RL-675 (03/99)

United States Government **Department of Energy**

memorandum

Office of River Protection

DATE: SEP 1 1 2014

REPLY TO ATTN OF: TRS:BAH 14-TRS-0028

SUBJECT: U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER PROTECTION SAFETY CULTURE SUSTAINMENT PLAN

TO: Mark Whitney, Acting Assistant Manager
for Environmental Management, EM-1, HQ

The U.S. Department of Energy, Office of River Protection (ORP) will sustain its safety culture improvements by implementing the activities listed in Attachment A. ORP's on-going safety culture actions will be focused on both improvement initiatives as well as the development of leadership behaviors that reflects ORP's commitment to continuous improvement of our organizational safety culture. ORP developed this plan with input from ORP staff, ORP's Organizational and Safety Culture Improvement Council, and feedback from the Federal Employee Viewpoint surveys and the Office of Health and Safety and Security safety culture review at the Waste Treatment and Immobilization Plant.

ORP recognizes that culture change takes time and involves both reinforcing current desired behaviors while simultaneously identifying and strengthening areas needing improvement. We must maintain our emphasis on continuous improvement and on long-term strategies to affect our desired cultural improvements. ORP's goal is to have a healthy organizational and nuclear safety culture fully demonstrating all of the attributes described in DOE G 450.4-1C, Attachment 10.

Attachment A is ORP's Safety Culture Sustainment Plan as requested in the memorandum from D. Huizenga to Distribution, "Safety Culture Sustainment Plans," dated June 27, 2014.

Attachment B is the Washington River Protection Solutions LLC Safety Culture Sustainment Plan, Attachment C is the Bechtel National, Inc., Safety Culture Sustainment Plan, and Attachment D is the Advanced Technologies and Laboratories International, Inc., Safety Culture Sustainment Plan.

If you have any questions, please contact Robert G. Hastings, Assistant Manager, Technical and Regulatory Support, (509) 376-9824.

Kevin W. Smith
Manager

Attachments: (4)

cc w/attachs:
T.A. Shrader, EM-23
J.A. Hutton, EM-40 (Acting)

Attachment A
14-TRS-0028
(3 Pages)

U.S. Department of Energy, Office of River Protection
Safety Sustainment Plan – Fiscal Year 2015

U.S. Department of Energy, Office of River Protection
Safety Culture Sustainment Plan

The U.S. Department of Energy, Office of River Protection (ORP) will continue to sustain its safety culture improvements by implementing additional actions listed in this Plan. Planned activities are grouped into the three Safety Focus Areas of DOE G 450.4-1C, *Integrated Safety Management System Guide*. ORP's on-going safety culture actions will be focused on both improvement initiatives as well as the continued development of leadership behaviors that reflect our commitment to continuous improvement of our organizational and safety culture. ORP developed this plan with direct input from our staff, ORP's Organizational and Safety Culture Improvement Council (OSCIC), and by using feedback from the Federal Employee Viewpoint Surveys and the Office of Health, Safety, and Security safety culture review at the Waste Treatment and Immobilization Plant.

ORP recognizes that culture change takes time and involves both reinforcing current desired behaviors while simultaneously identifying and strengthening areas needing improvement. We must maintain our emphasis on continuous improvement and on long-term strategies to affect our desired cultural improvements. ORP's goal is to have a healthy organizational and nuclear safety culture fully demonstrating all of the attributes described in DOE G 450.4-1C, Attachment 10.

I. Safety Focus Area: Leadership

Associated Attribute: Staff recruitment, selection, retention, and development

- Safety Culture Training:
  - ORP will conduct refresher training (3 hour) for all staff on organizational culture, safety culture, and safety conscious work environment annually. This training is intended to build on past safety culture training, refresh staff knowledge of the safety culture attributes, and engage staff in discussions on how they can participate in strengthening the culture.
  - Safety culture training for new ORP employees will be provided as part of the on-boarding process to ensure all staff have a basic understanding of the safety culture attributes.
  - Expand the ownership and involvement in the safety culture at ORP through the OSCIC. The ORP OSCIC will have some participants who serve short-term appointments (3 months) on the council. To prepare these members to successfully perform their duties, ORP will provide training on the safety culture attributes, fundamentals, lessons learned, and will include team building exercises. The expectation is that these short-term council members will not only be better trained and experienced in the application of a strong safety culture but they will also help propagate the safety culture attributes and the value of the OSCIC across ORP.

- Leadership development series (management and staff training):
  - ORP will incorporate safety culture attributes into the leadership development series for management and staff.

Associated Attribute: Management engagement and time in field

- Management engagement:
  - Similarly to beginning meetings with a safety topic, meetings led by ORP managers will include a brief example of how an attending member of the management team has recently contributed to developing a positive safety culture. These deliberate actions will assist in our continued understanding of the safety culture attributes and their application.

II. Safety Focus Area: Employee/worker engagement

Associated Attribute: Teamwork and mutual respect

- OSCIC:
  - The OSCIC will continue to serve as a monitoring and feedback panel for employees and management.
  - The OSCIC will be restructured to consist of core team members that will serve for one year and short-term members that will serve on a quarterly basis. The goal is to have more participation of staff on the council and to obtain new team members with new ideas and energy to help improve ORP's safety culture. An added benefit from having personnel who serve short periods will be that it increases the number of ORP staff who have been a part of the OSCIC, improving staff buy-in and understanding of the council.
- Employee expectations:
  - ORP management will continue to communicate the employee expectations for accountability, behavior, communication, trust, and vision.

Associated Attribute: Personal commitment to everyone's safety

- Roles, responsibilities, accountabilities, and authorities:
  - ORP will use the roles, responsibilities, accountabilities, and authorities attributes in developing key performance goals for fiscal year 2015.

III. Safety Focus Area: Organizational learning

Associated Attribute: Performance monitoring through multiple means

- Performance measures:
  - ORP will continue to use the Federal employee feedback results as a measuring tool of safety culture improvement.

- ORP management and OSCIC will continue to conduct employee interviews to understand the current state of the organizational, safety, and quality culture at ORP. These interviews will focus on efforts to achieve a healthy organizational and nuclear safety culture with all of the attributes described in DOE G 450.4-1C, Attachment 10.

Attachment B
14-TRS-0028
(8 Pages)

Washington River Protection Solutions LLC Letter from L. David Olson to K.W. Smith, U.S. Department of Energy, Office of River Protection, "Washington River Protection Solutions LLC Response to the U.S. Department of Energy, Office of River Protection Regarding Development of Safety Culture Sustainment Plans," WRPS-1402978 R1, dated August 14, 2014

washington river protection solutions
PO Box 850
Richland, WA 99352

August 14, 2014

WRPS-1402978 R1

Mr. K. W. Smith, Manager
Office of River Protection
U.S. Department of Energy
Post Office Box 450
Richland, Washington 99352-0450

Dear Mr. Smith:

CONTRACT NUMBER DE-AC27-08RV14800 – WASHINGTON RIVER PROTECTION SOLUTIONS LLC RESPONSE TO THE U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER PROTECTION REGARDING DEVELOPMENT OF SAFETY CULTURE SUSTAINMENT PLANS

Reference: Letter, T. W. Fletcher, ORP, to C. A. Simpson, WRPS, "Contract No. DE-AC27-08RV14800 – Safety Culture Sustainment Plans," 1402978/14-TRS-0024, dated July 28, 2014.

Per the Reference letter, Washington River Protection Solutions (WRPS) received contract direction from the U.S. Department of Energy, Office of River Protection (ORP) to develop and submit documentation of specific tools to sustain the safety culture attributes contained in DOE G 450.4-1C, Integrated Safety Management System Guide, Attachment 10, by August 15, 2014 As directed, this letter provides the following: *(1) specific sustainment tools WRPS will use, (2) descriptions of the tools; and (3) plans and schedules for implementation of the tools.* Since contract inception in October 2008, WRPS has continued to sustain and improve their Safety Culture Program using tools such as surveys, self-assessments, Voluntary Protection Plan reviews, and metrics. The WRPS' safety culture sustainment tools are shown in Enclosure 1 and identify (1) each specific sustainment tool that will be used by WRPS, (2) description of each tool, and (3) specific actions to be taken and the due date. Enclosure 2 identifies the action and schedule for developing and implementing the tools.

If you have any questions, you may contact me at 372-9974, or your staff may contact Mr. E. E. Kennedy at 376-0533.

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Sincerely,

(Signature Attached)

L. David Olson
President and Project Manager

EEK:TLF

Enclosures:
1. WRPS Safety Culture Sustainment Tools, Description, and Due Dates (4 pages)
2. WRPS 2015 Safety Culture Sustainment Plan Schedule (1 page)

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Electronically Approved by:

L. David Olson

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Title: President and Project Manager
Date: Monday, 18 August 2014, 10:06 AM Pacific Time
Meaning: Sign as L. David Olson
==========

Enclosure 1
WRPS Safety Culture Sustainment Tools, Description, and Due Dates

WRPS' safety culture sustainment tools, description of the tool, specific actions to be taken, and scheduled due date are provided in this enclosure.

- **Safety Culture Monitoring Panel (SCMP)**

  To provide greater senior management ownership and awareness of culture related issues, the scope of the Executive Safety Review Board (ESRB) will be increased through the formation of a SCMP to specifically include safety culture monitoring and oversight. The SCMP will also include an element of independent oversight by subject matter experts. This will involve an annual evaluation of the safety culture, aligned with the ISMS annual review. The ESRB provides feedback and senior management direction concerning the focus of assessments; reviews the health of the Safety Management Programs; and reviews issues that have crosscutting organizational implications. The ESRB exists to provide added confidence in the communication, analysis, and follow through on aggregate performance information insights about adverse trends and improvement opportunities.

  Action: Revise ESRB Charter to include SCMP Due Date: 12/31/2014

- **Methods to Provide Working Level Input to the SCMP**

  To ensure the ESRB considers culture related input from workers, the ESRB charter will be revised to include the SCMP and various working level activities to provide input to the ESRB on an ongoing frequency. Examples of working level activities that will provide input to ESRB include the Employee Accident Prevention Councils (EAPC), the VPP Task Team, the President's Accident Prevention Council (PAPC) and the Chemical Vapor Solutions Team (CVST). These committees provide employee leadership, and ensure employee involvement and injury reduction by application of the VPP and ISMS principles.

  Action: Revise ESRB Charter to include SCMP Due Date: 12/31/2014

- **Actions in Response to Self-Assessments**

  To strengthen the precepts and concepts of Safety Culture, several actions were developed as a direct result of the 2013 Safety Conscious Work Environment Self-Assessment. Ongoing communications on safety culture related topics are used on a frequent basis to raise employee awareness on various related topics. These include: Specific communication on alternative avenues for raising concerns/issues, Quarterly communications regarding the DPO Process (DOE G-0400), Integral/focused communications on Safety Culture/SCWE attributes/ISMS Behavioral Expectations using multiple company level communication methods. The current action plan to address recent safety culture self-assessments is included in Enclosure 2.

Action: On-going communication regarding safety culture topics Due Date: 9/30/2015

- **Periodic Self-Assessments and Independent Reviews**

  WRPS ensures programs regarding safety culture/SCWE are assessed on a period basis for continuous improvement and to ensure safety culture information is current, up-to-date and is being used, as designed.

Action:	Due Date:
o Safety Culture Self-Assessment/Survey	12/31/2014
o SCMP Evaluation of Safety Culture	12/31/2014
o WRPS Annual VPP Assessment	2/28/2015
o ECP Annual Assessment	4/30/2015
o Subcontract terms and conditions (flowdown and incentive) including safety culture	9/30/2015

- **Continuing Training**

  To ensure all WRPS employees understand WRPS' safety culture attributes and expectations, all employees receive Safety Culture/SCWE Training. The training is provided to all new hire employees, and refresher training provided on a biannual basis. This training provides details of the WRPS safe work environment, ISMS behavioral expectations, and responsibilities of each employee to these expectations. Examples of topics in the training include expectations for problem identification and resolution, alternative avenues for raising issues, zero tolerance for harassment, intimidation, retaliation, or discrimination, and the importance of building trust.

  Action: Safety Culture Refresher Training Due Date: 9/30/2015 (on-going)

- **Performance Measures**

  It is possible to measure safety culture to provide greater insight into the culture of the organization. WRPS publishes a monthly report of performance indicators which are reviewed by management. These performance indicators specifically identify metrics that are used to monitor safety culture performance. Adverse trends are identified and addressed on an ongoing basis. The safety culture related metrics will now be reviewed by the safety culture monitoring panel (SCMP).

  Action: Revise ESRB Charter to include SCMP Due Date: 12/31/2014

- **Disciplinary Process for the ISMS Behavioral Expectations**

  To ensure fair and consistent action is taken in the disciplinary process, which supports a strong Safety Culture/SCWE, the Human Resources (HR) department reviews the facts of disciplinary events and ensures the action does not adversely impact any ISMS Behavioral Attributes using the following criteria:

- Constitutes retaliation for raising a concern
- Could create the perception of retaliation
- Has the potential to create a "chilling effect"
- Is inconsistent with past practices
- Violates any Price-Anderson Amendments Act (PAAA) considerations
- Has any Human Performance Improvement considerations been associated with the violation.

Action: HR Review Due Date: On-going

- **Lean Process**

To increase focus on employee engagement and continuous improvement, an improvement process that WRPS has recently adopted is called Lean. Lean principles are a proven method for improving performance and organizational culture, which is consistent with the DOE ISMS framework. Lean management principles are articulated around Continuous Improvement (relentless elimination of waste) and Respect for People (engagement in long term relationships based on continuous improvement and mutual trust). Respect for People involves two defining principles:

- Taking every employee's and stakeholder's problems seriously, and making every effort to build mutual respect and trust. Taking responsibility for other people reaching their objectives.
- Developing individuals through team problem-solving. The idea is to develop and engage people through their contribution to team performance: work area teams, whole departments as a team, and WRPS as a team.

Action: Issue Lean Steering Committee Charter Due Date: 10/15/2014

- **Issue Management Process Improvements**

To improve the effectiveness of the PER process, a Lean review of the PER process identified several opportunities to increase management focus on higher significance issues and improve response time. Ultimately, these changes are expected to provide a more responsive process to worker identified issues, and higher quality corrective actions.

Actions:

- A process will be developed to expedite routing of lower level PERs to existing processes such as procedure changes, with the goal of reducing PER cycle time.
- A formal review will be conducted to enhance consistency and quality of PER evaluations, corrective action development, and corrective action implementation.

Due Date: 12/31/2014

- **Human Performance Improvement (HPI)**

  To foster HPI cultural concepts and Conduct of Operations improvements, a new organization called Organizational Performance Improvement (OPI) was recently created. The OPI group reports to the company president and will increase focus on HPI and conduct of operations. The OPI group will increase focus on safe, reliable, predictable, and excellent performance of work, the existing Procedures and Training Departments, as well as the newly created HPI and conduct of operations programmatic functions.

  Action: HPI Program Plan Issued Due Date: 10/31/2014

- **Culture Change Management**

  To improve worker engagement, teamwork, mutual respect, and alignment with the company mission, vision, and values, Edventures methodology was initially implemented in April 2014. Edventures is a highly interactive learning process where everyone in the organization gains an understanding of how WRPS operates, the mission, and the impacts their actions have on their co-workers, customers, and other stakeholders of our organization. Further use of this process is currently being evaluated. New employees receive an Edventures briefing on an ongoing basis.

  Action: Edventures implemented, as necessary Due Date: Ongoing

- **Performance Expectations**

  To improve accountability to culture related expectations, management maintains and effectively communicates a priority commitment to our ISMS, with clear, formally documented expectations for the behaviors of all members of the organization regarding safe execution of work. The organization embraces the commitment, understands the expectations, and is dedicated to sustaining a safe work environment. These expectations will be formally integrated into the company performance objectives which are the formal mechanism for documenting personal performance on an annual basis.

  Action: Update company performance objectives Due Date: 10/15/2014

Enclosure 2

WRPS 2015 Safety Culture Sustainment Plan Schedule

This Enclosure lists the specific action and due date for sustainability tools identified in Enclosure 1.

Tool / Action	Target Due Date
Safety Culture Monitoring Panel (SCMP) Revise ESRB Charter to include SCMP	12/31/2014
Methods to Provide Working Level Input to the SCMP Revise ESRB Charter to include SCMP	12/31/2014
Actions in Response to Self-Assessments On-going communication regarding safety culture topics	9/30/2015
Periodic Self-Assessments and Independent Reviews Safety Culture Self-Assessment/Survey SCMP Evaluation of Safety Culture WRPS Annual VPP Assessment ECP Annual Assessment Subcontract terms and conditions (flowdown and incentive) including safety culture	 12/31/2014 12/31/2014 2/28/2015 4/30/2015 9/30/2015
Continuing Training Conduct safety culture refresher training	9/30/2015
Performance Measures Revise ESRB Charter to include SCMP	12/31/2014
Disciplinary Process for the ISMS Behavioral Expectations HR Review	Ongoing
Lean Process Issue Lean Steering Committee Charter	10/15/2014
Issue Management Process Improvements A process will be developed to expedite routing of lower level PERs to existing processes such as procedure changes, with the goal of reducing PER cycle time. A formal review will be conducted to enhance consistency and quality of PER evaluations, corrective action development, and corrective action implementation.	12/31/2014 12/31/2014
Human Performance Improvement (HPI) HPI program plan issued	10/31/2014
Culture Change Management Edventures implemented, as necessary	Ongoing
Performance Expectations Update company performance objectives	10/15/2014

Attachment C
14-TRS-0028
(21 Pages)

Bechtel National, Inc. letter from J.M. St. Julian to W.F. Hamel, U.S. Department of Energy, Office of River Protection, "Bechtel National Inc. Response to the U.S. Department of Energy, Office of River Protection Regarding Development of Safety Culture Sustainment Plans," CCN: 271903, dated August 28, 2014

U.S. Department of Energy
Waste Treatment & Immobilization Plant
Mr. W. F. Hamel
Assistant Manager, Federal Project Director
P.O. Box 450, MSIN H6-60
Richland, Washington 99352

CCN: 271903

AUG 2 8 2014

Dear Mr. Hamel:

CONTRACT NO. DE-AC27-01RV14136 – BECHTEL NATIONAL INC. RESPONSE TO THE U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER PROTECTION REGARDING DEVELOPMENT OF SAFETY CULTURE SUSTAINMENT PLANS

Reference: CCN 271077, Letter, from W. F. Hamel, ORP-WTP, to J. M. St. Julian, BNI, "Safety Culture Sustainment Plans," 14-TRS-0026, dated August 1, 2014.

Per the referenced letter, ORP-WTP requested that Bechtel National, Inc. (BNI) provide documentation of specific tools to sustain the safety culture attributes contained in DOE G 450.4-1C, *Integrated Safety Management System Guide*, Attachment 10. As requested, the attachment to this letter provides the following: *(1) specific sustainment tools BNI will use, (2) descriptions of the tools; and (3) plans and schedules for implementation of the tools.*

The plan has been reviewed with Garth Reed, ORP-WTP Engineering Division.

Contact Melinda d'Ouville at (509) 371-2981 for further information related to this subject.

Sincerely,

J. M. St. Julian
Project Manager

MDJ/alk

Attachment: 24590-WTP-PL-MGT-14-0037, Rev 0, *Nuclear Safety and Quality Culture Sustainment Plan*

CCN: 271903 ~~271903~~

cc:

Baker, L. W. w/o	WTP	
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Dawson, R. L. w/o	ORP-WTP	
d'Ouville, M. J. w/a	WTP	MS14-3B
Dowell, J. A. w/o	ORP	
Dunkirk, J. H. w/o	WTP	
Hajner, R. S. w/o	WTP	
Kacich, R. M. w/o	WTP	
Mair, K. A. w/o	ORP-WTP	
McCullough, M. G. w/o (hard copy)	WTP	MS14-3C
Noyes, D. L. w/o	ORP-WTP	
Oxenford, W. S. w/o	WTP	
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PADC w/a	WTP	MS-19A

Attachment to CCN 271903

24590-WTP-PL-MGT-14-0037, Rev 0, *Nuclear Safety and Quality Culture Sustainment Plan*

18 Pages

ISSUED BY
RPP-WTP PBC

R11672597

Nuclear Safety and Quality Culture Sustainment Plan

Document title: Nuclear Safety and Quality Culture Sustainment Plan

Document number: 24590-WTP-PL-MGT-14-0037, Rev 0

Contract number: DE-AC27-01RV14136

Department: Nuclear Safety and Quality Culture

Author(s): TES for MJ d'Ouville

Issue status: Approved

Approved by: WS Oxenford

Management Systems

Approver's position: Requirements Area Manager

Approver's signature: _____ Signature 8/28/14 Date

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History Sheet

Rev	Reason for revision	Revised by
0	Initial issuance to document nuclear safety and quality culture sustainability	MJ d'Ouville

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1 Introduction

This Sustainment Plan is being submitted to the US Department of Energy (DOE) as requested in letter 14-TRS-0026 (CCN 271077) dated August 1, 2014. This Plan describes the overall structure of the Hanford Tank Waste Treatment and Immobilization Plant (WTP) Project's nuclear safety and quality culture (NSQC) construct, and it identifies and describes the tools used to sustain the NSQC.

Bechtel National, Inc. (BNI) has primary responsibility for designing and constructing the WTP, with safety and quality embedded in its processes and work products. For BNI, an important component of mission success is delivering a safe and high-quality facility to the DOE through a skilled and professional work force not only working safely every day, but also delivering a facility that will operate safely and reliably over its design life.

Sustaining a strong NSQC culture is particularly difficult at WTP due to the extended duration of the design, procurement and construction phase. Unlike a standard operating facility, where turnover is primarily driven from attrition, projects encounter additional turnover as skill mix needs and funding profiles change, whether driven as part of the planned baseline or unplanned direction/funding changes. This organizational dynamic increases the importance of implementing, sustaining, and adjusting cultural efforts as the Project progresses.

The Organizational Effectiveness function was put in place as the cultural and learning organization conscience of the Project. It brings together the elements necessary for the maturing of an NSQC: Corrective Action Management Program (CAMP), Requirements Management, Project Procedures, Project Training, Employee Concerns and Ethics, Lessons Learned, Metrics, Trending, Assessment, and the NSQC Program. This change added a dimension of learning and coaching not evident prior to creating the Organizational Effectiveness function.

Several independent assessments conducted during 2010 and 2011 indicated that the safety culture at the WTP Project was not sufficiently mature, embedded, and reinforced to ensure the requisite levels of quality and safety were evident. As a result, the WTP Project undertook a safety culture revitalization initiative documented in the 24590-WTP-PL-MGT-12-0005, *Comprehensive Corrective Action Plan for Strengthening the Nuclear Safety and Quality Culture at the Hanford Tank Waste Treatment and Immobilization Plant*, otherwise called the CCAP.

When the decision was made in 2010 to refresh the WTP Project nuclear safety culture, the Project adopted the term NSQC. Because of the strong industrial safety culture that has been maintained at the WTP Project, there was a concern that employees would misconstrue "safety culture" as referring only to industrial safety. To avoid confusion, NSQC was adopted. This decision has served the Project well and now, four years later, employees are familiar with NSQC concepts, attributes, and desired behaviors.

The WTP leadership team capitalized on nuclear industry lessons learned and developed the Organizational Effectiveness organization with the specific role of providing a daily focus on culture and cross-functional foundational programs. Included is an NSQC Program Management position that is independent of daily project execution demands. The Organizational Effectiveness organization assists line management to ensure that the NSQC aspects of ongoing activities are routinely viewed from a nuclear safety culture frame of reference. In 2010, the WTP NSQC Program Manager position was formally instituted, and in 2014, the Organizational Effectiveness organization was formed. Together, these changes institutionalize maintenance of supporting governance policies and Project documents that describe the responsibilities for managers and employees in a nuclear safety environment.

The WTP leadership team views culture as an asset and realizes "periodic revitalization is necessary to account for new industry information and lessons learned; it is a never-ending journey" (McDonald et al. 2010). Applying this philosophy, the WTP leadership team became fully engaged in improving and sustaining a robust NSQC. To help accomplish this objective, the team instituted communications initiatives, leadership training, and behavior goals, along with disciplined work processes—all intended to refresh the cultural aspects of the team's commitment to nuclear safety and quality.

For the past several years, the WTP leadership team has been revitalizing its culture through a variety of initiatives described in greater detail in the following sections of this plan. Culture, however, is an evolving and changing dynamic that requires consistent attention and advancement. It is not a state of being at which the organization arrives and maintains, but it is one that calls for periodic monitoring to recognize positive advances and potential negative influences from which adjustments can be made. In May 2012, the CCAP documented activities designed to align the WTP Project's NSQC with the DOE G 450.4-1C, *Integrated Safety Management System Guide*, Attachment 10, "Safety Culture Focus Areas and Associated Attributes," and nuclear industry standards. In developing the CCAP, the findings and recommendations of various assessments were distilled and grouped into an integrated set of manageable actions. Discussion specific to the individual actions can be found in the CCAP . A cross-reference matrix of CCAP actions to the DOE, Office of River Protection (ORP) closure surveillances is provided with this plan (Appendix A). Many of the actions included in the CCAP Strategic Improvement Areas (SIA) are discussed in the following sections. These actions have provided a foundation for achieving the objective of:

> ...not only strengthening the Project NSQC in the short term, but also sustaining it over the remainder of the construction and startup phases as project staff continues to change over the duration of this project. (CCAP)

In May 2013, while the NSQC CCAP actions were still in progress, ORP audited the BNI Quality Assurance Program (CCN 263442, *Bechtel National, Inc. Quality Assurance Program Requirements 3, 4, 7, 8, 15, and 16, and Direction to Perform a Managed Improvement Plan*, dated October 28, 2013). This audit resulted in findings regarding the WTP Project Quality Program and CAMP, with specific direction to develop a Managed Improvement Plan (MIP) that is to be implemented by October 2015. With this direction, the WTP leadership team has chosen to integrate its nuclear safety and quality culture sustaining initiatives into the MIP. The completion dates for MIP initiatives are in final development as this Sustainment Plan is being developed. Therefore, completion dates are not yet confirmed for inclusion in this plan and will be available with issuance of the MIP.

The tools to be used in sustaining the NSQC are grouped into the three focus areas extracted from DOE G 450.4-1C, with particular attention paid to the attributes highlighted in *Consolidated Report for Defense Nuclear Facilities Safety Board Recommendation 2011-1 Actions 2-8 and 2-9, Safety Culture at the Waste Treatment and Immobilization Plant* (DOE 2014) and two other attributes selected by the WTP leadership team:

- Leadership—specifically, the attributes of
  - demonstrated safety leadership
  - open communication and fostering an environment free from retribution
  - clear expectations and accountability
- Employee Engagement—specifically, the attribute of
  - teamwork and mutual respect

- Organizational Learning—specifically, the attributes of
  - credibility, trust, and reporting errors and problems
  - performance monitoring through multiple means

This plan also presents the implementation construct and plan for monitoring the NSQC and the Safety Conscious Work Environment (SCWE) as the ongoing and planned actions are completed (see Section 3).

2 Learning Organization

The WTP leadership team considers the three focus areas of Leadership, Employee Engagement, and Organizational Learning to be components for achieving the objective of becoming a learning organization—one that is openly transparent, is rigorously self-critical, finds its own problems, and solves them effectively. The WTP Project began implementing the principles of a learning organization in 2013, and it is continuously improving on these as the Project matures. The Project Director issued Procedure and Guide Use and Adherence (24590-WTP-G63-MGT-012) in January 2014; Integrated Issue Management Policy (24590-WTP-G63-MGT-015) in May 2014; and Quality Policy (24590-WTP-G63-MGT-020) in July 2014. The Project Director is investing in strengthening all of the foundational processes that sustain improved performance (e.g., requirements management, procedures, training, CAMP, and other performance elements such as self-assessment, trending, cause analysis, and lessons learned). Improving these processes over the next year is intended to help Project leaders and the workforce become a learning organization and, as a consequence, secure the foundational infrastructure of its NSQC.

The WTP Project's culture is vulnerable to the dynamics of change, influenced as it is by conditions such as workforce and organizational changes, evolving customer direction, dynamic Project priorities, funding uncertainties, and the daily activities of a project's engineering, procurement, construction and commissioning work. This vulnerability can have a profound effect on what employees view as important and their dedication to producing quality work. The WTP leadership team has a foundation of covenants, absolutes, values, and key behaviors intended to sustain and strengthen the Project's culture. These fundamentals continue to be enhanced and remain the representation of the WTP leadership team's values and beliefs. However, it is leadership that brings the messages alive and embeds them into the daily work activities of employees. This is where the WTP Project Director is leading the management team and the workforce through positive recognition of behaviors and performance aligned with the safety culture commitments, and implementing coaching or discipline when needed to guide improvement.

WTP leadership knows that informed employees, who trust their supervisors and raise issues, are the underpinnings of the Project's NSQC. While it is not possible to eliminate negative effects of cumulative change found on this Project, the effects of change can be minimized by employees who are empowered by their supervisors to work with a questioning attitude. These employees find, report, fix, and prevent recurrence of conditions that are adverse to nuclear safety and quality or threaten the NSQC. Through *Peggy's Posts* and other all-employee messages, the WTP Project Director has reinforced the importance of the Key Behaviors and Culture Goals, Expectations and Avenues for Raising Concerns at WTP, Being Accountable, and many others. The Project Director holds the senior leadership team accountable for these behaviors and for demonstrating in all their actions their commitment to a robust safety culture.

Recognizing that culture change takes an investment of time and leadership attention, WTP Project leadership determined that monitoring the improvements that have taken place and applying the attributes of continuous improvement to them are essential as a means of reinforcing and embedding them in the NSQC. The sections that follow present selected actions implemented through the CCAP and the actions

captured in the MIP. Designation of a CCAP action as ongoing indicates that by its nature it has been institutionalized and will continue, such as new-hire orientation. Actions that were begun in the CCAP and will continue to be enhanced through initiatives described in the MIP are identified. The monitoring of the culture is discussed in Section 3.

2.1 Leadership

Of the DOE G 450.4-1C, Attachment 10, attributes associated with safety culture focus area of Leadership, the WTP leadership team is focused on demonstrated safety leadership, open communication and fostering an environment free from retribution, and clear expectations and accountability.

2.1.1 Ongoing Actions

Portions of the NSQC CCAP addressed the leadership attributes: demonstrating safety leadership and open communication; fostering an environment free from retribution; and clear expectations and accountability. Several actions included in the CCAP were designed to enhance and institutionalize the processes to be used by senior management to drive continuous improvements in the NSQC across the entire Project. Additional actions included development of the WTP NSQC Leadership Forum and design and implementation of its governing elements based on a model described in the Nuclear Energy Institute's NEI 09-07, *Fostering a Healthy Nuclear Safety Culture*. In early 2013, the Project Director formally strengthened a set of targeted strong NSQC behaviors by refining and signing Key Behavior and Cultural Goals. These were further refined by the new Project Director in August 2013 and the project leadership in a campaign that continues in 2014 to communicate and reinforce these behaviors and goals with managers and employees. The Key Behaviors and Cultural Goals continue to be reinforced through management expectations and the performance coaching or discipline processes. The Project Director followed up with a June 10, 2014, *Peggy's Post* discussing the importance of holding everyone accountable for demonstrating the Key Behaviors. The Post was focused on "Accountability for management behaviors: Everyone is held to the same standard."

Two actions specifically related to zero tolerance for retaliation. Both the Differing Professional Opinion (DPO) process and the Employee Concerns Program (ECP) were strengthened through incorporation of industry best practices. Greater use has been made of the DPO process since that change and has exhibited evidence of being successful. Employees using the ECP process have elicited better information that has helped improve timeliness for resolving concerns and making it a more effective program.

Actions were developed to institute an accountability model and to develop managerial competencies in accountability and decision-making. The accountability model was approved by the Senior Leadership Team and presented to ORP in October 2013. The model focuses on the concepts of "Holding Yourself Accountable" and "Holding Each Other Accountable" by defining clear roles and responsibilities with an established single point of accountability, aligned with decision-making authority. Discussions of accountability were communicated across the project via the Key Behaviors and Cultural Goals and Messages from Management. Full implementation of the accountability model and skills is planned in the Accountable Leadership initiative in the MIP (MIP-72), which is discussed in Section 2.1.2, "Planned Actions."

Actions in the CCAP also included developing and delivering SCWE training and incorporating it into the on-boarding indoctrination / required core training for new employees. This training was instituted with the initial training of over 2300 WTP personnel, including non-manuals, craft, and subcontractors. It articulated the leadership expectations for SCWE at the WTP Project and was well received by all levels of the organization. The WTP Leadership Academy was designed to create "Leaders One Wednesday at a Time." In 2013, WTP Leadership Academy offered three courses: Forthright Conversations, Bechtel

Supervisory Development Program, and Employee Engagement. The WTP Leadership Academy modules are offered on an ongoing basis.

Change management, identified as an area for improvement by independent assessments over the previous few years, was to be addressed in the NSQC CCAP. Additional efforts to institutionalize a systematic approach to change management are needed. Therefore, strengthening the change management process is an initiative in the WTP MIP (MIP-74).

A Bechtel standard business practice for improving leadership skills is the 360-Degree Review Process, in which senior managers receive evaluations from their manager, from their peers in different departments with whom they work, and from team members who report to them. For senior and mid-level managers, Bechtel uses Upward Feedback sessions, which provide participants with one-on-one coaching and then a session with his or her direct reports during which improvement opportunities are presented and discussed. Individuals directing the work of three or more employees are the target audience. Participants then add their selected behavior improvement to their annual performance review plan as a development goal. As of March 5, 2014, approximately 94 percent of WTP supervisors are receiving feedback from their direct reports on an annual basis through this process. To complete the WTP personnel evaluation process, each employee participates in an annual review process that includes a minimum of three required interactions with his or her manager throughout the year. This is followed by the final review meeting. During these meetings, behaviors and performance in line with the Key Behaviors, the WTP Covenants, and mission commitments are appraised along with the individual goals established by the employee.

Other NSQC CCAP actions covered improvements in the craft rating system and superintendent leadership workshop fostering a just culture. Although these CCAP items were closed in 2012, the closure represented only the development and initial implementation of the new rating system. Three separate uses of the new system were introduced in 2013, and follow-up focus groups were conducted to address newly identified opportunities for improvement. The Craft Employee Evaluation process was enhanced to better define the criteria against which craft employees are evaluated. With the enhancements in the evaluation process and the inclusion of a craft development plan, the craft evaluation process allows for open lines of communication with supervision. Each of these actions is an ongoing part of Construction Management's oversight and implementation approach for the craft workforce.

2.1.2 Best Practices

The WTP NSQC Leadership Forum, tailored after the NEI 09-07 Oversight Model that describes the nuclear industry approach to monitoring and addressing NSQC issues, has been recognized as a best practice by independent reviewers.

Leadership Academy module *Forthright Conversations* has been especially well received, with high course evaluations by students. The training has helped to improve the supervisor / employee relationship by empowering each with a tool and technique for positive mutual learning conversations. It is considered by the WTP leadership as a strength.

BNI used a training model for the SCWE training that was widely recognized by the workforce as successful across the organization. Training sessions were populated with different functional groups and different organizational levels, and participants recognized the value of hearing different perspectives. The sessions were led by a team of two managers from different functions in the WTP organizations. An independent safety culture assessment team recognized the SCWE training model as a strength (CCN 269323, *Independent Oversight Follow-up Assessment of Safety Culture at the Waste Treatment and Immobilization Project* – June 2014).

2.1.3 Leadership Focus Area Implementation

Table 1 that follows provides a listing of the schedule for completing actions included in the Leadership focus area. In this context, the term "ongoing" indicates a completed action that by its nature has been institutionalized and will be ongoing, such as new-hire orientation, to support sustainment of the NSQC. Those identified with a MIP number are MIP initiatives that will be scheduled in accordance with the final issue of that document. By institutionalizing these initiatives, discontinuation or change will require review and deliberate management consideration.

Table 1 Leadership Focus Area Implementation Schedule

Description	Status/Planned Completion Date
Senior Manager 360-Degree Review Process: Improving Leadership Skills	Ongoing
Manager Upward Feedback with Direct Reports and Peers	Ongoing
Employee Annual Review with Behaviors and Performance Results	Ongoing
Leadership Academy Modules for Leadership Skills	Ongoing
Accountability Model	Ongoing
Craft Employee Evaluation	Ongoing
Craft Rating and Ranking System Improvements	Ongoing
Superintendent Leadership Workshop	Ongoing
Safety Conscious Work Environment Awareness in Onboarding and as Core Training	Ongoing
Differing Professional Opinion	Ongoing
Employee Concerns Program	Ongoing
Key Behaviors and Cultural Goals	Ongoing
WTP NSQC Leadership Forum	Ongoing
Strengthening the Programmatic Change Management System	MIP-74
Sustaining a Safety Conscious Work Environment	MIP-75
Accountable Leadership	MIP-72

2.2 Employee Engagement

Of the DOE G 450.4-1C, Attachment 10, attributes associated with the safety culture focus area of Employee Engagement, the WTP leadership team is focused on teamwork and mutual respect.

2.2.1 Ongoing Actions

Some actions addressed in Leadership, Section 2.1, and Employee Engagement, Section 2.3, significantly affect teamwork and mutual respect. These include the Leadership Academy modules in general, but specifically the Employee Engagement module. Employee Engagement is designed to help the student understand the impact of leadership behavior on discretionary effort and its role in improving employee engagement. The course is a behavior-based leadership development program designed to improve business results through better communication between managers and the people they supervise. The development and delivery of SCWE training and its incorporation into the on-boarding indoctrination as core required training for new employees sets the foundation for mutual respect, especially related to the employee's responsibility to identify concerns and management's responsibility to welcome them. The Human Performance Improvement model, People Based Quality (PBQ), and the upcoming Accountable

Leadership approach all drive improvement in the employee's engagement with his or her work processes and sustaining a healthy NSQC.

NSQC CCAP actions that addressed revision, documentation, communication and enforcement of roles, responsibilities, authorities, and accountabilities (R2A2) were begun with an evaluation of gaps and overlaps; however, this NSQC CCAP action was recognized as redundant to others established during the preparation of the MIP. As a result, the ongoing need to refine R2A2s is an initiative in the MIP (MIP-08).

Actions related to NSQC CCAP construction-site-unique issues included improvements in the craft rating and ranking system and the Superintendent Leadership workshop intended to improve communication and understanding between field supervision and workers. Although these CCAP items were closed in 2012, the closure represents only the development and initial implementation of the new rating system. Three separate uses of the new system were introduced in 2013, and follow-up focus groups were conducted to address newly identified opportunities for improvement. The overall understanding and acceptance of the new system continues to be evaluated using scorecards. The scorecards are conducted to gain information about a selected WTP Project NSQC area of interest. Results are tabulated, evaluated by a craft focus group, and reported to the general employee population.

The Craft Employee Evaluation process was enhanced to better define the evaluation criteria. With the enhancements in the evaluation process and the inclusion of a craft development plan, the craft evaluation process allows for open lines of communication with supervision.

The *Nuclear Safety and Quality Culture Communications Plan* (24590-WTP-PL-MGT-10-0004) and the MIP are included in the *WTP Communications Plan* (24590-WTP-PL-MGT-14-0022), and seven behaviors are addressed as foundational Key Messages: build trust, be accountable, make defendable decisions, recognize interdependence, be self-critical, apply discipline in executing work, and have forthright conversations. The tactics presented in the *WTP Communications Plan* address cultivating the Project's core values—safety and quality; regularly communicating project goals and progress; and continuing to strengthen the Project's NSQC. Surveys, focus groups, and interviews are all information-gathering techniques used by the Project leadership team to evaluate employee opinions about and involvement in work activities and processes.

2.2.2 Best Practices

Day-to-day direct supervisors are the major contributors to the craft ratings and rankings. Their involvement has solidified the supervisor / employee relationship, improved employee understanding of the process, and increased the fidelity of the information used to conduct the rating and ranking process. Craft and supervisors both participate in the focus groups that are the follow-on evaluation process to continuously improve this effort.

PBQ clearly identifies and reinforces the behaviors associated with the Quality Absolutes adopted by the WTP Project as the gold standard for delivering quality. PBQ activities are conducted at the line level and focus attention and conversation on quality and raise awareness of the Project's "bullet proof" quality standard. Integrated Safety Management System principles identify line management as responsible for safety; they are also responsible for quality.

2.2.3 Employee Engagement Focus Area Implementation

Table 2 provides a listing of the schedule for completing actions included in the Employee Engagement focus area. In this context, the term "ongoing" indicates a completed action that by its nature has been institutionalized and will be ongoing, such as superintendent leadership workshops, to support

sustainment of the NSQC. Those identified with a MIP number are MIP initiatives that will be scheduled in accordance with the final issue of that document. By institutionalizing these initiatives, discontinuation or change will require review and deliberate management consideration.

Table 2 Employee Engagement Implementation Schedule

Description	Status/Planned Completion Date
Craft Rating and Ranking Improvements	Ongoing
Superintendent Leadership Workshop	Ongoing
Craft Employee Evaluation Process	Ongoing
Human Performance Improvement Model	Ongoing
WTP Communications Planning	Ongoing
Leadership Academy: Employee Engagement	Ongoing
SCWE Awareness in On-boarding and as Core Training	Ongoing
Establishment of R2A2s	MIP-08
Non-manual People Based Quality	MIP-26
Craft-centered and Craft-executed People Based Quality	MIP-70
Accountable Leadership	MIP-72

2.3 Organizational Learning

Of the DOE G 450.4-1C, Attachment 10, attributes associated with Organizational Learning, the WTP leadership team is focused on credibility, trust, and reporting errors and problems, and performance monitoring through multiple means. Performance monitoring is described in Section 3 of this Sustainment Plan.

2.3.1 Ongoing Actions

One section of the NSQC CCAP was primarily devoted to the organizational learning attributes of credibility, trust, and reporting errors and problems. The focus was on integrating, simplifying and better communicating the issues management / CAMP starting with issuance of an *Integrated Issues Management Policy* (24590-WTP-G63-MGT-015) by simplifying and integrating the processes and communicating them better to employees. While incremental improvements in the CAMP were made during the CCAP, actions associated with MIP-01 represent significant additional improvements to be implemented. Identification and clarification of interfacing processes made the CAMP more accessible to employees, clarifying when project issues evaluation reports (PIER) should be written. Improvements in the cause analysis program included implementation of a cause analysis procedure, increased rigor for analyst qualification and certification, review of products, and refinement of the in-process measures that monitor the quality of cause evaluations.

Strengthening the DPO Program involved incorporating in the program documentation lessons learned from previous DPO activities and enhancements from experts with DPO experience elsewhere. Office of Health Safety and Security (HSS) input was included in the DPO procedure revision, and it was revised using current DPO concepts and values acquired from the nuclear industry (*Peggy's Post*, "DPO Process Available for Environment, Safety and Health Technical Concerns," November 5, 2013). Project leadership was briefed with the changes and highlights were posted in a Project News article.

Strengthening the ECP involved benchmarking industry best practice material from: Yucca Mountain Office of Civilian Radioactive Waste Management ECP Procedure, the other Hanford contractor ECP procedures, Bechtel Power ECP procedures, DOE ECP procedures, and several additional commercial nuclear power ECP procedures. Substantive revision to the procedure was postponed in favor of incorporating the information learned in the new Hanford-wide employee concerns procedure under development. However, as an interim improvement, ECP-related forms were streamlined, new performance indicators were developed, and communications products were introduced.

The NSQC Leadership Forum is an innovative approach for becoming a more robust learning organization by monitoring the health of the NSQC. Inputs from various sources are filtered through an evaluation process that provides the NSQC Monitoring Panel and Senior Leadership Team with notable achievements and constructive criticisms. This approach includes the use of targeted independent oversight on an as needed basis. Monitoring is discussed in Section 3.

Over several stages, the Organizational Effectiveness organization was put in place to bring together the elements necessary for the NSQC to mature: CAMP, Requirements Management, Project Procedures, Project Training, Employee Concerns and Ethics, Lessons Learned, Metrics, Trending, Assessment, and the NSQC Program.

2.3.2 Best Practice

The functioning of the NSQC Monitoring Panel, an element of the WTP NSQC Leadership Forum, was identified by an independent oversight review board as "exemplary of the safety culture principles in NEI 09-07… a useful benchmark for other organizations implementing the NEI 09-07 monitoring panel functions." (24590-WTP-RPT-MGT-14-017, Nuclear Safety Review Board Meeting: April 2014)

2.3.3 Learning Organization Focus Area Implementation

The table that follows provides a listing of the schedule for completing the actions included in the Learning Organization focus area. In this context, the term "ongoing" indicates a completed action that by its nature has been institutionalized and will be ongoing, such as establishment of the NSQC Monitoring Panel, to support sustainment of the NSQC. Those identified with a MIP number are MIP initiatives that will be scheduled in accordance with the final issue of that document. By institutionalizing these initiatives, discontinuation or change will require review and deliberate management consideration.

Table 3 Learning Organization Implementation Schedule

Description	Status/Planned Completion Date
Differing Professional Opinion	Ongoing
Employee Concerns Program	Ongoing
WTP NSQC Leadership Forum	Ongoing
NSQC Monitoring Panel	Ongoing
Corrective Action Management Program	MIP-01
Human Performance Improvement Model	MIP-73
NSQC Monitoring	MIP-77
Assessment and Review Effectiveness	MIP-85

3 Monitoring Nuclear Safety and Quality Culture and Safety Conscious Work Environment

The WTP leadership team understands that data, represented in metrics or performance indicators, alone cannot fully capture the health of the WTP Project's NSQC. Metrics are merely an indicator of areas on which leadership can focus its attention to determine if there are positive or negative influences at work. A healthy NSQC, particularly one like the WTP culture that is maturing, directly correlates to the investment made by leadership to consistently shape behaviors and performance through its own commitment to modeling what it expects of its employees. Monitoring the WTP NSQC is an ongoing effort that requires adjustments. The quantitative data and qualitative information used to gauge the health of the culture is itself under constant review and refinement for improvements. MIP-77 presents the initiative for strengthening the methodology for monitoring and reporting NSQC and SCWE indicators to leadership for actionable decision-making. The focus for monitoring NSQC in FY 2015 will be on the continuous improvement areas identified with the MIP.

The WTP Project currently is collecting data via metrics on a quarterly basis. The information from the metrics has been used in developing a broad-based *WTP Nuclear Safety and Quality Culture Health Report January 1, 2013 through June 30, 2013* (24590-WTP-RPT-MGT-13-031), identifying survey topics, developing communication themes, generating suitable management talking points, and setting the stage for focused observations and focus group interviews. While this is valuable, the WTP leadership team plans to augment the data in a way that adds meaning and value by using a monitoring framework that integrates quantitative data with qualitative information. This framework features a self-evaluation process that measures significance and maturity against the standards that form the basis of the attributes found in a healthy NSQC environment. As the NSQC monitoring framework matures in FY 2015, analysis of existing metrics will gain depth by using additional culturally relevant data and qualitative information. Implementation of the framework may include assessment of artifacts associated with NSQC values and collection of information through surveys, focus groups, and interviews on employee's perceptions and experiences, with processes that impact the culture in relationship to the artifacts. The information collected by the framework will give additional depth to the analysis of the data and trends, including revelation of challenges and opportunities not indicated by the metrics themselves to better improve and reinforce the culture.

The WTP NSQC health is measured via a suite of metrics governed by 24590-WTP-GPG-MGT-0037, *Monitoring the Nuclear Safety and Quality Culture*, and guided by the DOE G450.4-1C, Attachment 10, NEI 09-07, and other industry information related to performance and culture monitoring. Metrics are collected quarterly from the CAMP, ECP, Human Resources, and other processes and programs. The metrics are used by the WTP NSQC Leadership Forum, comprised of a management level Monitoring Panel and the Senior Leadership Team, in accordance with the guide, *Nuclear Safety and Quality Culture Monitoring Panel*, 24590-WTP-GPG-MGT-0025. Additional information is collected and analyzed from the quarterly Culture Poll; annual Great Place to Work survey; semiannual Culture Pulse survey; construction site Scorecards; and independent assessments or surveys performed periodically. Other information is collected and analyzed on an as-needed basis, including assessments, focused observations, feedback opportunities, employee interviews, and focus group discussions.

4 Conclusion

The institutionalized processes and practices implemented by BNI at the WTP Project are based on industry best practices and lessons learned. Actions have been implemented to improve NSQC over the last ten years, with accelerated and focused initiatives through the CCAP. These initiatives provide a

strong foundation for sustaining a healthy NSQC. Actions newly developed in the MIP, combined with this foundation, provide for sustaining and improving upon the DOE G 450.4-1C focus areas and associated attributes at the WTP Project.

5 References

24590-WTP-G63-MGT-012, *Procedure and Guide Use and Adherence.*

24590-WTP-G63-MGT-015, *Integrated Issue Management Policy.*

24590-WTP-G63-MGT-020, *Quality Policy.*

24590-WTP-GPG-MGT-0025, *Nuclear Safety and Quality Culture Monitoring Panel.*

24590-WTP-PL-MGT-10-0004, *Nuclear Safety and Quality Culture Communications Plan.*

24590-WTP-PL-MGT-12-0005, *Comprehensive Corrective Action Plan for Strengthening the Nuclear Safety and Quality Culture at the Hanford Tank Waste Treatment and Immobilization Plant.*

24590-WTP-PL-MGT-14-0022, *WTP Communications Plan.*

24590-WTP-RPT-MGT-13-031, *WTP Nuclear Safety and Quality Culture Health Report January 1, 2013 through June 30, 2013.*

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Peggy's Post, *Accountability for Management Behaviors: Everyone Is Held to the Same Standard*, June 10, 2014.

Peggy's Post, DPO Process Available for Environment, Safety and Health Technical Concerns, November 5, 2013.

Appendix A
Cross-Reference: CCAP Actions to ORP Surveillances

CCAP Action #	Action Description	CNN/Surveillance No If blank, not yet received	Finding/OFI/AFI
A--Realignment and Maintenance of Design and Safety Basis			
A-IP i	Develop PEP to transition PTF PDSA to STD-3009 - PIER 11-0473 #5	CCN 257175 S-13-WTP-RPPWTP-001	None
A-IP ii	Develop PEP to transition HLW PDSA to STD-3009 - PIER 11-0473 #7	CCN 257175 S-13-WTP-RPPWTP-001	None
A-IP iii	Develop PEP to transition LAW PDSA to STD-3009 - PIER 11-0473	CCN 257175 S-13-WTP-RPPWTP-001	None
A-1	Formal Six Sigma Process Mapping	CCN 264578 S-13-WTP-RPPWTP-004	O01 PIER 13-1450-D
		CCN 268351 S-14-WTP-RPPWTP-001	Closed S-13-WTP-RPPWTP-004, O01, above
A-2	Safety Basis Review Team (SBRT) review of Six Sigma		PIER 14-0580-D closed
A-3	Revise ENG and E&NS procedures		
A-4	Develop and Administer new training		
A-5	Facilitate ENG/E&NS Meetings	CCN 258511 S-13-WTP-RPPWTP-002	None
A-6	ENG/E&NS Integrated Schedule		
B--Management Processes of the WTP NSQC			
B-1	Develop a set of Behavioral Values specific to WTP	CCN 260850 S-13-WTP-RPPWTP-003	None
B-2	Revise the Project NSQC Communication Plan	CCN 257175 S-13-WTP-RPPWTP-001	O01 and O02 PIER 13-0409-D closed
B-3	Develop a Set of Quantitative and Qualitative Metrics	CCN 258511 S-13-WTP-RPPWTP-002	O01 PIER 13-0637-D closed
B-4	Establish a Nuclear Safety Review Board (NSRB)	CCN 258511 S-13-WTP-RPPWTP-002	O02 PIER 13-0638-D closed
C--Timeliness of Issues Identification and Resolution			
C-IP- i	Publish a Management Policy regarding WTP Issue Management	CCN 257175 S-13-WTP-RPPWTP-001	None
C-IP- ii	Streamline and clarify the corrective action management process	CCN 257175 S-13-WTP-RPPWTP-001	None
C-IP- iii	Identify Issue Management processes interfacing with the corrective action program	CCN 258511 S-13-WTP-RPPWTP-002	None
C-IP- iv	Strengthen cause analysis program and process	CCN 257175 S-13-WTP-RPPWTP-001	O03 PIER 13-0437-D closed
C-IP- v	Upgrade presentation material in new employee indoctrination	CCN 258511 S-13-WTP-RPPWTP-002	None

CCAP Action #	Action Description	CNN/Surveillance No If blank, not yet received	Finding/OFI/AFI
C-IP- vi	Cascade communication related to corrective action management program	CCN 257175 S-13-WTP-RPPWTP-001	O04 PIER 13-0438-D closed
C-IP- vii	Upgrade the trend program	CCN 264578 S-13-WTP-RPPWTP-004	None
C -1	Strengthen the Differing Professional Opinion (DPO) Program	CCN 258511 S-13-WTP-RPPWTP-002	None
C -2	Strengthen the Corrective Action Management Program	CCN 268351 S-14-WTP-RPPWTP-001	None
C -3	Strengthen the ECP program	CCN 258511 S-13-WTP-RPPWTP-002	None
C -4	Re-institute and strengthen the BNI change authorization process	CCN 268351 S-14-WTP-RPPWTP-001	None
C -5	Reconstitute the Issue Resolution Team (IRT)	CCN 268351 S-14-WTP-RPPWTP-001	None
C -6	Integrate, Simplify, and Communicate the Issues Management Processes	CCN 258511 S-13-WTP-RPPWTP-002	None
C -7	Establish cycle time metrics for issue resolution	CCN 260850 S-13-WTP-RPPWTP-003	None
C -8	Clarify and document the DOE review and approval process	CCN 265984 Closed to no action	
C -9	Strengthen WTP's Ability to Self identify issues in a timely manner	CCN 265865 S-13-WTP-RPPWTP-005	None
D-- Roles, Responsibilities, Authorities, and Accountabilities (R2A2s)			
D-1	Assessment of R2A2 Assignments and Documentation	CCN 258511 S-13-WTP-RPPWTP-002	O03 PIER 13-0639-D closed
D-2	Establish a common project accountability model in concert with DOE	CCN 264578 S-13-WTP-RPPWTP-004	A01
D-3	Implement, Validate, and Enforce the New Accountability Model	CCN 258511 S-13-WTP-RPPWTP-002	O03 PIER 13-0639-D closed
D-4	Update and Maintain the WTP R2A2 Governance Documents	CCN 258511 S-13-WTP-RPPWTP-002	O03 PIER 13-0639-D closed
D-5	Managerial Competencies in Accountability and Decision-making/Plan	CCN 268351 S-14-WTP-RPPWTP-001	None
D-6	Clarify, Document, and Institute ORP/BNI Interface R2A2s/Hold Joint Meeting		
E--Management and Supervisory Behaviors			
E-1	Managerial/Supervisory Behavioral Competencies	CCN 264578 S-13-WTP-RPPWTP-004	None
E-2	Organizational Development Professional Position	CCN 257175 S-13-WTP-RPPWTP-001	None

CCAP Action #	Action Description	CNN/Surveillance No If blank, not yet received	Finding/OFI/AFI
E-3	Inclusion of individual NSQC Performance Goals	CCN 260850 S-13-WTP-RPPWTP-003	A02 (no PIERs initiated for AFIs)
E-4	Delivery of Leadership Development Curriculum	CCN 260850 S-13-WTP-RPPWTP-003	None
E-5	Establish Formal Behavioral Feedback Process	CCN 260850 S-13-WTP-RPPWTP-003	None
E-6	New Employee Orientation (NEO) and Onboarding (OB)	CCN 260850 S-13-WTP-RPPWTP-003	O01 CCN 264578
E-7	Safety Conscious Work Environment (SCWE) Training	CCN 260850 S-13-WTP-RPPWTP-003	None
F--Construction Site-Unique Issues			
F-1	Admin of an Enhanced Craft Performance Rating System	CCN 257175 S-13-WTP-RPPWTP-001	None
F-2	Delivery of an Enhanced Superintendent Leadership Workshop		

Attachment D
14-TRS-0028
(20 Pages)

Advanced Technologies and Laboratories International, Inc. letter from J.G. Hwang to W.E. Hader, U.S. Department of Energy, Office of River Protection, "Advanced Technologies and Laboratories International, Inc. Response to the U.S. Department of Energy Request for Safety Culture Sustainment Plans," ATL-2014-115, dated August 12, 2014

Advanced Technologies and Laboratories International, Inc.

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August 12, 2014

ATL-2014-115

Mr. W. E. Hader
Office of River Protection
U.S. Department of Energy
Post Office Box 450, H6-60
Richland, Washington 99352-0450

Dear Mr. Hader:

CONTRACT NUMBER DE-AC27-10RV15051 –ADVANCED TECHNOLOGIES AND LABORATORIES INTERNATIONAL, INC. RESPONSE TO THE US DEPARTMENT OF ENERGY REQUEST FOR SAFETY CULTURE SUSTAINMENT PLANS

Reference: Letter, W. E. Hader, ORP, to J G Hwang, ATL, "Contract No. DE-AC27-10RV15051 – Safety Culture Sustainment Plans," 14-TRS-0025, dated July 29, 2014.

In response to the referenced letter, Advanced Technologies and Laboratories International, Inc. is submitting its ISMS Safety Culture Sustainment Plan which identifies the programs, processes, and activities performed to sustain ATL's Safety Culture, as well as identified initiatives for continuous improvement.

Should you have any questions regarding the matter, please contact Bill Leonard at 373-1820.

Sincerely,

J. G. Hwang, PhD
Laboratory Manager

Attachment

cc: ORP Correspondence Control
K.A. Brazil, ORP
D.R. Garcia, ORP
C. A. Blanchard, ORP
B. A. Harkins, ORP
R. M. Irwin, ORP
J. E. Cheadle, ORP
E. M. Mattlin, ORP
J. M. Sondag, ORP
B. J. Stickney, ORP

ATL-2014-115

Attachment

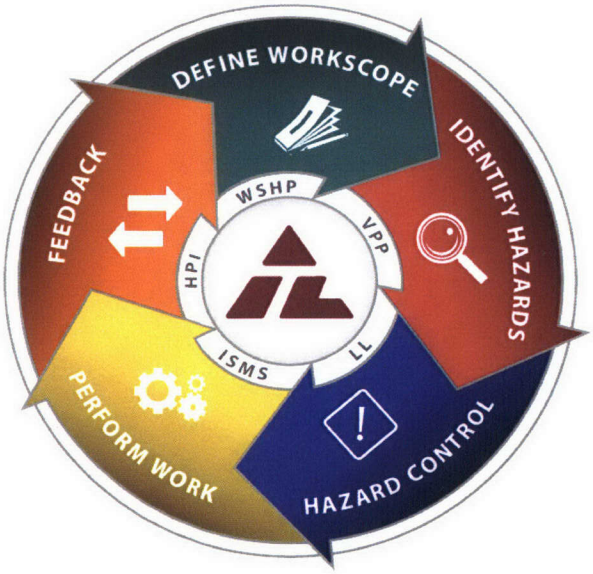
Advanced Technologies and Laboratories International, Inc.
Integrated Safety Management System
Safety Culture Sustainment Plan

Consisting of 19 pages including this coversheet

ADVANCED TECHNOLOGIES AND LABORATORIES INTERNATIONAL, INC.

INTEGRATED SAFETY MANAGEMENT SYSTEM

SAFETY CULTURE SUSTAINMENT PLAN



August 14, 2014

Approved by:

W. J. Leonard, ES&H Manager — Date: 8/12/14

L. J. Estey, Safety Engineering and Training Manager — Date: 8/12/14

D. R. Hansen, Laboratory Manager — Date: 8-12-14

J. Hwang, Project Director — Date: 8-12-2014

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INTRODUCTION

Advanced Technologies and Laboratories International, Inc. (ATL) developed a Safety Culture Sustainment Plan in response to the letter of direction from DOE's Office of River Protection (ORP) (reference letter 14-TRS-0025, dated July 29, 2014). The letter required that a plan be developed and submitted to ORP by August 15, 2014 and that the plan should identify the following as it relates to the safety culture attributes contained in DOE G 450.4-1C, *Integrated Safety Management Guide,* Attachment 10:

1) Specific tools you will use;
2) A description of each tool; and
3) A plan and schedule for implementation of the tools.

METHODOLOGY FOR PLAN DEVELOPMENT

The three Focus Areas and their associated attributes were reviewed. Existing processes or activities were identified that implemented the attributes associated with safety culture and are credited with sustainment or improvement of ATL's Safety Culture. The Focus Areas and their associated attributes are:

Leadership Focus Area 1

a. *Demonstrated safety leadership*
b. *Risk-informed, conservative decision-making*
c. *Management engagement and time in the field*
d. *Staff recruitment, selection, training, and development*
e. *Open communication and fostering an environment free from retribution*
f. *Clear expectations and accountability*

Employee Engagement Focus Area 2

a. *Personal commitment to everyone's safety*
b. *Teamwork and mutual respect*
c. *Participation in work planning and improvement*
d. *Mindful of hazards and controls*

Organizational Learning Focus Area 3

a. *Credibility, trust and reporting errors and problems*
b. *Effective resolution of reported problems*
c. *Performance monitoring through multiple means*
d. *Use of operational experience*
e. *Questioning attitude*

SAFETY CULTURE SUSTAINMENT PLAN

The following lists the Focus Area and associated attributes, and where appropriate, specific tools that are used; a description of the tools; and, the plan and schedule for implementation of the tools.

Leadership Focus Area 1:

Demonstrated safety leadership

Demonstrated safety leadership is continuously observed throughout ATL. The first line managers will continue to set the example for others in demonstrating consistent safe work practices. They have a clear understanding of their work activities and their performance objectives. They will continue their commitment to safety by spending time in the lab areas, mentoring and reinforcing safe analytical operations. The managers will continue to ensure that their employees have the required technical and safety training they need to work safely and ensure that appropriate hazard controls (engineered, administrative, and PPE) are in place/provided to protect their workers. ATL's Environment, Safety, and Health Program Lead will continue to play a key safety leadership role in identifying hazards and controls as part of their involvement with the analytical work teams in the hazards analysis process. For more information regarding demonstration of safety leadership refer to Guiding Principle (GP) 1 – Line Management Responsibility for Safety as described in ATL-MP-1009, *Integrated Environmental, Safety, and Health Management System Description for the 222-S Laboratory Analytical Services and Testing Contractor (ISMS).*

Specific tools used, a description, and plan for implementation:

- Monthly Safety Inspection Checklist – used to conduct the 222-S Complex monthly safety inspections using criteria from 29 CFR 1910. (Implemented)

- Room Owner Inspection Checklist – used to conduct the inspection of specific analytical rooms to identify issues associated with chemical and radiological conditions. (Implemented)

- Employee Job Task Analysis – used by managers to identify the essential functions of employees and associated hazards they might be exposed to in the workplace to ensure appropriate medical monitoring is provided and supports the identification of required training. (Implemented)

- Laboratory Worksite Hazards Analysis – used to conduct the hazards analysis in support of the technical procedures process to ensure hazards are identified and appropriate hazard controls are incorporated into the procedure. (Implemented)

- Journey Through Leadership Training – a series of training modules to be conducted in support of professional development leadership training for select individuals, program leads and first line managers up to and including executive leadership positions. (To be conducted starting in FY 2015)

Risk-informed, conservative decision-making

ATL's managers will continue to support and reinforce conservative decisions based on available information and risks. Both managers and employees will continue to be systematic and rigorous in making informed decisions that support safe, reliable operations. Employees will continue to be expected, authorized and supported by managers to take conservative actions when faced with unexpected or uncertain conditions, up to and including Stop Work. Managers and employees will continue to be intolerant of conditions or behaviors that have the potential to adversely affect safety. Adverse conditions will continue to be thoroughly investigated, promptly mitigated, and periodically analyzed. A proactive approach will continue to be used to identify and mitigate hazards using routine monthly inspections, room owner inspections, and by using the Laboratory Worksite Hazards Analysis (LWHA) process to identify hazards and implement appropriate hazard controls based on risk. Employees will continue to be trained on the fundamentals of Conduct of Operations and Human Performance improvement which emphasizes that employees conducting work should not proceed in the face of uncertainty. For more information regarding demonstration of risk informed, conservative decision making refer to GP 1 – Line Management Responsibility for Safety, GP 4 – Balanced Priorities, GP 6 – Hazard Controls Tailored to Work Being Performed, and Core Function (CF) 2 – Analyze Hazards as described in ATL-MP-1009, *ISMS Description.*

Specific tools used, a description, and plan for implementation:

- Monthly Safety Inspection Checklist – used to conduct the 222-S Complex monthly safety inspections using criteria from 29 CFR 1910. (Implemented)

- Room Owner Inspection Checklist – used to conduct the inspection of specific analytical rooms to identify issues associated with chemical and radiological conditions. (Implemented)

- Employee Job Task Analysis – used by managers to identify the essential functions of employees and associated hazards they might be exposed to in the workplace to ensure appropriate medical monitoring is provided and supports the identification of required training. (Implemented)

- Laboratory Worksite Hazards Analysis – used to conduct the hazards analysis in support of the technical procedures process to ensure hazards are identified and appropriate hazard controls are incorporated into the procedure. (Implemented)

- Conduct of Operations Training – used to train employees on the attributes essential to disciplined operations within the laboratory. (Implemented)

- Human Performance Improvement Training – used to provide employees tools for identifying error likely situations and mitigation techniques. (Implemented)

Management engagement and time in field

Management will continue to conduct morning turnover meetings with their staff and communicate assignments and expectations for the day. They will continue to follow-up by their presence in the field, performing oversight of analytical operations, participating in monthly safety inspections and room owner inspections, as well as providing mentoring and feedback on laboratory operating practices, including procedure compliance and radiological work practices. For more information regarding management engagement and time in the field refer to GP 1 – Line Management Responsibility for Safety, GP 6 – Hazard Controls Tailored to Work Being Performed, GP 7 – Operations Authorization, and (CF) 5 – Provide Feedback and Continuous Improvement as described in ATL-MP-1009, *ISMS Description.*

Specific tools used, a description, and plan for implementation:

- Fume Hood Use Checklist – used to monitor and assess employee work practices in fume hoods and provide real time feedback on good practices and areas requiring improvement. (Implemented)

- Procedure Use Method Assessments – used to monitor employee use of procedures and provide real time feedback on good practices and areas requiring improvement. (Implemented)

- Monthly Safety Inspection Checklist – used by management, safety professionals, and employees in the field to conduct the 222-S Complex monthly safety inspections using criteria from 29 CFR 1910. (Implemented)

- Room Owner Inspection Checklist – used by management in the field to conduct the inspection of specific analytical rooms to identify issues associated with chemical and radiological conditions. (Implemented)

Staff recruitment, selection, training, and development

ATL employees and their professional capabilities, experiences, and values are regarded as the organization's most valuable assets. Human Resources will continue to support this activity by (1) reviewing position descriptions that define position titles, education, and experience requirements for ATL work, and (2) supporting the preparation of new position descriptions as needed. Personnel selected will continue from sources within or outside the company. In either case, training, education, and experience will continue to be evaluated before personnel are assigned to a position to ensure each worker meets the predefined requirements. Once people are assigned to a position, their manager will determine the company, facility, activity, position or task training, and qualifications required to be completed.

Management will continue to place a high priority and time commitment on recruiting, selecting, training, and retaining an excellent technical staff. Management will continue to maintain a highly knowledgeable workforce to support a broad spectrum of operational and technical

decisions. Technical and safety expertise will continue to be embedded in the organization, with outside expertise employed when necessary. Management will continue to build and sustain a flexible, resilient, robust technical staff and staffing capacity. Staffing will be sufficiently maintained to ensure adequate resources exist while providing redundancy in coverage as well as cope with and respond to unexpected changes in a timely manner. ATL values and practices continuous learning, supporting the professional development of its employees through training and educational opportunities. Employee training includes demonstration of proficiency to validate individual skills and abilities. Training provided includes the ability to appreciate the potential for unexpected conditions; to recognize and respond to a variety of problems and anomalies; to understand complex technologies and capabilities to respond to complex events; to develop flexibility at applying existing knowledge and skills in new situations; to improve communications; and to learn from significant industry and DOE events via ATL's *Operating Experience Program*, ATL-312-10.05. For more information regarding staff recruitment, selection, training, and development refer to GP 3 – Competence Commensurate with Responsibilities as described in ATL-MP-1009, *ISMS Description.*

Specific tools used, a description, and plan for implementation:

- ATL-MP-1024, Training and Qualification Program Description – provides the program for management to ensure employees are trained to safely, competently, and effectively perform their job functions. (Implemented)

- ATL-MP-1025, ATL Training Implementation Matrix, – provides documentation of compliance with DOE O 426.2, Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities. (Implemented)

- ATL-312-10.05, Operating Experience Program – use to provide feedback and continuous improvement regarding both internal and external operating experience. (Implemented)

Open communication and fostering an environment free from retribution

ATL employees have continuously demonstrated that an environment exists for open communication free from retribution. Employees will continue to have a variety of options for openly communicating issues and concerns without fear of retaliation. In addition to communicating with their managers or supervisors, they can communicate safety concerns and other issues directly to the HAMTC Safety Representative or the ATL Environment, Safety, and Health Program Lead. For those employees that prefer to remain anonymous, a Safety Logbook was developed to provide a method for employees to submit safety issues anonymously. ATL will continue to maintain a more formalized process for communicating employee concerns and differing professional opinions using DOE-400, *Hanford Site-Wide Employee Concerns Program.* Finally, ATL will continue to have a zero tolerance policy for retaliation against employees who raise concerns as described in ATL-POL-008, *Zero Tolerance for Retaliation.* For more information regarding open communication and fostering an environment free from retribution refer to CF 5 – Provide Feedback and Continuous Improvement as described in ATL-MP-1009, *ISMS Description.*

Specific tools used, a description, and plan for implementation:

- Safety Logbook – used to provide employees the ability to submit safety issues anonymously. (Implemented)

- DOE-400, Hanford Site-Wide Employee Concerns Program – provides a process for employees to communicate an employee concern or differing professional opinion. (Implemented)

- ATL-POL-008, Zero Tolerance for Retaliation – establishes expectations regarding an employee's ability to raise issues, concerns, and questions without fear of retaliation. (Implemented)

- DOE-0343, Hanford Site Stop Work Procedure – provides a process for employee responsibility and authority to stop work when they believe that a situation exists that places them, their coworker(s), contracted personnel, or the public at risk or in danger; could adversely affect the safe operation or cause damage to the facility; or result in a release of radiological or chemical effluents to the environment above regulatory requirements or approvals; and provides a method to resolve the issue without fear of reprisal or retribution. (Implemented)

Clear expectations and accountability

ATL employees will continue to demonstrate leadership in the performance and management of analytical services and testing activities through clear expectations and accountability. Employee performance appraisals are conducted annually in accordance with ATL-312-2.23, *Performance Appraisal Process*. Previously established expectations are evaluated and clear expectations are determined for the coming year. ATL-MP-1007, *ATL Job and Organizational Descriptions* further identify the specific expectations for the various employee positions. Roles and responsibilities for the position titles are further identified in administrative and technical procedures.

ATL will continue to apply a just-culture philosophy when it comes to discipline to ensure appropriate accountability for performance. ATL-312-2.15, *Employee Discipline* provides a process for investigating and evaluating unacceptable work behaviors, standards, and practices and a progressive discipline approach to ensure consistency in holding employees accountable for their performance.

Employees are viewed as our most valued resource; as such they will continue to be recognized in accordance with ATL-312-2.25, *Employee Recognition*, for exhibiting safe behaviors that are indicative of ATL's Safety Culture, as well as for their contributions to excellence in the QA program. For more information regarding clear expectations and accountability refer to GP 1 – Line Management Responsibility for Safety, GP 2 – Clear Roles and Responsibilities, and CF 5 – Provide Feedback and Continuous Improvement as described in ATL-MP-1009, *ISMS Description*.

Specific tools used, a description, and plan for implementation:

- ATL-312-2.23, Performance Appraisal Process – used to provide documented periodic mentoring and feedback to employees regarding their performance. (Implemented)

- ATL-MP-1007, ATL Job and Organizational Descriptions – describes the organization and summary level roles and responsibilities of employees. Lower level detailed job descriptions are available from the Human Resources that further define expectations. (Implemented)

- ATL-312-2.15, Employee Discipline – used to enforce acceptable work behaviors, standards, and practices. In the event that violations occur, it provides the process that will ensure a thorough evaluation of the facts and a consistent application of the principles of progressive discipline. (Implemented)

- ATL-312-2.25, Employee Recognition – used to reward employees for contributions to safety (STARZ Award), quality (Quality Assurance Superior Achievement Reward – QASAR), and Significant Part Of The Team (SPOTT) Awards. (Implemented)

Employee Engagement Focus Area 2:

Personal commitment to everyone's safety

ATL management will continue to be responsible for the safety of employees and the employees will continue to be responsible for conducting work safety and looking out for their co-workers in accordance with ATL-MP-1028, *ATL Health and Safety Plan (HASP)* and ATL-MP-1037, *Worker Safety and Health Program (WSHP)*. The HASP and WSHP rely on a variety of other safety programs to ensure the safety of employees, including but not limited to the Industrial Safety Program, Industrial Hygiene Program, Radiation Protection Program, Chemical Hygiene Program, Fire Protection Program, etc.

Expectations are provided via new employee training and refresher training as part of ATL's annual General Employee Training. Roles and responsibilities, authorities and accountabilities are clearly defined in writing in individual job descriptions, employee appraisals, and ATL-MP-1007, *ATL Job and Organizational Descriptions* and are understood by each individual. Individuals understand and demonstrate responsibility for safety. ATL employees will continue to demonstrate that safety and its ownership are apparent in everyone's actions and deeds by complying with procedures, participating in the LWHA process, and through their involvement in the safety committee (Zero Accident Council – ZAC) and Voluntary Protection Program. Employees will continue to ensure that individuals outside of the organization (including subcontractors, temporary employees, visiting researchers, vendor representatives, etc.) understand their safety responsibilities. Managers will continue to defer to subject matter experts with relevant expertise during operational upset conditions. Qualified and capable people closest to operational upsets will continue to be empowered to make important decisions in response to adverse conditions. For more information regarding personal commitment to everyone's safety refer to GP 1 – Line Management Responsibility for Safety, GP 2 – Clear Roles and

Responsibilities, and GP 5 – Identification of Safety Standards and Requirements as described in ATL-MP-1009, *ISMS Description.*

Specific tools used, a description, and plan for implementation:

- ATL-MP-1007, ATL Job and Organizational Descriptions – describes the organization and summary level roles and responsibilities of employees. Lower level detailed job descriptions are available from the Human Resources that further define expectations. (Implemented)

- ATL-MP-1028, ATL Health and Safety Plan – serves to aid workers in understanding the safety and health issues that may be encountered in routine and non-routine work activities. (Implemented)

- ATL-MP-1037, Worker Safety and Health Program (WSHP) – describes how ATL provides a place of employment free from recognized hazards. (Implemented)

- Monthly Safety Inspection Checklist – used to conduct the 222-S Complex monthly safety inspections using criteria from 29 CFR 1910. (Implemented)

- Room Owner Inspection Checklist – used to conduct the inspection of specific analytical rooms to identify issues associated with chemical and radiological conditions. (Implemented)

- Employee Job Task Analysis – used by managers to identify the essential functions of employees and associated hazards they might be exposed to in the workplace to ensure appropriate medical monitoring is provided and supports the identification of required training. (Implemented)

- Laboratory Worksite Hazards Analysis – used to conduct the hazards analysis in support of the technical procedures process to ensure hazards are identified and appropriate hazard controls are incorporated into the procedure. (Implemented)

- ATL-MP-1023, ATL Zero Accident Council (ZAC) Charter – use to describe the employee driven safety committee. (Implemented)

- ATL-MP-1021, ATL Voluntary Protection Program Steering Committee Charter – used to describe the employee driven program for implementing and assessing the tenants of VPP. (Implemented)

- ATL-312-2.25, Employee Recognition – used to reward employees for contributions to safety (STARZ Award), quality (Quality Assurance Superior Achievement Reward – QASAR), and Significant Part Of The Team (SPOTT) Awards. (Implemented)

Teamwork and mutual respect

Management will continue to emphasize the need for employees to listen to each other and effectively engage in crucial conversations to ensure meaning, intent and viewpoints are understood; and that differing points of view are acknowledged. Discussion regarding adverse conditions affecting safety and quality will focus on problem solving rather than on individuals. Good news and bad news are valued, encouraged (at times rewarded in accordance with ATL-312-2.25, *Employee Recognition*), and shared as operating experience. For more information regarding teamwork and mutual respect refer to GP 1 – Line Management Responsibility for Safety as described in ATL-MP-1009, *ISMS Description*.

Specific tools used, a description, and plan for implementation:

- Monthly Safety Inspection Checklist – used to conduct the 222-S Complex monthly safety inspections using criteria from 29 CFR 1910. (Implemented)

- Room Owner Inspection Checklist – used to conduct the inspection of specific analytical rooms to identify issues associated with chemical and radiological conditions. (Implemented)

- Employee Job Task Analysis – used by managers to identify the essential functions of employees and associated hazards they might be exposed to in the workplace to ensure appropriate medical monitoring is provided and supports the identification of required training. (Implemented)

- Laboratory Worksite Hazards Analysis – used to conduct the hazards analysis in support of the technical procedures process to ensure hazards are identified and appropriate hazard controls are incorporated into the procedure. (Implemented)

- ATL-MP-1023, ATL Zero Accident Council (ZAC) Charter – use to describe the employee driven safety committee. (Implemented)

- ATL-MP-1021, ATL Voluntary Protection Program Steering Committee Charter – used to describe the employee driven program for implementing and assessing the tenants of VPP. (Implemented)

- ATL-312-2.25, Employee Recognition – used to reward employees for contributions to safety (STARZ Award), quality (Quality Assurance Superior Achievement Reward – QASAR), and Significant Part Of The Team (SPOTT) Awards. (Implemented)

- DOE-400, Hanford Site-Wide Employee Concerns Program – provides a process for employees to communicate an employee concern or differing professional opinion. (Implemented)

Participation in work planning and improvement

Employees will continue to actively participate in the planning and improvement of work and work practices through their involvement in the ZAC, VPP, LWHA, and the procedure development/validation process. Training and mentoring on good work practices (chemical and radiological) will continue to be provided. Employees will continue to follow procedures in accordance with ATL-POL-012, *Procedure Use Expectations.* Employees will continue to be trained and encouraged to invoke their stop work authority in the event of unsafe or unexpected work conditions. ATL-312-2.25, *Employee Recognition* will continue to be used to reward employees for their contributions to continuous improvement in safety and quality. For more information regarding participation in work planning and improvement refer to CF 1 – Define the Scope of Work, CF 2 – Analyze Hazards, CF 3 – Develop and Implement Hazard Controls, CF 4 – Perform Work within Controls, and CF 5 – Provide Feedback and Continuous Improvement as described in ATL-MP-1009, *ISMS Description.*

Specific tools used, a description, and plan for implementation:

- ATL-POL-012, Procedure Use Expectations – communicates management's expectations regarding the use of procedures/work instructions.

- ATL-MP-1034, ATL Work Control – defines the process for ATL's conduct of work control.

- Laboratory Worksite Hazards Analysis – used to conduct the hazards analysis in support of the technical procedures process to ensure hazards are identified and appropriate hazard controls are incorporated into the procedure. (Implemented)

- ATL-312-2.25, Employee Recognition – used to reward employees for contributions to safety (STARZ Award), quality (Quality Assurance Superior Achievement Reward – QASAR), and Significant Part Of The Team (SPOTT) Awards. (Implemented)

Mindful of hazards and controls

Management will continue to ensure that employees are mindful of the hazards within the laboratory, especially those associated with radiological hazards and chemical hazards which can contribute to high consequence events. Expectations regarding employee safety responsibilities will continue to be emphasized in training, morning turnover meetings, and pre-job briefings. The team approach to the hazards analysis process (LWHA) will continue to be used to ensure a comprehensive analysis to ensure work hazards are identified and controlled to prevent or mitigate accidents, with particular attention to high consequence events with unacceptable consequences. Management will continue to ensure employees understand and proactively identify hazards and controls before beginning work activities. HPI training will continue to provide employees with tools needed to address error likely situations and apply a questioning attitude in order to be mindful of the potential impact of equipment and process failures. For more information regarding mindful of hazards and controls refer to GP 1 – Line Management Responsibility for Safety, GP 6 – Hazard Controls Tailored to Work Being Performed, CF 2 – Analyze Hazards, and CF 3 – Develop and Implement Hazard Controls as described in ATL-MP-1009, *ISMS Description.*

Specific tools used, a description, and plan for implementation:

- ATL-MP-1034, ATL Work Control – defines the process for ATL's conduct of work control. (Implemented)

- Laboratory Worksite Hazards Analysis – used to conduct the hazards analysis in support of the technical procedures process to ensure hazards are identified and appropriate hazard controls are incorporated into the procedure. (Implemented)

- Human Performance Improvement Training – used to provide employees tools for identifying error likely situations and mitigation techniques. (Implemented)

Organizational Learning Focus Area 3:

Credibility, trust and reporting errors and problems

Management will continue to foster a culture of trust, between management and technical staff, and between all staff regardless of organizational role. This will continue to be accomplished in a variety of ways. It's important for staff to know that management always has the staff's best interest and welfare at heart. This is primarily accomplished through a constant commitment to safety, backed up by actions. In addition, management will continue to encourage staff to proactively identify and report concerns, and validates that encouragement by actively resolving identified concerns. Employees know that there is never a risk of retaliation for any issue raised, all concerns will be taken seriously, and that sincere efforts will be made to resolve concerns that can be resolved.

There are a number of avenues employees have for identifying issues. ATL's corrective action management system, CAMPATS, is available to all employees for identifying adverse conditions. Employees can identify concerns to their supervisor or manager, HAMTC Safety Representative, or members of the Environment, Safety, and Health organization. ATL implemented a mechanism for employees to report issues anonymously using a Safety Logbook. Employee can also use the Employee Concerns Program as yet another route to reporting issues.

ATL's Employee Recognition Program provides incentives for reporting safety and quality issues. Employees will continue to be rewarded for identifying safety and quality issues, initiating an issue in CAMPATS, and suggesting alternate approaches to improve safety and quality. For more information regarding credibility, trust and reporting errors and problems refer to GP 1 – Line Management Responsibility for Safety and CF 5 – Provide Feedback and Continuous Improvement as described in ATL-MP-1009, *ISMS Description.*

Specific tools used, a description, and plan for implementation:

- ATL-312-2.25, Employee Recognition – used to reward employees for contributions to safety (STARZ Award), quality (Quality Assurance Superior Achievement Reward – QASAR), and Significant Part Of The Team (SPOTT) Awards. (Implemented)

- ATL-312-9.04, *ATL Corrective Action Management* – describes the process for reporting and documenting adverse conditions using the CAMPATS system. (Implemented)

- Safety Logbook – used to provide employees the ability to submit safety issues anonymously. (Implemented)

- DOE-400, Hanford Site-Wide Employee Concerns Program – provides a process for employees to communicate an employee concern or differing professional opinion. (Implemented)

- ATL-POL-008, Zero Tolerance for Retaliation – establishes expectations regarding an employee's ability to raise issues, concerns, and questions without fear of retaliation. (Implemented)

Effective resolution of reported problems

ATL will continue to use its Assessment Program, in concert with its Corrective Action Management system, CAMPATS, and a concerned, engaged, and committed workforce, to assure issues are sought out and corrected in a timely manner. More significant or recurrent errors are more carefully evaluated (e.g., causal analysis, extent of condition) and relevant actions taken to prevent future recurrence. Only staff who have received formal training in causal analysis can action-plan issues that have been screened as 'Resolution Required' (i.e., considered a significant impact to safety and/or quality).

The Assessment Program includes at its apex the all-encompassing Management Review. The Management Review will continue to be used to provide yet another approach to seek out and identify organizational weaknesses, as well as obstacles to accomplishing the company's and project's goals and objectives.

Effectiveness of the corrective action process is accomplished in a variety of ways. Core management will continue to meet every other week to evaluate new issues and newly developed action plans. The Senior Quality Manager will continue to evaluate randomly selected closed issues as part of the bi-monthly QA Report to Management. Issues that are considered to significantly impact safety and/or quality will continue to be assigned an action to conduct a follow-up assessment for effectiveness (Effectiveness Review).

In addition, there are a number of CAMPATS metrics that will continue to be trended. Metrics and trends routinely monitored include timeliness of corrective action planning and closure. Trending provides an important pathway for identifying emerging issues, and applying preventive action to avoid unintended events.

As discussed earlier, ATL will continue to respond and resolve problems reported by employees to their manager, HAMTC Safety Representative, or the ES&H organization; entries in the Safety Logbook; and problems reported during the ZAC monthly meetings. Employees reporting issues will continue to be recognized and often will provide support to ensure effective resolution. For more information regarding effective resolution of reported problems refer to GP

1 – Line Management Responsibility for Safety, GP 2 – Clear Roles and Responsibilities, and CF 5 – Provide Feedback and Continuous Improvement as described in ATL-MP-1009, *ISMS Description.*

Specific tools used, a description, and plan for implementation:

- ATL-MP-1020, Assessment Program – defines the process for conducting assessments of processes, programs, and performance and identifying issues requiring resolution.

- ATL-312-9.04, *ATL Corrective Action Management* – describes the process for reporting and documenting adverse conditions using the CAMPATS system. (Implemented)

- ATL-312-2.25, Employee Recognition – used to reward employees for contributions to safety (STARZ Award), quality (Quality Assurance Superior Achievement Reward – QASAR), and Significant Part Of The Team (SPOTT) Awards. (Implemented)

- Safety Logbook – used to provide employees the ability to submit safety issues anonymously. (Implemented)

- ATL-MP-1023, ATL Zero Accident Council (ZAC) Charter – use to describe the employee driven safety committee. (Implemented)

Performance monitoring through multiple means

ATL will continue to monitor operational performance in a variety of ways, by a variety of organizational roles. The breadth of this monitoring, as well as results of these processes, is provided below:

- Assessments: ATL has a comprehensive assessment program that examines performance from multiple perspectives. Assessments may be planned per the annual schedule or conducted ad hoc, e.g., to evaluate a potential emerging issue. They may be structured with a higher level of formality (e.g., Independent Assessment) or less formal (e.g., surveillance); they may be conducted by QA, by management, or by workers (e.g., in the case of the VPP annual self-assessment). Line managers are responsible for periodic operational awareness assessments in the way of room owner inspections, in which identified issues are addressed on the spot. The apex of the assessment program is the Management Review, a high-level annual performance evaluation in which all managers representing all levels of management actively participate. Additional performance information is acquired via a variety of external assessments, including proficiency testing exercises.
- Issue identification and corrective action: All staff have access to ATL's corrective action management system (CAMPATS), and are encouraged to either initiate issues directly into the system or notify their supervisors if they identify issues or have safety or quality concerns.
- Monitoring of key metrics: Key operational metrics that are critical to performance (e.g., holding times and turn-around times) are routinely tracked and maintained on the company's

intranet homepage. Those and additional performance metrics (e.g., report reissue rate, analytical performance on proficiency testing samples, etc.) are monitored and reported in the monthly performance report to ORP; still others (e.g., corrective action metrics) are evaluated and reported in the bi-monthly QA Report to Management. Safety and Health metrics are also monitored and reported on a monthly basis and to ORP via the Quarterly Performance Analysis Report.

- Trend analysis: ATL trends many of the key performance metrics described above so that performance changes will be recognized and addressed. Other relevant activities include periodic evaluations of trends emerging from operational awareness assessments and corrective action activities (e.g., causal analysis codes, keywords, timeliness of action planning and action closure). Identified trends get additional attention and evaluation, and may result in an assessment to gather more information to better understand the identified trend.
- Communication and Feedback: Performance information is also collected via informal conversation between management and technical staff. ATL staff has a myriad of opportunities for exchanging performance information. Daily morning meetings provide the technical staff with critical facility information before work begins, and also reinforces management's commitment to safe work practices. The daily meeting also provides an opportunity for workers to inform managers of issues and concerns. Additional avenues of communication exist through periodic program lead meetings and all-hands meetings. Core management meets every other week, and the Core CAMPATS team meets every other week to discuss recently initiated issues. ATL prepares and submits a monthly report to ORP and meets quarterly to discuss a variety of metrics relating production and costs, as well as quality and safety performance. All of these meetings provide ample opportunity for bidirectional flow of information, which is considered another critical pathway toward effective performance monitoring.

For more information regarding performance monitoring through multiple means refer to GP 1 – Line Management Responsibility for Safety, GP 2 – Clear Roles and Responsibilities, and CF 5 – Provide Feedback and Continuous Improvement as described in ATL-MP-1009, *ISMS Description*.

Specific tools used, a description, and plan for implementation:

- ATL-MP-1020, Assessment Program – defines the process for conducting assessments of processes, programs, and performance and identifying issues requiring resolution.

- ATL-312-9.04, *ATL Corrective Action Management* – describes the process for reporting and documenting adverse conditions using the CAMPATS system. (Implemented)

- ATL-312-9.11, *ATL Corrective and Preventive Action Analysis and Trending*

Questioning attitude

Employees will continue to be encouraged to challenge the traditional ways of doing things. ATL encourages a questioning attitude, and provides opportunities for frank discussions to elicit concerns, suggestions and feedback. Employees will continue to receive HPI training which provides error reduction tools for employees to use to prevent error likely situations. For more information questioning attitude refer to GP 1 – Line Management Responsibility for Safety, GP 2 – Clear Roles and Responsibilities, and CF 5 – Provide Feedback and Continuous Improvement as described in ATL-MP-1009, *ISMS Description*.

Specific tools used, a description, and plan for implementation:

- Human Performance Improvement Training – used to provide employees tools for identifying error likely situations and mitigation techniques. (Implemented)

CONCLUSIONS

As demonstrated above, ATL has an established safety culture consistent with our company slogan "At ATL, Safety Is Our Value". That being said, ATL continues to look for opportunities to continuously improve its safety culture. Leadership training is planned for FY 2015 to provide key leaders the tools and techniques needed to improve their leadership skills. Also, a Safety Conscious Work Environment (SCWE) survey is currently in progress. This survey will be used to compare against the results of the DOE Hanford Site Organizational Climate & SCWE Survey (DOE SCWE Survey) conducted in July 2012. The results of this recent survey will be evaluated to identify potential opportunities for improvement of ATL's Safety Culture.