	\$10	\$20		\$30	\$30	\$30	\$30
Total		\$75	\$220		\$125	\$175	\$155	\$200
Composite Totals		\$295			\$300		\$355	

This page intentionally left blank.