

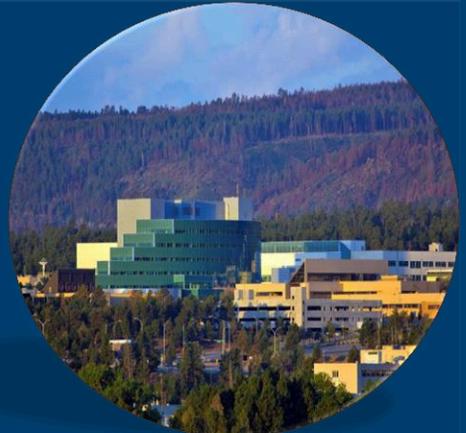
Safety Culture and Contractual Language

Prepared for
DOE Safety Culture Improvement Panel

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FORWARD

This report contains the results of the Contract Language Working Group (CLWG) assessment of safety culture provisions in selected DOE site contracts. The intent is to determine how these provisions can and do affect the safety culture in which the contracted work is performed across the U.S. Department of Energy (DOE) and NNSA complex.

This assessment was tasked by the Safety Culture Improvement Panel (SCIP) and conducted by highly experienced DOE professionals and managers that form the CLWG. This is part of DOE efforts to conduct safety culture assessments at large DOE nuclear projects, as directed by the Secretary of Energy in the Department's implementation plan for Defense Nuclear Facilities Safety Board Recommendation 2011-1, *Safety Culture at the Waste Treatment and Immobilization Plant (WTP)*.

The Contract Language Working Group

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EXECUTIVE SUMMARY

This report describes the results of the Contract Language Working Group (CLWG) assessment of the existing safety provisions in selected current DOE site contracts, at the request of the Department's Safety Culture Improvement Panel (SCIP).

The primary objective of the assessment was to examine information in current DOE site contracts regarding the effectiveness of their safety provisions at driving [or, "conducive to supporting"] a positive safety culture. SCIP instructed CLWG to examine a limited number of existing contracts at sites under the purview of organizations represented by SCIP Core Members. Hence, the CLWG's examination included the following sites and associated contracts and/or Request for Proposal (RFP):

- *Idaho Cleanup Project RFP # DE-SOL-0007097*
- *Idaho Cleanup, Contract # DE-AC07-05ID14516*
- *Los Alamos National Lab (LANL), Contract # DE-AC52-06NA25396*
- *Tank Operations- Hanford Site, Contract # DE-AC27-08RV14800*
- *Richland Plateau Remediation, Contract# DE-AC06-08RL14788*
- *Savannah River Site (SRS), Contract # DE-AC09-08SR22470*
- *SRS Nuclear Remediation, Contract # DE-AC09-09SR22505*
- *Uranium Processing Facility (UPF) - Y-12 Complex, Contract # DE-NA-0001942*

The CLWG found that although there were similar safety culture clauses and/or requirements in the above contracts, not all contracts were consistent in their content. All contracts include the DEAR requirement, *970.5223-1 Integration of environment, safety, and health into work planning and execution*, for an Integrated Safety Management System (ISM). However, most of the contracts did not explicitly include a specific safety culture clause or reference the DOE ISM Guide, G-450.4-1C which includes specific expectations on safety culture. Some contracts list the DOE Orders requiring an Employee Concerns Program, DOE Order 442.1A, and/or Differing Professional Opinion Manual, DOE Manual 442.1-1, which are both important for encouraging employees to raise concerns. The Idaho Cleanup Project Request for Proposal is unique in that it includes a specific provision for a positive Safety Culture (see table 1 for details).

Based on the above findings, the CLWG recommends: 1) establishing consistency in the contractual language across all DOE sites contractors; 2) ensure consistent application and interpretation of orders and guidance within the complex; and, 3) assess the effectiveness of the current performance measure in advancing safety culture.

BACKGROUND

This report describes the results of the Contract Language Working Group (CLWG) assessment of the existing safety provisions in selected current DOE site contracts, at the request of the Department's Safety Culture Improvement Panel (SCIP).

Safety Culture Improvement Panel (SCIP)

The purpose of the Department of Energy's (DOE) Safety Culture Improvement Panel (SCIP) was established as a permanent, high-level organization within the DOE devoted to promoting a positive safety culture; provide cross-organizational leadership focused on continuous safety culture improvement; and create an ongoing forum for the exchange of information and ideas to establish, monitor and sustain measures that support a positive safety culture.

Overview of SCIP Contract Language Working Group (CLWG)

The SCIP Contract Language Working Group (CLWG) was formed to review the contract language of selected current contracts to determine how their provisions can and do affect the safety culture in which the contracted work is performed. Members of the working group will examine a sample of existing contracts at sites under the purview of organizations represented by SCIP Core Members. In addition to their own review of these contracts, they will interview, as they deem necessary, by federal and contractor contracting officers, federal and contractor managers responsible for achieving the mission managing the work, and workers, including union officials, responsible for accomplishing contracted work.

Technical Approach

The CLWG sampled current contracts from around the DOE complex to examine what contract mechanisms were used to ensure a positive safety culture exists within the projects. The following is a list of sites and associated contracts and/or Request for Proposal (RFP):

- *Idaho Cleanup Project RFP # DE-SOL-0007097*
- *Idaho Cleanup, Contract # DE-AC07-05ID14516*
- *Los Alamos National Lab (LANL), Contract # DE-AC52-06NA25396*
- *Tank Operations- Hanford Site, Contract # DE-AC27-08RV14800*
- *Richland Plateau Remediation, Contract# DE-AC06-08RL14788*
- *Savannah River Site (SRS), Contract # DE-AC09-08SR22470*
- *SRS Nuclear Remediation, Contract # DE-AC09-09SR22505*
- *Uranium Processing Facility (UPF) - Y-12 Complex, Contract # DE-NA-0001942*

The CLWG examined the contracts for the following elements:

- any contract clause that is found to be an impediment to sustaining a sound safety culture;
- any contract clause that promotes or has the potential to successfully promote a sound safety culture;
- any clauses that promote a positive safety culture and are appropriate as a model to include in other contracts to;
- any other relevant findings.

Documentation

The following is a list of contracts (with brief description on each contract) that were reviewed by CLWG members for the assessment:

Idaho Cleanup Project Site RFP, DE-SOL-0007097, The Idaho Cleanup Project (ICP) is funded through the DOE's Office of Environmental Management and focuses equally on reducing risks to workers, the public, and the environment and on protecting the Snake River Plain Aquifer, the sole drinking water source for much of eastern Idaho.

Idaho Cleanup Contract, DE-AC07-05ID14516: CH2M-WG Idaho, LLC, (CWI) is a partnership comprised of CH2MHill and the URS Corporation that directs the Idaho Cleanup Project at the Department of Energy's Idaho Site located 45 miles west of Idaho Falls. The project focuses on early risk reduction and protection of the Snake River Plain Aquifer, and the contractor will be responsible for treatment and disposal of radioactive waste; retrieval, disposal and other remediation related to buried waste; safe management of spent nuclear fuel; disposition of nuclear materials; disposition of reactor and non-reactor nuclear facilities; environmental remediation activities; and completion of the sodium-bearing waste processing.

Los Alamos National Lab (LANL) M&O Contract, DE-AC52-06NA25396: Under this contract, the contractor manages and operates the facilities and equipment necessary to meet the NNSA and DOE mission.

Office of River Protection-Tank Operations- Hanford Site Contract, DE-AC27-08RV14800: This includes operations and construction activities necessary to store, retrieve and treat Hanford tank waste, store and dispose of treated waste, and begin to close the Tank Farm waste management areas to protect the Columbia River.

Richland Plateau Remediation Contract, DE-AC06-08RL14788: This includes Waste Treatment and Disposal, Facility and Waste Site Minimum-safe/Surveillance and

Maintenance (S&M), Plutonium Finishing Plant (PFP) Closure, Operate the Environmental Restoration Disposal Facility (ERDF), and maintain the 100K Area in a safe and compliant manner.

Savannah River Site (SRS) Contract, DE-AC09-08SR22470: This covers the management and operation of the contractor in maintaining and operating the SRS to meet the mission of EM, NNSA and other DOE missions.

Savannah River Site (SRS) Remediation Contract, DE-AC09-09SR22505: This involves the treatment and disposal of radioactive liquid waste presently stored in 49 underground tanks as well as radioactive liquid waste resulting from planned nuclear material stabilization activities and the deactivation of the major facilities and equipment that compose the radioactive Liquide Waste system.

Y-12 Security Complex-Uranium processing Facility (UPF) Contract, DE-NA-0001942: This includes design and construction of a facility to house the enriched uranium processing capabilities necessary to meet the NNSA and DOE mission.

RESULTS OF REVIEW

Table 1 below shows the results of the CLWG contract review and the Safety Culture elements which are included in the current contracts and RFP.

Observations:

- Although there were similar elements found among the contracts, not all contracts were consistent in their content. This is not in compliance with Order O 410.1.
- All contracts include requirements for an Integrated Safety Management System (ISM). However most of the contracts did not include a specific safety culture clause or explicitly reference the DOE ISM Guide which includes specific expectations on safety culture. Some contracts include the ISM Policy and Order while others did not.
- Additionally only some contracts list the DOE Orders requiring an Employee Concerns Program or Differing Professional Opinion which are both important for encouraging employees to raise concerns.
- The Idaho Cleanup Project is unique in that the contractual language includes a specific provision for Safety Culture (See Table 1).
- Core values and behaviors described in DOE G 450.4-1C, Integrated Safety Management System Guide, as inherently present in a strong safety culture coupled with a collective commitment by leaders and individuals are missing, or at least, buried and not emphasized in our current contracts and incentives plans.

Opportunities for Improvement:

- A minimum set of DOE directives to be included in the contract's List B could provide consistency among the sites.
- The Idaho Cleanup Project's Safety Culture provision contains little additional expectations than the requirements found in the existing referenced Directives.
- The Department should include specific Safety Culture expectations and focus areas from the DOE G 450.4-1C, Integrated Safety Management System Guide that are consistent with DOE core values and supporting behaviors as requirements within the DOE contracts.
- To meet this end, the following elements for suggested language should be considered:
 - The Contractor shall establish and maintain a strong safety culture and Safety Conscious Work Environment (SCWE), in accordance with Departmental expectations and the Integrated Safety Management System (Department of

- Energy Acquisition Regulation (DEAR) clause at 970.5223-1, Integration of Environment, Safety, and Health into Work Planning and Execution.)
- Special emphasis should be placed on behaviors and values that specifically enhance sustained employee performance in the three Safety Focus Areas: Leadership, Employee Engagement, and Organizational Learning.
 - The Contractor shall leverage required Employee Concern Programs and Differing Professional Opinion Processes to encourage the free, open and fearless expression of employee concerns and their resolution in support of a strong safety culture.
 - The Contractor shall take action to demonstrate absolute proscription of actions/environment contributing to a chilling effect such as: harassment, intimidation, retaliation, and/or discrimination (for engagement in protected activity).
 - The following elements for suggested core DOE performance metrics aligned with DOE core values and supporting behaviors should be considered for use in contract performance award incentive processes and templates:
 - Maintaining and implementing the approved Safety Culture Sustainment Plan;
 - Improving trends in Corrective Action Program condition report (CR) corrective action effectiveness, self-identification, and percent of employees issuing CRs
 - Employee concerns performance which demonstrates responsiveness, employee satisfaction, and reduced recurrence
 - Conduct and effectiveness of management to employee engagement sessions (proactive vice reactive)
 - Percentage/frequency of management time in the field ,and engagements with employees within the workspace
 - Attainment/maintenance of third party quality certifications (ASME NQA-1, ISO 9001, VIP, Baldrige....)

RECOMMENDATIONS

Based on the CLWG assessment and observations the following is a list of recommendations to consider by SCIP:

- Consistency in the language between contracts. This will ensure a common expectation is communicating to all contractors managing the DOE sites.
- Include specific safety culture elements from the DOE ISM Guide. This will enable the contractors to design and institute safety processes that meet the desired safety culture that meet the DOE missions.
- Assess the effectiveness of the current Contractor Performance Measures in enhancing safety culture environment across the DOE complex.

Site/Contract #	Table 1: Safety Culture Elements Included in Contract		
	Integrated Safety Management	Directives included in List B:	Special Contract Clauses
Idaho Cleanup Project RFP # DE-SOL- 0007097	Section C.8.3.07 Integrated Safety Management System (ISMS), Contractor shall establish and maintain a single ISMS program	DOE O 442.1A, Department Of Energy Employee Concerns Program, DOE O 442.2 Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health DOE P 450.4, Safety Management System Policy	Section C.8.3.08 Safety Culture: The Contractor shall establish and maintain a strong safety culture as required by DOE's Nuclear Safety Policy (DOE P 420.1) and Integrated Safety Management Policy (DOE P 450.4A). The Contractor shall also implement effective employee concerns programs. DOE's Employee Concern Program (DOE O 442.1A) and Differing Professional Opinion Process (DOE O 442.2) encourage the free and open expression of employee concerns. The Contractor shall set the expectation that employees have not only the right to raise concerns, but also the responsibility to raise concerns, and that they can do so without fear of retaliation. The Contractor shall take action to proactively address, or demonstrate adequate and effective response to, chilling effect. The Contractor shall also demonstrate evidence of immediate, adequate and effective mitigation of substantiated allegations of

			<p>harassment, intimidation, retaliation, and/or discrimination (for engagement in protected activity). The Contractor shall establish and maintain a strong safety culture and Safety Conscious Work Environment (SCWE), in accordance with Departmental expectations and the Integrated Safety Management System (Department of Energy Acquisition Regulation (DEAR) clause at 970.5223-1, Integration of Environment, Safety, and Health into Work Planning and Execution.), specifically focusing on the three Safety Focus Areas of Leadership, Employee Engagement, and Organizational Learning.</p> <p>H.57 DOE Contract Administration, Oversight And Safety Oversight</p>
<p>Idaho Cleanup Contract # DE-AC07-05ID14516</p>	<p>Section I.141(d) and B.6(d), Requires an approved Integrated Safety Management System</p>	<p>DOE P 450.4 Safety Management System Policy,</p> <p>DOE O 442.1A CRD Department of Energy Employee Concerns Program</p>	<p>H.3 DOE Contract Administration, Oversight And Safety Oversight</p>
<p>LANL M&O Contract # DE-AC52-</p>	<p>Appendix B, Section 4.2, Requires an approved Integrated Safety Management System</p>	<p>DOE O 442.1A, Attachment 1 CRD, 06/06/01 Department Of Energy Employee Concerns Program,</p>	

06NA25396		DOE O 442.2, Attachment 1 CRD 07/29/11 Differing Professional Opinions for Technical Issues Involving Environment, Safety, and Health	
Tank Operations- Hanford Site # DE-AC27- 08RV14800	Section C.3.2 describes the contractor's requirements for ISMS. Requires an approved Integrated Safety Management System	DOE O 442.1A, Department Of Energy Employee Concerns Program, DOE O 442.2 Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health DOE M 450.4-1, Integrated Safety Management System Manual DOE G 450.4-1B Vol 1, Integrated Safety Management System Guide (Volume 1) for use with Safety Management System Policies (DOE P 450.4, DOE P 450.5, and DOE P 450.6); The Functions, Responsibilities, and Authorities Manual; and the DOE Acquisition Regulation	

<p>Richland Plateau Remediation</p> <p>#</p> <p>DE-AC06-08RL14788</p>	<p>Section C.3.2 describes the contractor's requirements for ISMS including use of DOE O 450.1A, Environmental Protection Program (or current version). Does not reference DOE O 450.2, Integrated Safety Management.</p> <p>DOE O 450.2 is also not included in LIST B: APPLICABLE DOE DIRECTIVES, nor is DOE P 450.4A which expresses DOE's commitment to a positive safety culture. DOE O 450.2 assigns to DOE line management, including the ISM Champions Council, the responsibilities for evaluating and developing strategies for improving DOE's safety culture. The DOE G 450.4-1C expands on guidance for safety culture focus areas.</p>	<p>CRD O 442.1A (Supp Rev. 3) Department Of Energy Employee Concerns Program,</p> <p>CRD O 442.2 Differing Professional Opinions for Technical Issues Involving Environment, Safety and Health</p>	
<p>Savannah River Site</p> <p>#</p> <p>DE-AC09-08SR22470</p>	<p>Section 6.4 and B-9, Requires an approved Integrated Safety Management System</p>	<p>DOE P 450.4 Safety Management System Policy</p> <p>Contract Management Plan: "The Contractor shall:—establish and maintain a nuclear safety culture; establish and maintain a culture of continuous improvement;"</p>	
<p>SRS Remediation</p> <p>#</p> <p>DE-AC09-09SR22505</p>	<p>Sections C.2.2 and B.5, Requires an approved Integrated Safety Management System. Includes specific guidance on:</p> <p>APPENDIX G - Guidance For Preparation Of Employee Concerns</p>	<p>DOE P 450.4, Safety Management System Policy</p> <p>DOE O 442.1A, Department of Energy Employee Concerns Program,</p>	

	Program (ECP) Implementation Plan. APPENDIX H - Guidance For Preparation Of Equal Opportunity Program	DOE M 450.4-1, Integrated Safety Management System Manual	
UPF Y-12 # DE-NA-0001942	Section I-18 and Section 4.1, Requires an approved Integrated Safety Management System	DOE O 450.2 Integrated Safety Management, DOE O 442.2 Differing Professional Opinions for Technical Issues Involving Environmental, Safety, and Health Technical Concerns	