## memorandum

Idaho Operations Office

Date: September 12, 2014

Subject: Safety Culture Sustainment Plans for the Department of Energy, Idaho Operations Office

and the Idaho Site Environmental Management Contractors (EM-NSP-14-054)

To: James M. Whitney

Acting Assistant Secretary for Environmental Management

DOE-HQ/EM-1/FORS

References: Memorandum: David Huizenga, EM-1, to James R. Cooper, "Safety Culture Sustainment

Plans," dated June 27, 2014

This responds to the Referenced memorandum. The U.S. Department of Energy, Idaho Operations Office (DOE-ID), and both Office of Environmental Management (EM) contractors, CH2M•WG Idaho, LLC (CWI), and Idaho Treatment Group, LLC (ITG) have developed the subject plans as directed by the Reference (attached). Electronic files of the reports have been provided to Jim Hutton separately.

If you have any questions, please contact me at (208) 526-3811, or you may contact Mark Brown, of my staff, at (208) 526-7065.

John P. Zimmerman, Deputy Manager

Idaho Cleanup Project

Attachments (3)

cc: James Hutton, EM-40 Julie Goeckner, EM-40

## Idaho Operations Office Safety Culture Sustainment Plan

## September 2014



## Idaho Operations Office Safety Culture Sustainment Plan

#### **BACKGROUND/PURPOSE**

The U.S. Department of Energy (DOE) Idaho Operations Office (DOE-ID) is committed to establishing and maintaining a strong and sustained nuclear safety culture. A positive safety culture is an integral aspect of an effective ISM system. DOE's commitment to a positive safety culture is expressed in DOE P 450.4A, *Integrated Safety Management Policy*:

...the Department expects all organizations to embrace a strong safety culture where safe performance of work and involvement of workers in all aspects of work performance are core values of managers and workers. The Department encourages a questioning attitude by all employees and a work environment that fosters such attitude.

In order to progress towards achieving this goal, DOE has been focused on establishing and strengthening a Safety Conscious Work Environment (SCWE) throughout the Department. SCWE is defined in DOE G 226.1-2A, *Federal Line Management Oversight of Department of Energy Nuclear Facilities* as an environment "in which employees can raise safety questions without fear of retribution. . ." This focus has included independent reviews of DOE safety culture and SCWE, training, and operations office and contractor SCWE self-assessments.

On June 27, 2014, the Acting Assistant Secretary for Environmental Management (EM), EM-1, issued a directive for all field offices and contractors to develop Safety Culture Sustainment Plans (SCSP) to ensure strong and sustained safety cultures throughout EM. In an effort to ensure a sustained safety culture at DOE-ID, this SCSP was developed to describe the tools DOE-ID has and will use to pursue continuous improvement and measure progress towards these improvements.

#### **OVERVIEW**

Over the past two years, DOE-ID has been working to improve the safety culture and SCWE within the operations office. These efforts have included independent safety culture reviews, improvement plans, self-assessments, training, action plans, and continuous reinforcement of management expectations for a SCWE.

**Independent Assessment of Safety Culture:** In April/May 2012, the DOE Office of Health, Safety, and Security (HSS) conducted an independent assessment of the safety culture at the Integrated Waste Treatment Unit (IWTU), a new DOE EM nuclear facility being built and commissioned at the DOE Idaho Site. This HSS review included an evaluation of the safety culture of the DOE-ID operations office. As a result of this review, DOE-ID developed and implemented a Safety Culture Improvement Plan to address vulnerabilities associated with the operations office safety culture. All actions from this Improvement Plan have been completed.

SCWE Training: In February 2013, DOE Headquarters (HQ) provided several SCWE training sessions to DOE-ID management, supervisors, and some federal staff, as well as to contractor management and supervision. This SCWE training was developed by DOE-HQ and was delivered to all field offices, including the DOE-ID operations office. The sessions consisted of a full day of training on SCWE concepts and practices, and included some useful communication and action tools for use by supervisors and workers. Additional SCWE training is being developed by HQ, the National Training Center (NTC), and the Volpentest Hazardous Materials Management and Emergency Response Federal Training Center (HAMMER) to be provided to the balance of DOE-ID and contractor management, supervision, and workers. The initial portion of this SCWE follow-on training is planned for late calendar year 2014 or early 2015.

**SCWE Self-Assessment:** In July/August, 2013, a DOE-ID team conducted a self-assessment of DOE-ID's SCWE using some guidance from DOE-HQ, but primarily using a safety culture self-assessment model used in the commercial nuclear industry. This SCWE self-assessment was very effective in evaluating the DOE-ID SCWE and in evaluating the effectiveness of the actions taken following the 2012 safety culture review conducted by HSS. This SCWE self-assessment determined:

"... the focus areas and attributes of DOE-ID's Safety Conscious Work Environment (SCWE) were implemented and effective, overall, based on the results from the survey, interviews, and observed activities."

This self-assessment identified nine potential vulnerabilities and provided five recommendations for continued improvement. An Action Plan was developed by a multi-disciplined team within DOE-ID to address the Recommendations from the self-assessment. This action plan has been implemented and work is ongoing in this area. Key actions from this plan are outlined in the "Sustainment Plan" section below. This action plan also commits to a follow-on SCWE self-assessment, which is expected to be completed in fiscal year 2015.

External SCWE Support: DOE-ID also supports and plans to support numerous HQ-Led activities and initiatives in support of strengthening SCWE and safety cultures across the complex. DOE-ID contractors assisted HQ review and analyze complex-wide SCWE self-assessment results, for use in developing a SCWE report to the Defense Nuclear Facilities Safety Board. DOE-ID has supported the HQ level Safety Culture Improvement Panel efforts. DOE-ID and its contractors have assisted DOE HQ and National Training Center (NTC) personnel develop additional SCWE training for delivery to the complex. DOE-ID have assisted the Energy Facility Contractors Group (EFCOG) develop consistent safety culture assessment methodology and criteria. DOE-ID plans to be an active participant in development of Integrated Safety Management System (ISMS) guidance and directive strengthening in the safety culture and SCWE areas. This planned involvement includes developing and evaluating revisions to the Department of Energy Acquisition Regulations (DEAR) for strengthening requirements for safety culture and SCWE as part of the ISMS DEAR Clause.

Other Field Office SCWE Initiatives and Focus Areas: In addition to the previously mentioned SCWE training conducted and planned by DOE-HQ, the operations office has also provided training and briefings to operations office management and staff in a number of SCWE-

associated areas. Specifically, training has been conducted on DOE and operations office Differing Professional Opinion (DPO) requirements and processes, as well as on the DOE and operations office Employee Concerns Program (ECP).

#### SUSTAINMENT PLAN

The DOE-ID operations office is committed to ensuring a strong safety culture (and SCWE). To accomplish this goal, a number of tools, including activities and ongoing actions, will be used to sustain and improve upon the DOE-ID safety culture. The following key actions and activities are planned/in progress. These actions and activities have been binned in the Safety Culture Focus Areas and attributes defined in Attachment 10 of DOE G 450.4-1C, *Integrated Safety Management System Guide*. In the DOE "Consolidated Report for Defense Nuclear Facilities Safety Board Recommendation 2011-1 Action 2-8 and 2-9, *Safety Culture at the Waste Treatment and Immobilization Plant*," dated May 2014, the report identifies four primary attributes for safety culture continuous improvement at DOE sites. This sustainment plan also discusses DOE-ID improvements in those areas as well (listed under their associated focus areas):

- Leadership Focus Area
  - \* Demonstrated safety leadership
  - \* Open communication and fostering an environment free from retribution
- Employee/Worker Engagement Focus Area
  - \* Teamwork and mutual respect attribute
- Organizational Learning Focus Area
  - \* Credibility, trust, and reporting errors and problems

### Leadership

Demonstrated Safety Leadership: DOE-ID has supported independent assessments of safety culture, self-assessments of SCWE, and complex-wide SCWE and safety culture initiatives in support of this attribute. Specific actions taken and planned in this attribute area include the following:

Independent Assessment—the independent review of IWTU and DOE-ID safety culture in 2012 prompted the development of safety culture improvements in the operations office. Management analyzed the assessment results, developed an improvement plan for the recommended areas, and completed the actions from that review. The action plan developed as a result of the review has been closed out. As DOE-ID matures in its safety culture, independent assessments will be considered as a potential future tool for safety culture sustainment.

Self-assessment—DOE-ID management fully supported the 2013 SCWE self-assessment of DOE-ID, including the development of an action plan to address the recommendations from that review (some of which are highlighted in this sustainment plan). Additionally, a follow-

on self-assessment is currently scheduled for 2015, to validate effectiveness of the action plan from the 2013 SCWE self-assessment, and to evaluate sustained improvement. This review will include trained and experienced assessors and evaluators. It is anticipated that a similar methodology to the 2013 self-assessment will be used in order to provide meaningful results that can be readily compared to the 2013 results. An action plan will be developed to address any identified vulnerabilities from this review. Although additional self-assessments are expected in the future, none are currently scheduled beyond the FY 2015 self-assessment.

Safety Culture Advisory Panel—DOE-ID and the site contractors are in the discussion and development stages of chartering a site-wide Safety Culture Advisory Panel (SCAP). The purpose of this SCAP would be to share safety culture lessons learned across the site in the interest of promoting sustained safety culture improvement. An added benefit of the SCAP would be to facilitate the sharing of resources for the conduct of self-assessments, etc.

Complex-wide SCWE and Safety Culture Initiatives—the DOE-ID management team has been supportive of HQ-driven SCWE initiatives. HQ-provided SCWE training has been embraced by the management team. Initial training was provided by DOE-HQ to DOE-ID in 2013. Additional training being developed by HQ for mid-level management, supervisors, and workers is anticipated and preparations are already being made to attend when the classes are available later this year or next. Other support planned or provided includes:

- Assistance to other DOE sites in conducting SCWE and safety culture selfassessments
- Support to HQ for SCWE training development and delivery
- Support to HQ for safety culture self-assessment training development and delivery
- Support to HQ for SCWE and safety culture assessment guidance development

Open communication and fostering an environment free from retribution: DOE-ID has developed several actions to foster open communications and a retribution-free environment. Actions have been implemented and include the following specifics:

- DOE-ID senior leadership meet with managers and employees at least semi-annually to
  foster open communications, understand work scope, and to facilitate the
  accomplishment of federal work; this includes open, frank discussions, workplace visits,
  and reinforcement of the tenants of a strong safety culture
- DOE-ID Senior Leadership (the Manager, and the Deputy Managers) meet with each division or Assistant Manager team semi-annually to:
  - o Explore the work that the team is currently doing
  - o Explore issues that may be impeding the team's ability to complete work
  - Discuss how Senior Leadership can assist the team in the accomplishment of their work objectives
  - Explore how the team's work assists in the completion of the DOE-ID mission, strategic plan and goals
  - o Reinforce SCWE principles
- DOE-ID Senior Leadership routinely emphasize that they have an open door policy

- DOE-ID Senior Leadership conduct workplace visits with staff to explore staff
  perspectives on how things are going, reinforce management expectations and improve
  communication between management and employees
- Directors or Assistant Managers conduct one staff meeting with their direct reports and other invited employees who work with their direct reports per quarter to provide an update of department goals, changes, and answer questions
- Supervisors, Directors, and Assistant Managers routinely emphasize that they continue to have an open door policy
- Supervisors, Directors, and Assistant Managers will use the Pinch-Crunch Model to resolve conflicts
- DOE-ID procedures will be revised to be more user friendly and to provide a clear path to voice concerns, whether through the Employee Concerns Program, Differing Professional Opinions, or other mechanisms; action to be completed by the end of calendar year 2014

### **Employee/Worker Engagement**

*Teamwork and Mutual Respect*: DOE-ID has developed specific actions to employ tools to improve communications and teamwork across the organization. Specific actions and tools being implemented include:

- Quarterly Staff Meetings—Assistant Managers and Directors will hold at least quarterly staff meetings with direct reports and employees to update departmental goals, discuss organizational or process changes, emphasize the open door policy, and to openly answer questions from the staff; action implemented
- Conflict—based on the 2013 provided SCWE training, management and supervisors will
  employ the Pinch-Crunch model to more effectively manage conflict; action implemented
  and ongoing

#### **Organizational Learning**

*Credibility, Trust, and Reporting Errors and Problems*: The DOE-ID SCWE self-assessment identified this as a potential vulnerability and provided a recommendation for improvement in this attribute. Specific actions being taken include:

- Quality Assurance team to conduct a self-assessment of the effectiveness of the corrective action management program; the results to be briefed to senior DOE-ID management, followed by development and implementation of corrective actions; completed in April 2014
- Upgrade the currently-used action tracking system to make it more user friendly; actions in progress and anticipated to be complete in FY 2015
- Update/upgrade the office procedure for action management; completed in April 2014
- Develop and implement office-wide performance metrics to ensure effective, timely closure of DOE-ID issues; completed in June 2014 with ongoing monitoring of metrics by the DOE-ID management team

### Conclusion

DOE-ID management understands the development of an effective, open, and healthy safety culture is modeled from the top down, and is essential to long-term mission success. The DOE-ID management team has devoted resources and expertise to develop and implement measures to ensure sustained improvement in the DOE-ID federal safety culture. Continued, ongoing monitoring of these and future actions is recognized as critical to ensure sustained improvement in the federal safety culture.

## CH2M-WG, Idaho (CWI) Safety Culture Sustainment Plan

September 2014

# CH2M-WG, Idaho (CWI) Safety Culture Sustainment Plan

#### **BACKGROUND/PURPOSE**

CH2M-WG, Idaho (CWI) is committed to establishing and maintaining a strong and sustained nuclear safety culture. A positive safety culture is an integral aspect of an effective ISM system. While DEAR Clause 970.5332-1 defines the basic building blocks for ISM, the commitment to a positive safety culture is expressed in DOE P 450.4A, *Integrated Safety Management Policy*:

...the Department expects all organizations to embrace a strong safety culture where safe performance of work and involvement of workers in all aspects of work performance are core values of managers and workers. The Department encourages a questioning attitude by all employees and a work environment that fosters such attitude.

In order to progress towards achieving this goal, DOE has been focused on establishing and strengthening a Safety Conscious Work Environment (SCWE) throughout the complex. SCWE is defined in DOE G 226.1-2A, *Federal Line Management Oversight of Department of Energy Nuclear Facilities* as an environment "in which employees can raise safety questions without fear of retribution. . ." This focus has included independent reviews of safety culture and SCWE, training, and field office and contractor SCWE self-assessments.

On June 27, 2014, the Acting Assistant Secretary for Environmental Management (EM), EM-1, issued a directive for all field offices and contractors to develop Safety Culture Sustainment Plans (SCSP) to ensure strong and sustained safety cultures throughout EM. In an effort to ensure a sustained safety culture at CWI, this SCSP was developed to describe the tools CWI has and will use to pursue continuous improvement and measure progress towards these improvements.

#### **OVERVIEW**

Over the past two years, CWI has been working to improve the safety culture and SCWE within the Idaho Cleanup Project (ICP). These efforts have included independent safety culture reviews, training, self-assessments, corrective action plans, and continuous reinforcement of management expectations for a SCWE.

**Independent Assessment of Safety Culture:** In April/May 2012, the DOE Office of Health, Safety, and Security (HSS) conducted an independent assessment of the safety culture at the Integrated Waste Treatment Unit (IWTU). As a result of this review, CWI developed and implemented a corrective action plan. All actions from this Improvement Plan have been completed.

**SCWE Training:** In February 2013, DOE Headquarters (HQ) provided several SCWE training sessions to CWI management. This SCWE training was developed by DOE-HQ and was

delivered to all field offices, including Idaho. The sessions consisted of a full day of training on SCWE concepts and practices, and included some useful communication and action tools for use by supervisors and workers. Additional SCWE training is being developed by HQ and the National Training Center (NTC) to be provided to the balance of management, supervision, and workers. The initial portion of this SCWE follow-on training is planned for late calendar year 2014 or early 2015. CWI has dedicated significant resources and manpower to development of this training and has played an integral role in its development.

**Assessment Review:** Early in FY13, CWI Performance Assurance and representatives of selected organizations performed a review of safety culture assessments that had recently transpired. The focus was to determine whether areas of collective significance were evident from these assessments beyond those addressed by the individual reports.

The team concluded that CWI has a positive safety culture in place. Recommendations were made as safety culture improvement initiatives and to increase the quality of communication across CWI and quality of training at IWTU. The report documented one-strength, two areas for improvement, and six recommendations for process/program improvements. These areas of improvement and recommendations were managed within the issues management process.

**VPP Reviews:** Indirectly related to SCWE, three significant reviews of the CWI VPP program have occurred since 2012. Two self-performed annual reviews identified no findings each year of 2012 and 2013, and with a number of positive work practices that also provide evidence of an active and healthy SCWE. Some of these key practices are discussed in the Sustainment Plan section.

The third review was an independent review by the Office of Environment, Health, Safety and Security's DOE-VPP Team in March 2014 to determine whether CWI was continuing to perform at a level deserving DOE-VPP recognition. The Team evaluated CWI's safety programs against the provisions of DOE-VPP. Of significance, the team concluded:

- "...The managers' willingness to be present in the work areas, listen to and implement workers' ideas, provide resources to encourage worker participation, and reach out to the community are significant strengths of the program. Senior managers lead by example and expect everyone in the organization to accomplish work safely, or stop work until issues are resolved." Additionally,:
- "...Employee Involvement remains the cornerstone of the CWI safety program. CWI ESTs are the primary vehicle that encourages employee engagement and participation in safety. Across CWI, there is a strong sense of ownership towards safety, making it difficult to differentiate between hourly and salaried employees. Employees continue to use Changing Our Behavior Reduces Accidents (COBRA) as the CWI behavior-based safety program that employees can use to provide behavioral observations and feedback to each other."

Concluding, in part, "... There is a strong bond between workers and managers based on mutual respect and trust. CWI actively seeks and encourages employee involvement in

every aspect of its mission. That involvement was particularly evident as it solved challenges associated with unexpected conditions at Materials and Fuels Complex and IWTU. The variety of participation opportunities, the incorporation of creative ideas, and the willingness to think outside the box are hallmarks of its efforts to improve safety. CWI willingly invests people, time, and money to generate worker interest and ownership to safely complete its mission."

**SCWE Self-Assessment:** In July/August, 2013, a joint DOE-ID/CWI team conducted a self-assessment of CWI's SCWE using some guidance from DOE-HQ, but primarily using a safety culture self-assessment model used in the commercial nuclear industry. This SCWE self-assessment was very effective in evaluating the SCWE and in evaluating the effectiveness of the actions taken following the 2012 safety culture review conducted by HSS. This SCWE self-assessment determined:

"... the focus areas and attributes of CWI's SCWE were implemented and effective, based on the results from the survey, interviews, and observed activities. Most employees felt a strong commitment by the company to improve the safety culture, and had no reservations with raising concerns at any level within the company without fear of retaliation. Moreover, most employees felt there was a significant focus on improving the safety culture specifically at IWTU since the June 2012 pressurization event."

The team identified thirteen positive observations, four potential vulnerabilities, and provided three recommendations. Areas for continuous improvement included communications and teamwork, worker trust in middle-management, and improved understanding and trust in the Employee Concerns Program.

Corrective action plans were developed to address the recommendations from the self-assessment. These corrective action plans have been implemented and work is ongoing in this area. Key actions are outlined in the "Sustainment Plan" section below. This action plan also commits to a follow-on SCWE self-assessment, which is expected to be completed in fiscal year 2015.

**External SCWE Support:** CWI also supports and plans to support numerous HQ-Led activities and initiatives in support of strengthening SCWE and safety cultures across the complex.

- CWI assisted HQ review and analysis of complex-wide SCWE self-assessment results, for use in developing a SCWE report to the Defense Nuclear Facilities Safety Board.
- CWI has supported the HQ level Safety Culture Improvement Panel efforts.
- CWI has assisted DOE HQ and National Training Center (NTC) personnel develop additional SCWE training for delivery to the complex.
- CWI has assisted the Energy Facility Contractors Group (EFCOG) develop consistent safety culture assessment methodology and criteria.

**Other SCWE Initiatives and Focus Areas:** The Employee Concerns Program (ECP) procedure was revised and a computer based training course created to train managers and leaders on their roles and responsibilities in the program, and ways to effectively use and support the program.

The ECP participates in annual cooperative assessments with DOE-ID of the CWI ECP. Recommendations and opportunities for improvement are vigorously pursued to ensure continuous improvement and growth in the program.

The DOE O 442.2, Differing Professional Opinions for Technical Issues Involving Environmental, Safety, and Health Technical Concerns, was implemented into the CWI contract in December of 2013. CWI ECP facilitates DOE Differing Professional Opinion (DPO) investigations by acting as a liaison between DOE and the ICP to ensure that the Department is supported in the proper resources and access to facilities, documents, and people when issues are filed.

#### SUSTAINMENT PLAN

CWI is committed to ensuring a strong safety culture (and SCWE). To accomplish this goal, a number of tools, including activities and ongoing actions, will be used to sustain and improve upon the ICP safety culture. The following key actions and activities are planned/in progress. These actions and activities have been binned in the Safety Culture Focus Areas and attributes defined in Attachment 10 of DOE G 450.4-1C, *Integrated Safety Management System Guide*. In the DOE "Consolidated Report for Defense Nuclear Facilities Safety Board Recommendation 2011-1 Action 2-8 and 2-9, *Safety Culture at the Waste Treatment and Immobilization Plant*," dated May 2014, the report identifies four primary attributes for safety culture continuous improvement at DOE sites. This sustainment plan also discusses improvements in those areas as well (listed under their associated focus areas):

- Leadership Focus Area
  - \* Demonstrated safety leadership
  - \* Open communication and fostering an environment free from retribution
- Employee/Worker Engagement Focus Area
  - \* Teamwork and mutual respect attribute
- Organizational Learning Focus Area
  - \* Credibility, trust, and reporting errors and problems

#### Leadership

Demonstrated Safety Leadership: CWI has supported independent assessments of safety culture, self-assessments of SCWE, and complex-wide SCWE and safety culture initiatives in support of this attribute. Specific actions taken and planned in this attribute area include the following:

Independent Assessment—the independent review of IWTU safety culture in 2012 prompted the development of safety culture improvements. Management analyzed the assessment results, developed corrective action plans for the recommended areas, and completed the actions from that review. The corrective action plans developed as a result of the review have been closed out. Independent assessments will be considered as a potential future tool for safety culture sustainment. – FY15 Assessment schedule will be approved by September 30, 2014.

Self-assessment—ICP management fully supported the 2013 Joint DOE/CWI SCWE self-assessment of ICP, including the development of an action plan to address the recommendations from that review (some of which are highlighted in this sustainment plan). Additionally, a follow-on self-assessment is currently scheduled for 2015 in conjunction with the annual ESH training that occurs for all CWI employees to evaluate sustained improvement. Corrective action plans will be developed to address any identified vulnerabilities from this review. Although additional self-assessments are expected in the future, none are currently scheduled beyond the FY 2015 self-assessment. – FY15 Assessment schedule will be approved by September 30, 2014.

Management Workplace Visits – Perform and monitor workplace visits to ensure management presence in the field. Projects will continue to monitor both the management level performing the visits and the quality and quantity each performs as a minimum expectation. – Action ongoing

Safety Culture Advisory Panel—CWI, DOE-ID and other site contractors are in the discussion and development stages of chartering a site-wide Safety Culture Advisory Panel (SCAP). The purpose of this SCAP would be to share safety culture lessons learned across the site in the interest of promoting sustained safety culture improvement. An added benefit of the SCAP would be to facilitate the sharing of resources for the conduct of self-assessments, development of consistent sitewide SCWE metrics, etc. – Panel charter and first meeting will be complete in early FY15

Complex-wide SCWE and Safety Culture Initiatives—the CWI management team has been supportive of HQ-driven SCWE initiatives. HQ-provided SCWE training has been embraced by the management team. Initial training was provided by DOE-HQ to DOE-ID in 2013. Additional training being developed by HQ with support from CWI for mid-level management, supervisors, and workers is anticipated and preparations are already being made to provide training to the workforce later this year or next. Training will be developed by the end of the calendar year 2014 with other actions ongoing. Other support planned or provided includes:

- Assistance to other DOE sites in conducting SCWE and safety culture selfassessments
- Support to HQ for SCWE training development and delivery
- Support to HQ for safety culture self-assessment training development and delivery
- Support to HQ for SCWE and safety culture assessment guidance development

Open communication and fostering an environment free from retribution: CWI has developed several actions to foster open communications and a retribution-free environment. This was an area of improvement from the 2013 joint assessment. Actions include the following specifics:

• CWI senior leadership will meet with managers and employees periodically to foster open communications, explain work scope, and to facilitate the safe accomplishment of work. This will include open, frank discussions, workplace visits, and reinforcement of the tenants of a strong safety culture. – Action ongoing

- CWI procedures recently revised to be more user friendly and to provide a clear path to voice concerns, whether through the Employee Concerns Program, Differing Professional Opinions, or other mechanisms; will have corresponding revised training to educate managers and leaders. Training will be revised in early FY15.
- Encourage use of step back and stop work processes through positive reinforcement. –
   Action ongoing

### **Employee/Worker Engagement**

*Teamwork and Mutual Respect*: CWI has developed specific actions to employ tools to improve communications and teamwork across the organization. Interactions with middle management were an area of improvement from the 2013 joint assessment. Specific actions and tools being implemented include:

- Periodic All Hands—Senior Management will hold periodic All Hands meetings with employees to update departmental goals, discuss organizational or process changes, emphasize the open door policy, and to openly answer questions from the staff - Action ongoing
- Conflict—as part of the SCWE training provided in 2013, management and supervisors were trained on the Pinch-Crunch model which may be used to more effectively manage conflict Action ongoing
- Operate Employee Concern Program offices at each project area to provide an avenue for raising concerns locally before becoming larger issues. Action ongoing
- Continue to cultivate a strong working relationship with the union Actions ongoing
  - o Routine meetings between union leadership and senior management
  - o Provide for two full time union safety representatives as an avenue for employees to raise concerns
  - Utilize union safety representatives in event investigations and CAP developments

### **Organizational Learning**

*Credibility, Trust, and Reporting Errors and Problems*: CWI has developed specific actions to employ tools to improve trust across the organization. Specific actions being taken include:

- Project Evaluation Board will incorporate a review of SCWE attributes into their independent reviews of projects at ICP. – Action ongoing
- Annual SCWE survey will be incorporated into annual ESH training with potential additional inclusion of ECP survey also. – Action to be completed with annual ESH training
- Perform Safety Management Program reviews and present the results to senior management during Executive Safety Review Board (ESRB) presentations. – Action ongoing
- Include SCWE criteria during performance of annual VPP assessments Action ongoing
- Cultivate a Just Culture by including human performance factors in event investigations.
  - Action ongoing

### Conclusion

CWI management understands the development of an effective, open, and healthy safety culture is modeled from the top down, and is essential to long-term mission success. The CWI management team, in conjunction with DOE-ID and other site contractors, has devoted resources and expertise to develop and implement measures to ensure sustained improvement in the safety culture. Continued, ongoing monitoring of these and future actions is recognized as critical to ensure sustained improvement.



## **Safety Culture Sustainment Plan**

Advanced Mixed Waste Treatment Project

## 1.0 Purpose

The Idaho Treatment Group, LLC (ITG) manages and operates the Advanced Mixed Waste Treatment Project (AMWTP) for the U. S. Department of Energy (DOE). ITG's mission is to safely, compliantly, and efficiently retrieve, characterize, process, package, and ship the remaining AMWTP legacy stored waste.

ITG's project goals include:

- Achieving and sustaining an injury-free workplace
- Conducting work safely and compliantly to minimize environmental impacts
- Shipping legacy waste out of Idaho in accordance with contract requirements
- Promoting a positive safety culture that emphasizes employee involvement and ownership to create a highly effective organization
- Recognizing people's efforts and celebrating our accomplishments.

Department of Energy Guide (DOE G) 450-1C, Integrated Safety Management System Guide, defines safety culture as "an organization's values and behaviors modeled by its leaders and internalized by its members, which serve to make safe performance of work the overriding priority to protect the workers, the public, and the environment." The strength of an organization's dedication to safe operation can be seen in its safety culture. ITG recognizes that a key element of AMWTP's safe operation is its safety culture that is dependent on every employee and it is necessary to ensure ITG continues to achieve its project goals.

In an effort to maintain a sustained safety culture, this plan has been developed to describe the actions and tools AMWTP will use to pursue continuous improvement and support an effective safety conscious work environment.

#### 2.0 Overview

Over the past 2 years, the ITG has been working to improve the safety culture and safety conscious work environment (SCWE) at AMWTP. These efforts have included safety culture surveys, improvement plans, training, Integrated Safety Management System (ISMS) and Voluntary Protection Program (VPP) reviews, periodic assessments, and continuous reinforcement and communication of management expectations for a SCWE.

### 2.1 Safety Culture Survey

In April 2012, the ITG conducted an employee survey that measured employee perceptions associated with organizational climate, specifically focusing on the attributes of an effective safety culture and SCWE. The analysis of the survey results identified both positive and negative factors of the employee perceptions of safety climate.

As a result of this survey, a safety culture improvement plan (SCIP) was developed. The SCIP identified safety culture issues, improvement opportunities, and actions to be completed. All the actions have been completed and form part of the basis of our safety culture sustainability plan.

### 2.2 Training

ITG developed and implemented various training courses to ensure AMWTP employees understand safety culture attributes and expectations. These training courses have been provided to the AMWTP leadership team and employees, to provide them with the tools and associated knowledge to improve performance, ISMS behavioral expectations, and responsibilities of each employee to these expectations. The training courses also provide an overview of safety culture and SCWE attributes and the leadership principles that affect safety culture. These courses include:

- Supervisory skills training for managers and supervisors. This course provided managers and supervisors with the skills to enhance motivational and leadership techniques. (Training is ongoing.)
- Employee safety culture and Human Performance Improvement (HPI) training. This course covered Beyond Target Zero, SCWE, HPI, VPP, ISMS management expectations of safety and compliance, and miscellaneous safety culture tools and exercises. (This course was provided to the AMWTP workforce in preparation for ISMS Phase II readiness, it has since been incorporated into New Employee Orientation.)
- Coaching and positive reinforcement (R+) training for managers who perform Management Observation Program (MOP) observations. This 4-hour course provides MOP users with tools, as well as practice opportunities, for encouraging and reinforcing high levels of employee performance and for conducting high quality MOPs. The principles learned in the R+ training and the follow-up assignments support Beyond Target Zero, SCWE, and overall safety culture focus areas. (Training is ongoing and is scheduled monthly.)
- Contractor Assurance System (CAS) orientation for managers and supervisors to provide an overview of CAS, knowledge and understanding of CAS, and how management engagement in using CAS processes to improve performance. (Training is ongoing and is scheduled monthly.)

- SCWE training offered by DOE Headquarters. The session consisted of a full day of training on SCWE concepts and practices, and included useful communication and action tools for use by supervisors and workers. (Follow-on training for AMWTP managers and supervisors planned for early 2015.)
- Ethic and compliance training. This training has been provided to the AMWTP workforce, initially provided in such forums as Project Notes, all hands meetings, and plant status meetings; however it has recently been created as a quarterly online training session. The training covers elements of the AMWTP Employee Concerns Program (ECP) and differing professional opinions (DPO) process, SCWE, and behavior expectations related to daily work and business activities. (Training is ongoing and computer-based training [CBT] developed quarterly.)

### 2.3 ISMS Annual Declaration

Through our ISMS, we are continually working to improve our safety culture and SCWE. As part of the ITG ISMS Phase II verification review, the ISMS review team evaluated the effectiveness of the ITG safety culture. Interviews with ITG employees based on SCWE goals were conducted by the review team to determine if there were any impediments to the development of a safety culture within ITG. Based on the interviews, it was found that employees are aware of the avenues within ITG to raise safety issues and did not express any hesitation or fear of retaliation for reporting safety issues. In addition, the interviewees stated that they did not believe the company put production over safety. Based on the review results and ITG's response to identified issues, the ISMS Review Team concluded safety was systematically integrated into ITG's management, work practices, processes, and organizational culture.

As part of our annual ISMS and Quality Assurance Effectiveness Review Declaration, the ISMS safety culture focus areas and associated attributes will be assessed to help identify target areas and improvement activities to further strengthen efforts to ensure an effective Integrated Safety Management implementation and sustain a positive safety culture. In addition, a commitment has been established as part of our Fiscal Year (FY) 2015 Safety, Performance, Objective, Measures, and Commitments (SPOMC) to develop and implement one or more safety culture measures into the SPOMC by the third quarter of FY-15.

### 2.4 Voluntary Protection Program Annual Review

An important component within ITG's ISMS is the VPP. ITG's philosophy is that ISMS and VPP complement each other and provide AMWTP with the principles and philosophies necessary to have a successful and effective safety and health program, where employees at all levels are involved in anticipating, recognizing, evaluating, and controlling potential health and safety hazards.

In June 2014, AMWTP's VPP was evaluated by an external DOE Headquarters-led team for recertification. The review team had recommended to senior DOE officials that

AMWTP be recertified as a VPP participant at the STAR level. The assessors saw many positive improvements since their last VPP review of AMWTP in 2009. The assessors stated "...that they saw a genuine confidence and pride in what we are doing and saw numerous examples of direct employee involvement in safety." (Our VPP report is forthcoming; any opportunities for improvement will be addressed as part of a Corrective Action Plan.)

### 2.5 2014 SCWE Management Assessment

In May/June 2014, an internal SCWE assessment was performed of AMWTP in accordance with the safety culture focus areas and attributes identified in DOE ISMS Guide 450.4-1C, Attachment 10. As part of this assessment, the team included interview questions related to the ITG 2012 Safety Culture Survey to determine whether or not the primary concerns identified in 2012 are still of concern to ITG employees.

The assessment determined the focus areas and attributes of AMWTP/ITG's SCWE are implemented and effective, based on the results from interviews, implementing documents, data, and field observations. Employees have no reservations about raising concerns at any level within the company without fear of retaliation. Employees felt that AMWTP/ITG management and leadership are committed to the focus areas of leadership, employee/worker engagement, and organizational learning.

The assessment identified two observations and five strengths (noted below), in addition, to a perceived companywide improvement in safety culture and SCWE since the 2012 survey.

- (Observation No. 1) Additional senior management field time and employee interface is needed to help verify that management expectations are being met and provide employees opportunity to become better acquainted with management. (Improvement opportunity addressed in Section 3.1.1 – Demonstrated Safety Leadership.)
- (Observation No. 2) Although most workers felt good communications, teamwork, and engagement within their vertical work groups, there were indications of marginal effectiveness regarding horizontal communications, e.g., between work groups, shifts, and across organization boundaries. (Improvement opportunity addressed in Section 3.2.1 Teamwork and Mutual Respect.)
- (Strength No. 1) Employees feel AMWTP/ITG management demonstrates safety leadership throughout the organization. They feel front-line and mid-level management (e.g., shift supervisors, production managers) perform frequent, quality field visits, have an open door policy, and are receptive to employee feedback.

- (Strength No. 2) The assessment identified that employees actively utilize a variety of methods to raise safety issues without fear of reprisal for reporting errors, incidents, and conditions. These include Step Back/Stop Work, Keeping Everyone and Yourself Safe (KEYS), and Employee Safety and Improvement Team (ESIT).
- (Strength No. 3) The management assessment confirmed that AMWTP/ITG has made substantial improvements related to issues identified in the 2012 Safety Culture Survey in the areas of leadership issues, trust issues, and production over safety issues.
- (Strength No. 4) Employees felt there was a strong, positive presence in the field by shift supervisors and production managers.
- (Strength No. 5) All employees expressed their belief and coworker's belief in the Stop Work/Step Back process for safety and compliance issues. Employees feel that they and their coworkers are free from retribution when they initiate this process.

Follow-on SCWE management assessments are scheduled to be performed for FY-15. In addition, company internal safety culture indicators will be reviewed by the management team as part of the quarterly Collective Significance Review (CSR) process to identify potential trends and issues that may require follow-up and additional actions. (Established as part of our FY-15 SPOMC for an additional SCWE assessment to be performed the third quarter of FY-15.)

## 3.0 Sustainability Tools

This safety culture sustainability plan defines the tools and activities that will be used by AMWTP to sustain and maintain the current safety culture. The tools and activities take into account the proven processes and programs at AMWTP and the overall environment (e.g., dynamic staffing changes, contract uncertainty). The plan describes the AMWTP's approach for ensuring the continued health of its safety culture through the following focus areas and attributes:

- Leadership focus area
  - Demonstrated safety leadership
  - Open communication and fostering an environment free from retribution
- Employee/worker engagement focus area
  - Teamwork and mutual respect
- Organization learning focus area
  - Credibility, trust, and reporting errors and problems.

This plan is based on an ongoing holistic, objective, transparent, and safety-focused process which uses all of the information available (e.g., the corrective action program, performance trends, safety culture assessments, self-assessments, operating experience, employee concerns program, etc.) to provide an early indication of potential problems, develop effective corrective actions, and monitor the effectiveness of applied actions.

To accomplish this goal, a number of tools, including activities and ongoing actions, will be used to sustain and improve upon the AMWTP safety culture.

### 3.1 Leadership Focus Area

The AMWTP management recognizes the importance of building and maintaining a strong safety culture. This takes the commitment of its leaders and the dedication of every individual.

### 3.1.1 Demonstrated Safety Leadership

Leadership is fundamental to our success – our leaders show the way. All workers are expected to be leaders in safety.

This plan places primary responsibility for AMWTP's safety culture on its leadership team and is reflected in all supporting processes addressed in this plan. The following key actions and activities are planned/in progress in this attribute area:

- Additional senior management field time and employee interface is needed to help verify that management expectations are being met and provide employees opportunities to become better acquainted with management. (2014 SCWE management assessment improvement action being tracked and monitored in TrackWise under Action Item No. 87985.)
- Continue to maintain a superior level of senior and mid-level management support for the Employee Safety and Improvement Team (ESIT) and the ESIT's organizational structures. This structured support provides the means and direction needed to ensure that the ESIT and other employee programs are given the support necessary with employee participation remaining in the forefront. (Monitored monthly as part of the ESIT meeting, attendance rosters, and ESIT co-chair meetings with the President and Project Manager.)
- Continue to promote and foster a culture that values safety by recognizing employees through recognition opportunities intended to promote safety leadership through direct and immediate recognition of employees. Recognition promotes a strong safety culture and encourages employees to focus their attention towards perpetually safer conditions. (Validated and tracked with Human Resources [HR] on a monthly basis to ensure valid recognition of employees in accordance with the recognition program requirements.)

- Identify members of the AMWTP management team to participate in the DOE Safety Culture/SCWE self-assessment training in December 2014. (Complete: individual selected to attend training.)
- Participate as part of an Idaho National Laboratory sitewide Safety Culture
  Advisory Panel (SCAP) as a means to share safety culture lessons learned across
  the site in the interest of promoting sustained safety culture improvement
  opportunities. (FY-15 SPOMC for the SCAP to collaborate in the development of
  one or more safety culture measures into the SPOMC by third quarter of
  FY-15.)
- Conduct frequent and informative updates with the workforce on the AMWTP contract and contract award to minimize impacts on continuity of safe operations. Communications will be vital to maintain worker moral and avoiding distractions and rumors that could have a negative impact on the overall safety culture.
   (Ongoing through all-hands meetings, daily Project Notes, ESIT meetings, daily plan of the day, etc.)

## 3.1.2 Open Communication and Fostering of an Environment Free from Retribution

Another cultural component that is vital is a "reporting culture." Open discussion and safety culture improvements greatly increase an organization's ability to find and fix weaknesses, flaws in defense systems, and error traps through the development of an organization that maintains a healthy balance between production and safety, thereby establishing a positive safety culture one decision at a time. Good decisions prevent negative events through increased situational awareness, building on operating experience, and learning from employee feedback. Identification and resolution of safety culture improvement opportunities is key to understanding and improving the work environment.

Therefore, ITG has taken actions to strengthen the ECP, DPO program, SCWE to foster open communication and a retribution-free environment. Completed actions include the following:

• Modified the ethics officer position to eliminate duties associated with HR. Under the modified position, the ethics officer will have responsibility for administering the Code of Business Ethics and Conduct, SCWE, ECP, and DPO process. This separation should enhance the employee's willingness to raise ECP concerns and allow the ethics officer to focus on the overall ethics program, the ECP, DPO, and SCWE process. (Complete: 5/2/13. Position roles, responsibilities, authorities, and accountabilities [R2A2] were redefined.)

- Developed and implemented a Safety Conscious Work Environment Policy (POL-109) to encourage employees to identify SCWE or safety concerns and safety culture improvement opportunities through any of the available reporting methods at AMWTP. The policy promotes an atmosphere where an employee is encouraged and feels free to raise questions or concerns relative to safety without fear of harassment, intimidation, or retaliation. (Complete: 3/26/14.)
- Revised the Employee Disciplinary Action procedure (MP-ADMN-1.4) to include HPI and SCWE principles into the disciplinary action process. (Complete: 2/7/14.)

The 2014 SCWE management assessment determined the attribute Open Communication and Fostering an Environment Free from Retribution was implemented and effective within AMWTP/ITG. All employees expressed their belief and coworker's belief in the Stop Work/Step Back process for safety and compliance issues. They feel that they and their coworkers are free from retribution when they initiate the process. This was identified as strength in the AMWTP safety culture and SCWE process.

To ensure this attribute remains strong and viable and continues to establish the building blocks of promoting trust, the following actions will continue:

- The ethics officer will monitor ECP/DPO/SCWE activity in comparison to historical usage data. The ethics officer will monitor ECP/DPO/SCWE activity for trends in internal ITG reporting in comparison to the reporting of concerns to external resources. (Monitored quarterly as part of the CSR process.)
- The ITG senior management team will continue to have employee meeting settings (e.g., all-hands, plant status, ESIT meetings, etc.), to foster open communication, provide project updates/changes, discuss safety culture events and concern, contract updates, and collect feedback from the workforce. (This is ongoing and is typically scheduled quarterly.)

## 3.2 Employee/Worker Engagement Focus Area

The ITG constantly strives to strengthen and improve its performance and effectiveness of our ISMS eighth guiding principle of employee involvement and as our fundamental tenet of our strong safety culture. By utilizing our existing tools and employee-driven subcommittees and work units has helped drive home the project-wide desire for everyone to be actively involved in safety, strengthened the feedback process, and has promoted continuous improvement.

### 3.2.1 Teamwork and Mutual Respect

The AMWTP management team is fully dedicated to ensuring that the ESIT empowers employee leadership and involvement in safety programs and initiatives. Employees continue to have a key role in error-reduction techniques and in maintaining the integrity of defenses.

ITG will continue to fully engage all employees at all levels within the organization and will continue to do so for initiatives, such as:

- Raising awareness levels and implementing project wide injury prevention techniques
- Utilizing our behavioral based KEYS program to help identify at-risk behaviors and prevent accidents and injuries from occurring
- ESIT lead communications team subcommittee dedicated to keeping all employees well informed of company missions, goals, activities, safety topics, and projects.
- ESIT sponsored "Good Catch" program to recognize employees demonstrating exceptional adherence to safety.
- Ad-hoc ESIT subcommittees established to promote employee involvement, feedback, and improvement in the resolution of issues from reoccurring events at AMWTP (e.g. rolling stock, Level B suit, respiratory protection).
- Plant Operations Walkdowns for Excellence and Reliability (POWER) walks, encouraging workers to actively participate in, and take ownership for safety, requirements compliance, VPP, ISMS, Conduct of Operations, and housekeeping. Additionally, power-walks provide an environment where management can communicate their expectations and where employees along with management can identify and resolve issues.

Active employee engagement and involvement is a key to AMWTP's success. Continued emphasis and focus on employee safety and health has always been and remains a priority of ITG's. To help ensure that safety and health receives proper attention and remains a priority, ITG supports and encourages employee involvement at all levels.

An improvement opportunity was identified as a result of the 2014 SCWE Management Assessment, to improve communication between work groups, across shifts and organization boundaries. Two communication improvement processes have been developed. These include:

- The use of FLASH e-mail messages sent out to AMWTP personnel of Stop Work activities and events, Occurrence Reporting and Processing System (ORPS) reportable events, injuries, weather conditions, etc. (Action plan developed and expected to be completed and in place by the end of FY-14.)
- Stop Work Tracking Log, accessible from the AMWTP Home Page, that all employees will be able to view active Stop Work activities that are in place and the planned actions being taken to mitigate the Stop Work. (Action plan developed and expected to be completed and in place by the end of FY-14.)
- AMWTP will continue to utilizing existing communication processes in place to communicate information and safety-related awareness initiatives. These avenues include:
  - o Start of the Roll publications
  - First Day Back safety briefings
  - Project Notes
  - Weekly injury reports
  - o Feedback Forum (electronic question-and-answer system)
  - o Safety Performance Lights (Safety, Compliance, As Low As Reasonably Achievable [ALARA]).

### 3.3 Organizational Learning Focus Area

AMWTP management personnel conduct management assessments to identify and correct problems that hinder their organization from achieving its objectives, as well as to improve processes, systems, and products. Management assessments are conducted in accordance with MP-M&IA-17.1, Management Assessment. Problems or the potential for adverse conditions identified from these assessment and surveillance activities are reported in the issues management database for evaluation and management of the issues.

These assessment programs, including event reporting and analysis worker feedback mechanisms; issues management, including causal analysis; identification of corrective actions; tracking, monitoring, and closure of corrective actions and effectiveness verification; communication of lessons learned; and establishment of performance measures, provide a rigorous feedback and continuous improvement process to effectively and efficiently monitor and further strengthen the AWMTP safety culture.

These mechanisms also provide conclusions about the status and effectiveness of the ISMS. Performance commitments are developed to address the areas needing improvement. These commitments are combined with selected commitments contained in the SPOMC and are documented in the ISMS Annual Report and submitted to DOE-ID annually. (A commitment has been established as part of our FY-15 SPOMC to develop and implement one or more Safety Culture measures into the SPOMC by the third quarter of FY-15).

Comprehensive assessments and surveillances are a key part of contractor assurance and a significant contribution to an effective continuous improvement process. Improvement opportunities have been identified within the AMWTP CAS process:

• Weaknesses and opportunities for improvement within the AMWTP CAS process were identified in the FY-12/-13 timeframe. This prompted the development of a CAS Program Process Improvement Plan to address gaps and improve performance. These improvements include actions to address program weaknesses including: resource allocations for CAS program development and monitoring, management understanding of CAS principles and expected outputs, and manager engagement in using CAS processes to improve performance. (Improvements included short term and long term actions. Several actions have been completed and others will continue to be implemented through FY-15. All improvement actions are being tracked within the AMWTP issue management system-TrackWise with schedule due dates for completion.)

## 3.3.1 Credibility, Trust, and Reporting Errors and Problems

Multiple levels of reporting safety-related concerns exist at the AMWTP. Employees are encouraged to report concerns to their immediate management. If they are not comfortable in doing so or they perceive that they have not received a satisfactory review of their concern at that level, then they are encouraged to express their concern to the next level of management, up to and including the president. Other avenues to express concerns or report safety issues include:

- AMWTP Employee Concerns Program (ECP) as documented in MP-ADMN-1.8,
   AMWTP Employee Concerns Program
- As part of the ECP is the DPOs process
- The AMWTP SCWE Policy (POL-109)
- Employee Safety and Improvement Team.

AMWTP has established a series of internal nuclear safety culture indicators to provide an objective, transparent and safety-focused method, which uses all of the information available (e.g., injury performance trends, inspections, % corrective action complete, KEYS, ESIT concerns, audits, operating experience, employee concerns program, etc.)

to provide AMWTP senior management with an early indication of potential cultural problems, and a means to develop effective corrective actions and monitor the effectiveness of the actions. This information is fed into the CSR process, reviewed quarterly, where adverse trends or other indications requiring action are captured and presented to AMWTP management.

Safety culture aspects of workplace conditions can be trended to provide an indication to AMWTP managers of how to determine if cultural issues contributed to the condition. Process weaknesses, discovered through audits, self-assessments, inspections, etc., can also provide symptoms of safety cultural problems.

Similarly, The ESIT and each subcommittee takes the applicable information derived from trended materials, subcommittee data as well as general site-specific information, and relays that information through staff and shift turnover meetings to heighten awareness and prevention activities. The ESIT also provides feedback reports to committee members for injury/illness data, inspection results, and employee concerns. Summary data is assembled by the ESIT from KEYS data on a monthly basis and is provided to management, using a bottom-up approach. Examples of this include:

- The ESIT has used this data to also run educational campaigns such that employee awareness is raised. For example, the ESIT has implemented the use of an electronic sign that is seen by all who enter the AMWTP grounds. This sign is a scrolling marquee sign and can be utilized to encourage employees to perform a KEYS observation, to be on the lookout for icy and/or abnormal conditions, or to simply be aware of who the current plant shift manager is.
- Focused KEYS observations have been effectively used to raise awareness to a specific problem area or to address a safety topic that has proven to be on the rise. An example of this would be the use of a focused KEYS observation that looks specifically at strains and sprains.

### 4.0 Conclusion

Strong leadership and a culture of management-worker trust are key ingredients for an effective, open, and healthy safety culture. Identification and resolution of safety culture improvement opportunities through management leadership and employee engagement (top down-bottom up approach), including organizational learning, provide the framework for sustaining a positive safety culture and it is necessary to ensure AMWTP continues to achieve its project goals.