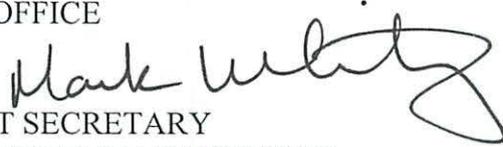




Department of Energy  
Washington, DC 20585

JUN 19 2015

MEMORANDUM FOR JOSE FRANCO  
MANAGER  
CARLSBAD FIELD OFFICE

FROM: MARK WHITNEY   
ACTING ASSISTANT SECRETARY  
FOR ENVIRONMENTAL MANAGEMENT

SUBJECT: Safety Culture Sustainment Plans

On June 27, 2014, my predecessor directed all Department of Energy, Office of Environmental Management (EM) sites to submit Federal and Contractor Safety Culture Sustainment Plans (SCSPs) outlining tools to improve their organizations' safety culture. In accordance with the established due date, 32 SCSPs were received (11 Federal and 21 Contractors plans). In mid-November EM convened a team to conduct a comprehensive evaluation of the plans which resulted in the attached EM SCSP Review Summary Report, dated April 2015. The report describes the review criteria, evaluation process, areas for improvement, best practices, lessons learned, conclusions and recommendations.

The development of the SCSP was a baseline effort and precedent setting initiative. I was pleased to see that, for the most part, we received well thought out SCSPs. Although the report highlights areas for improvement, it also identifies the high level of commitment and engagement by Federal and contractor leaders, which will establish a solid foundation for building a positive safety culture and a Safety Conscious Work Environment across the EM complex.

In accordance with the Defense Nuclear Facilities Safety Board 2011-1 Implementation Plan, I reviewed the SCSPs, and with the concurrence of the Chief of Nuclear Safety, have concurred with the teams' recommendations for approval as follows:

Approved: Nuclear Waste Partnership, LLC (NWP)

Conditional Approval: Carlsbad Field Office (CBFO)  
Dependent upon:

- Submission of a supplemental safety culture sustainment improvement tools, or existing documentation, addressing ongoing improvements for:
  - SCWE self-assessment AFI, specifically in the Safety Culture Focus Areas of Leadership (demonstrated safety leadership);



- Organizational Learning (Performance monitoring through multiple means);
  - Oversight of the contractor's implementation of safety culture; and
  - Development of metrics/indicators to measure safety culture/SCWE (for Federal and contractor organizations);
- Prepared consistent with prior EM-1 guidance and submitted by July 31, 2015;
- The Office of Safety, Security, and Quality Programs review of supplemental SCSP, or existing documentation, within 30 days of submission; and
- Approval by EM-1 with concurrence by the CNS.

The attachments for this memorandum includes the following: (1) EM SCSP Review Summary Report, dated April 2015 (including Appendices); (2) SCSP Summary Table - Site Specific Feedback; (2a) CBFO - Site Specific Feedback; and (2b) NWP- Site Specific Feedback.

I appreciate your efforts to improve our safety culture. If you have any further questions, please contact me or Mr. James Hutton, Deputy Assistant Secretary for Safety, Security, and Quality Programs, at (202) 586-5151.

#### Attachments

cc: Jeff Carswell, CBFO  
Richard Lagdon, CNS  
Monica Regalbuto, EM-2.1  
Catherine Hampton, EM-3 (Acting)  
James Hutton, EM-40  
Julie Goeckner, EM-40



**U. S. Department of Energy**  
**Office of**  
**Environmental Management**

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**Safety Culture Sustainment Plan**  
**Summary Review Report**

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**April 2015**

## **HISTORY OF THE DEVELOPMENT OF SCSPs**

During Fiscal Year (FY) 2014, the Department of Energy (DOE) made substantial progress in completing Implementation Plan (IP) actions within Defense Nuclear Facilities Safety Board (Board) Recommendation 2011-1, *Safety Culture at the Waste Treatment and Immobilization Plant*. The actions build upon much of the work completed in FY13, especially the Safety Conscious Work Environment (SCWE) self-assessments performed at DOE headquarters and field sites with defense nuclear facilities.

In a letter dated May 29, 2014, DOE transmitted to the Board a consolidated report on the Safety Culture Extent-of-Condition (EOC) review. The EOC review report identified actions for improvement along with recommendations for their implementation. With assessments complete, the next follow-on efforts focused on individual sites identifying their specific processes and controls appropriate for improving and sustaining a robust safety culture. These actions were directed to sites in mid-FY14 by formal EM memorandum with results submitted to EM headquarters for review and approval.

In the IP the Department committed that EOC review would be conducted in five parts. Part 5 is titled *"The Sustainment of a Robust Safety Culture"*. It describes, following completion of EOC review and the DOE consolidated report on safety culture, that the Department will assure sustainment of a robust safety culture at its defense nuclear facilities by having PSOs direct their sites to develop processes and controls tailored to their unique conditions and circumstances. As a result, Office of Environmental Management (EM) sites were directed to prepare and transmit to EM their Safety Culture Sustainment Plans (SCSPs) as required by Recommendation 2011-1, *"Action 2-11, Direct sites to develop processes and controls for sustainment of a robust safety culture"*.

On November 13, 2014, EM transmitted Safety Culture Sustainment Plans for defense nuclear facilities (Carlsbad Field Office, Idaho Operations Office, Oak Ridge Office of Environmental Management, Office of River Protection, Richland Operations Office, Savannah River Operations Office, and DOE Separations Process Research Unit) to the Board, completing Recommendation 2011-1, Action 2-12; and identified the plans were being reviewed in accordance with the Implementation Plan. This report fulfills a portion of Action 2-13 of the IP: *"Complete review and PSO approval of site-specific safety culture sustainment tools"*.

## **EM-1 MEMO OF DIRECTION**

On June 27, 2014, Dave Huizenga, Acting Assistant Secretary for Environmental Management, sent a memo to Site Managers, titled *Safety Culture Sustainment Plans*. In the memo, he thanked site offices and the contractors across the EM complex for their focused efforts in conducting Safety Culture and Safety Conscious Work Environment self-assessments in 2013 and stated, *"I expect you are taking action on improvements to address your site's self-assessment findings."*

In addition, he referenced the Department's consolidated review report that analyzed the SCWE extent of condition which identified several areas for improvement as contained within the DOE's *Integrated Safety Management (ISM) System Guide*, DOE G 450.4-1C. The June 27, 2014, memorandum identified the following primary attributes: (1) Safety Culture Focus Areas of Leadership (under the attributes of "demonstrated safety leadership" and "open communication and fostering an environment free from retribution"); (2) Employee Engagement (under the attribute of "teamwork and mutual respect"); and (3) Organizational Learning (under the attribute of "credibility, trust, and reporting errors and problems").

Mr. Huizenga requested each organization submit a Safety Culture Sustainment Plan by September 15, 2014, which identifies the following:

- 1) Specific sustainment tools your site will use;*
- 2) Descriptions of the tools; and*
- 3) Plans and schedules for implementation of the tools.*

*Each plan must include the tools and metrics the field office and site contractor(s) will implement."*

Examples of sustainment tools were provided, which included: safety culture monitoring panels, methods to provide working level input to safety culture monitoring panels, actions plans in response to self-assessments in 2013, periodic self-assessments, periodic independent reviews, continuing training, performance measures, and contract incentives. Huizenga noted that *"The sustainment tools you select should be suitable for the specific conditions at your site, and be in alignment with the departmental actions recommended in the consolidated report."*

All requested EM organizations provided a response to the EM-1 request between the dates of September 10, 2014 and October 15, 2014 (some organizations were provided extensions to the requested response date).

## **EVALUATION TEAM**

A team was convened to review the safety culture sustainment plans submitted by 32 Federal and contractor (11 Federal/21 contractor) organizations within in the EM complex. The team was composed of staff representing the EM-40 organization, including Chief of Nuclear Safety (CNS) staff, with a broad cross-section of experience across the EM sites.

Team members included:

Julie Goeckner, EM-40, Team Leader  
Joanne Lorence, EM-40  
Don Rack, EM-40  
Bob Toro, EM-40  
Caroline Garzon, CNS  
Steve McDuffie, CNS

CNS staff participated as part of the evaluation team to ensure CNS acceptability of the safety culture sustainment plans. CNS concurrence is necessary per Action 2-12 of the IP for DNFSB Recommendation 2011-1: *“Submit proposed site-specific safety culture sustainment tools to PSOs for approval, including concurrence by DOE Chief of Nuclear Safety, NNSA Chief of Defense Nuclear Safety, or Office of Science Chief of Nuclear Safety.”*

The evaluation team participated in a number of conference calls starting on November 12, 2014 and working through March 6, 2015 to evaluate the submitted safety culture sustainment plans using the process described in the following section, *Evaluation Process and Criteria*.

## **EVALUATION PROCESS & CRITERIA**

The team reviewed the safety culture sustainment plans for content consistent with the EM request which included:

- Improvement actions in response to the SCWE self-assessment Opportunities for Improvement (OFIs) and in alignment with departmental actions from the DOE Consolidated Report - SCWE Extent of Condition (EOC);
- Tools the site will use to sustain the safety culture;
- A description of the tools the site will implement;
- Metrics the site will use (to measure progress); and
- A schedule for implementing the tools/metrics.

In addition, the team used the following criteria to review the SCSPs for evidence that they met the EM request:

- Approach to implement safety culture sustainment (including alignment within and between Federal site offices and contractor organizations);
- Demonstrated ownership by organization leaders to lead a shift in the culture;
- Implementation of safety culture within the DOE Integrated Safety Management (ISM) framework (Safety Focus Areas and Associated Attributes) or a plan to transition to the ISM framework if other documents were referenced (e.g., Institute of Nuclear Power Operations Traits/Principles);
- Improvement actions broken out into the 3 Safety Culture Focus Areas - Leadership, Employee Engagement, Organizational Learning;
- The rationale for selected improvement actions identified in the plan;
- Improvement action linkage to the organization's SCWE self-assessment OFIs;
- Tangible improvement actions that demonstrate a positive impact on the safety culture (e.g., result in changes in behaviors);
- A schedule for improvement actions (specific, measurable, timely); and
- A description of the tools for improvement including the following information:
  - A discussion of whether this is a new or existing tool;
  - If an existing tool, a description of how the ISM Safety Culture Focus Areas and Associated Attributes, specifically the behavioral elements, are incorporated into the tool;
  - If a new tool, a description of what prompted implementation;
  - If a new tool, discussion on whether it was implemented based on best industry practice or benchmarking, and if so, from where; and
  - Whether the tool been recognized as a best practice elsewhere.
- Description of metrics, indicators or performance measures:
  - What is being reported, to whom, how often, and for how long;
  - A discussion on the basis for any revisions to metrics (e.g., demonstration of application of learning organization); and
  - What is being used to measure safety culture.

## **DATA LIMITATIONS**

The team was tasked with evaluating the Safety Culture Sustainment Plans based upon the information submitted. The criteria identified above were utilized to provide objectivity in the

review process (and eliminate potential individual team member biases based upon knowledge and/or interface with various organizations). As this was the first time a request such as this has been made, and the team recognized these types of evaluations can be subjective, the team provided many of the organizations the opportunity to clarify information by requesting supplemental information. Approximately 120 exhibits were submitted for supplemental review. The team reviewed the additional information to screen and/or verify the potential for best practices and/or to obtain information prior to providing a recommendation such as an area for improvement (AFI). This supplemental information is captured as an “Exhibit” to provide traceability and transparency.

Although supplemental information was obtained from many of the organizations, it should be noted that the plans may not be all inclusive, meaning that the plans may not include all the improvement actions each organization has taken to improve safety culture (which may/may not have been in response to the SCWE self-assessment OFI’s). This Safety Culture Sustainment Plan Review considers only the safety culture sustainment plans as written at the time of submission, and improvement actions identified within those plans, as well as any supplemental information requested and provided to the team.

## **EVALUATION OF DATA (EM-1 DELIVERABLE):**

When EM first requested the plans, EM did not anticipate the breadth and diversity of responses expected. Safety culture concepts are still a relatively new concept for the DOE complex. What EM received, for the most part, were comprehensive well-thought-out SCSPs.

A specified format for the SCSP would have better enabled the comparison of the plans across the complex and ensured that plans were addressing each of the three ISM Safety Culture Focus Areas. (Additional Lessons Learned from the review are provided in Appendix 1). In general, there are many tools considered best practices being implemented within EM Federal and contractor organizations, as such there are many opportunities to share.

As evidenced by the submission of these Safety Culture Sustainment Plans, Federal and contractor organizations identified specific safety culture sustainment tools for implementation and are taking initiative to improve the safety culture/SCWE within the EM complex (as identified in Table 1).

Table 1. Safety Culture Sustainment Plans submitted by EM organizations.

EM-1 Request	Number of responses submitted	
	Federal	Contractor
Safety Culture Sustainment Plans submitted (100%)	11	21*
Specific tools for Implementation	11	21
Description of Tools	11	21
Plans/schedule for implementation of the tools**	8	18
Metrics the organization will implement	10	20***

\*SCSP: Parsons response (previously approved in 2013); no current improvement actions/schedule

\*\*Schedule not provided for implementation tools: Federal Orgs - ORP / PPPO / CBFO | Contractors - WEMS (OR)/ LATA KY (PPPO)/ Parsons (SR)

\*\*\*Metrics not provided: Federal Orgs - CBFO / Cont - NWP

**Best practices:** Best practices are listed for those safety culture/SCWE improvement actions that are recognized as industry standard best practices which can be easily adapted to other organizations (shared as lessons learned). Exhibits were obtained to verify principles were implemented consistent with best practices.

NOTE: The team’s identification of implementation of a single or multiple “best practice” or “Area for Improvement (AFI)” within an organization does not reflect upon the overall safety culture of the organization itself.

**Areas for Improvement:** Areas For Improvement (AFIs) are listed for those safety culture/SCWE improvement actions that have been identified, but can be further strengthened, in some instances, elevating the practice to a best industry practice. An AFI is not to be interpreted as negative feedback, rather to be used for the sole purpose of improving - as part of a learning organization.

A total of 66 best practices were identified and can be found in a table in Appendix 2 (Best Safety Culture Practices Identified From Across the EM Complex), broken out by topic as follows:

Safety Culture/SCWE Policies	6
Monitoring Panels/ Performance Indicators & Metrics	10
Expectations & Behaviors	5
Contract Standards	2
Approaches of Safety Culture Implementation	5
Safety Culture/SCWE Training	6
Leadership Actions	8
Safety Culture/SCWE Survey Evaluation	4
Miscellaneous	20

In some instances, the plans clearly identified information separated out by the three ISM Safety Culture Focus Areas of Leadership, Employee Engagement and Organizational Learning. In these instances, the team discerned the data into the corresponding areas during the review. For those plans that did not identify the specific ISM Safety Focus Area(s) the improvement actions were linked to, the review team did not attempt to categorize the data into the three Safety Culture Focus areas.

As stated previously, the review of the SCSPs were performed based on the information submitted, along with the requested supplemental information, and do not include evaluation of other tools the organization may have implemented that were not included within the SCSP. Although many of the identified safety culture improvement actions and tools can be binned within multiple Safety Culture Focus areas, the team has attempted to summarize some of the improvement tools identified in one of three Safety Culture Focus areas:

#### LEADERSHIP

- There is a high level of leadership commitment to improve safety culture across the EM complex as evidenced by the thoroughness of most plans submitted.
- Some sites (Idaho & Savannah River) have taken an overall site-wide approach to implementing safety culture and submitted action plans for Federal and contractor organizations that clearly aligned with both SCWE self-assessment actions and site-wide behavioral expectations, demonstrating a very high level commitment to the implementation of safety culture.
- Nearly all plans cited the implementation of “Management by Walking Around” (MBWA), emphasizing the importance of leadership visibility. This was the most popular and implemented tool across the EM complex.
- Examples were provided to demonstrate how several individual managers are personally leading a positive shift in the safety culture.
- A number of Federal and contractor organizations have developed policy statements that articulate the behaviors to support a positive safety culture/SCWE, including the right to raise a safety concern without fear of retribution.
- One contractor organization has implemented an anti-harassment policy statement, in direct response to their SCWE self-assessment and the Department’s Condition Report (Extent of Condition).

## EMPLOYEE ENGAGEMENT

- Many organizations cited existing practices such as Employee Safety Accident Committees, and other committees established to support ongoing Voluntary Protection Program and Human Performance Improvement activities, which encourage the attributes identified in the Employee Engagement Safety Culture Focus area (personal commitment to everyone's safety, teamwork and mutual respect, and participation in work planning and improvement; and mindful of hazards and control).
- One contractor organization established a Senior Review Board that includes union leadership to ensure worker views are heard from all levels of the organization.
- Some organizations have included safety culture fundamentals in formal on-boarding programs and seek feedback as part of an off-boarding process.
- A number of organizations have engaged employees in the development of ongoing feedback and improvement initiatives (e.g., Savannah River's Culture Growth Initiative, Office of River Protection's Safety Culture Improvement Panel).
- Several organizations established teams or focus groups to evaluate safety culture survey results and engage with leadership to develop improvement actions (e.g., Richland Operations Office).

## ORGANIZATIONAL LEARNING

- Safety culture metrics are identified by most organizations. At least two contractor organizations report high level project performance metrics on a quarterly basis; with two organizations incorporating nuclear safety culture metrics as part of the metric being measured.
- Many of the plans report reliance on standard safety metrics (e.g., number of injuries/first aids) to gauge safety culture.
- SCSPs identified a few EM contractor organizations are implementing safety culture/SCWE using INPO Traits/Principles instead of ISM/Safety Culture Focus Areas.<sup>1</sup>
- Several contractor SCSPs cited challenges with maintaining a positive safety culture/SCWE through contract transition and closure.<sup>2</sup>
- Several SCSPs identified performance monitoring through the use of industry experience reviews (safety culture reviews conducted with the use of external high caliber, qualified experts, with established/practiced industry methods/models).<sup>3</sup> The most recent example cited was precedent setting as the Safety Culture Assist Visit was conducted

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<sup>1</sup> SR/BWCS, SR/SRR, SR/Parsons [SR/SWPF], WVDP

<sup>2</sup> [LATA KY, WCH/RCC, ID/CWI, ID/AMWTP, OREM/WAI-TRU]

<sup>3</sup> External Safety Culture Assist Visits or methodology (SROO/SRR/SRNS, ID/CWI/ITG, WIPP - CBFO/NWP)

using DOE G 450.4-1C, *Integrated Safety Management*, Attachment 10, Safety Culture Focus Areas and Associated Attributes, as the standard for measurement (versus external standards, principles, and/or attributes).

## **Conclusions & Recommendations**

As safety culture is still a fairly new concept being implemented within the EM complex, it is important to identify that there is significant progress being made. Noteworthy best practices are being implemented into daily systems, structures and processes through Integrated Safety Management System (ISMS).

### **CONCLUSIONS**

- Many of the SCSPs clearly articulated a connection between their SCWE self-assessment Opportunities for Improvement (or independent safety culture assessments) to the specific improvement actions identified, with some plans clearly demonstrating this connection more than others.
- Although many of the plans reference the Department's Consolidated Report, SCWE Extent of Condition (EOC), the link or connection between improvement actions and alignment with the Department's improvement actions was not clear in many of the plans reviewed by the team, identifying this an overall Area for Improvement.
- Although many safety culture sustainment tools are being implemented across the EM organization, until the issuance of this report (and the identification of the Best Practices) there has not been a mechanism identified to share those Best Practices across the EM complex.
- Implementation of the Management By Walking Around tool identifies that leaders have the best intention to implement a safety culture. In many cases, the tool may not accomplish what it is intended to do (e.g., build relationships and develop trust with employees) as there appears to be an overemphasis on measuring the "quantity" of time in the field vs the "quality" of time in the field.
- There is a general misunderstanding of what data should be used to measure safety culture. Several contractors are using metrics to measure the characteristics of safety culture; however, many plans reported reliance on standard safety metrics (e.g., number of injuries/first aids) to gauge safety culture, rather than metrics based on the characteristics of measuring safety culture. This reinforces the need to develop a core set of metrics for use across the complex (e.g., a tool box).
- Federal SCSPs did not consistently demonstrate the understanding of the responsibility to oversee the contractor's implementation of safety culture, as the majority of SCSPs

did not identify implementation tools for oversight or monitoring the contractor's implementation of safety culture.

- Several SCSPs referenced challenges in implementation due to contract transition or closure. This may warrant revisiting contract language or the identification of a mechanisms to reinforce safety culture expectations and/or provide additional tools/resources for contractors through times of contract transition or contract closure.
- At least one contractor response stated that DOE's expectations for safety culture have not been clearly defined in Contractor Requirements Documents.<sup>4</sup> Current DOE guidance may be contributing to some confusion on safety culture expectations as it provides several standards for implementation.<sup>5</sup>
- SCSPs did not consistently demonstrate focus on understanding *why* "at risk behaviors" continue to be present or establishing a working environment which fosters and acknowledges the value of a "questioning attitude," thus indicating that EM is still evolving in terms of safety culture and is not yet fully demonstrating the attributes of a learning organization. Not understanding why "at risk behaviors" continue to occur or not taking effective actions to address the behaviors results in management not knowing what it doesn't know (e.g., keeps management in the dark, not solving the underlying root cause).

## RECOMMENDATIONS

1. At the next EM Quarterly Field Office Managers Meeting, require each FOM to identify one best practice (from Appendix 1) that their Federal office has identified for consideration of implementation (promoting shared practices).
2. Host an EM best practices workshop in Fall 2015 to promote more in-depth sharing amongst the EM complex, that encourages EM leaders and Safety Culture Subject Matter Experts (SMES) to share safety culture practices being implemented across the EM complex.
3. Following the best practices workshop, publish an article in the EM Portal highlighting best practices shared at the EM workshop; distribute throughout EM Headquarters and the field.
4. As part of the ISM Periodic Declaration Guidance, include the requirement for EM Federal and contractor organizations to:
  - a. Conduct a Safety Culture/SCWE self-assessment on a biennial basis (approximately every 18-24 months), and initiate improvement actions in

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<sup>4</sup> Parsons [SR/SWPF]

<sup>5</sup> DOE G 226.1-2A, Policy Requirements Related to Safety Culture, states, "DOE contractors may adopt guidance from DOE G 450.4-1C or the EFCOG documents or they may use various other models for establishing and maintaining a healthy safety culture. As an example, NRC has developed guidance for safety culture, including a SCWE." It relates that DNFSB 2011-1 may result in the revision of DOE G 450.4-1C.

response to identified Areas for Improvement (AFI). NOTE: Guidance for the conduct of Safety Culture/SCWE self-assessments will be provided separately by EM.

- b. Submit a safety culture sustainment plan revision upon completion of the SCWE self-assessment that focuses on areas for improvement (AFIs) identified in their safety culture/SCWE self-assessments and other safety culture monitoring methods/means. In FY 2015, to continue the Department's ongoing safety culture initiative, demonstrate evidence in Safety Culture Focus Areas (and Associated Attributes) improvements in:
    - Leadership/Demonstrated Safety Leadership & Management Engagement and Time in Field. During "Management by Walk Around" focus on quality of time in field (versus the quantity of visits performed) (e.g., line managers listen...ask questions...coach...mentor...reinforce standards and positive behaviors).
    - Employee Engagement/Teamwork and Mutual Respect & Participation in Work Planning and Control. Consider leveraging and building upon existing tools and/or other mechanisms (e.g., Zero Accident Councils [EZAC, PZAC], Employee Safety Teams, all employee announcements, safety bulletins/communications) to prompt and reinforce the desired behaviors identified in DOE G 450.4-1C, Attachment 10.
    - Organizational Learning/Building Credibility and Trust; "a high level of trust is established in the organization." Specifically, focusing on:
      - Line managers encourage and appreciate safety issue and error reporting;
      - Mistakes are used for opportunities to learn rather than blame; and
      - Individuals are recognized and rewarded for demonstrating behaviors consistent with the safety culture principles.
    - Organizational Learning/Questioning Attitude; develop an overall working environment which fosters and acknowledges the value of a "questioning attitude."
5. Transmit this report and results to the DOE Safety Culture Improvement Panel (SCIP), and provide the following recommendations:
    - a. Strengthen DOE contract language and guidance on safety culture, including an update to DOE G 450.4-1C, Attachment 10, based on Departmental learning (previously identified in DOE Consolidated Report EOC).

- b. Review language in DOE O 450.2, Integrated Safety Management, regarding the ISM Champions Council roles and responsibilities which may evolve as a result of the implementation of the Department's Safety Culture Improvement Panel.
- c. Consider benchmarking with commercial nuclear industry, NASA, or DOD regarding safety culture on closure contracts -- for contract language, incentives, and/or resources.

**Appendices:**

Appendix 1: Lessons Learned from Review Process

Appendix 2: Best Safety Culture Practices Identified From Across the EM Complex

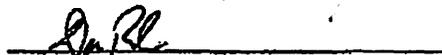
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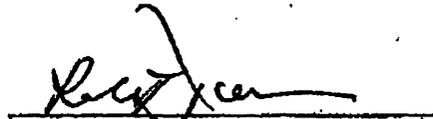
Julie A. Goekner | Team Lead  
Office of Environmental Management



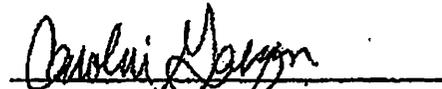
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Chief Nuclear Safety Office  
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## **Appendix 1: Lessons Learned on Review Process**

### **Safety Culture Sustainment Plan Review - EM Complex**

This process is similar to what the complex experienced when conducting the first Integrated Safety Management System review. Expectations were not well defined and it was not known the breadth and depth of what would be submitted. As years of industry experience has taught, safety culture is best not to be regulated. As such, guidance for safety culture sustainment plans was broad in nature to provide maximum flexibility. As a result of this flexibility, significant structural differences in both approach and methodology were seen within the submitted plans, making the reviews difficult and complex. These plans also had to capture historical implementation of all safety culture initiatives providing a baseline to report on in the future, creating more documentation for review.

To evaluate best practices, team members were required to obtain clarification and additional information. In some cases, information was not complete or data was not provided. This required significant additional effort to obtain exhibits. In total over 100+ exhibits were reviewed by team members to arrive at the 60+ best practices captured in this report.

The team recognizes an effort like this will never be conducted for reviewing safety culture sustainment plans again. Future safety culture sustainment plans will be submitted to provide updates to the baseline plans submitted for this effort, much like the annual ISM declarations are conducted today (which this could become a part of).

In the future, the team makes the following recommendations for future submissions of SCSPs:

- 1) Require SCSPs be submitted in a consistent format/structure, with improvement actions categorized under the three ISM Safety Focus Areas (or utilize a table that requires specific information and demonstrates the linkage/connection to one or more Safety Focus Areas and/or associated attributes);
- 2) Require SCSPs be submitted in a searchable pdf format (to enable easy electronic retrievability); and
- 3) Request organizations to provide exhibits (in pdf format) of referenced documents to demonstrate completion of activities (and best practices).

**Appendix 2 - SAFETY CULTURE SUSTAINMENT PLAN REVIEW  
BEST SAFETY CULTURE PRACTICES IDENTIFIED FROM ACROSS THE EM COMPLEX**

BEST PRACTICE	DESCRIPTION / WHY IT'S A BEST PRACTICE	SAFETY FOCUS AREA			Site / Organization
		L	EE	OL	
<b>Safety Culture/SCWE &amp; Other Policy Statements (6)</b>					
<b>SCWE Policy Statement (Federal)</b>	Policy statement signed by Federal leaders. Defines commitment to establish/ sustain a safety culture/SCWE for Federal employees. (OREM-REM-OM-PO-01)	X			OREM
<b>SCWE Policy (Contractor)</b>	Establishes organizational expectations for establishing and maintaining a SCWE, defines the processes for raising concerns, manager/ supervisor responsibilities, and encourages employees to raise concerns. (ITG-p 8/3.1.2)	X			ID-ITG
<b>Policy Expectations for Safety and Behaviors (Contractor)</b>	Reinforces behaviors needed to support a positive safety culture, states, "compliance always comes first, before schedule and cost performance." [Isotek - MLD-048] NOTE: Recognized as a best practice at the NNSA Safety Culture workshop in the fall 2014.	X			OR-Isotek
<b>NSQC Policy (Contractor)</b>	Policy describes management expectations for establishing a NSQC, policy projects, and core values and behaviors. Updated draft policy – which retains those descriptions and adds employee role and responsibility focused on ISM behaviors. (BNI - p. 1/para 1)	X			ORP -BNI/WTP
<b>Safety Culture Policy (Contractor)</b>	Establishes expectations for establishing and creating a SCWE, consistent with DOE ISM. [FBP-PM-POL-0-003] (FBP/p. 1)	X			PPPO-FBP
<b>Anti-Bullying Policy</b>	Defines expectations for behaviors associated with bullying type behaviors. Directly responds to issues identified in the DOE Consolidated Report. [BWCS - POL-072] (BWCS - p. 5)	X	X		PPPO - BWCS
<b>Contract Standards/Language/Expectations (2)</b>					
<b>POMC - Standards for Safety Culture and SCWE</b>	Establishes standard for evaluating performance through multiple means; includes safety culture and SCWE standards, as well as specific/defined measurements and metrics for HIRD and chilling effect.	X		X	OR-UCOR
<b>PEMP - Incentives for Fostering a Nuclear Safety Culture/SCWE</b>	PEMP language promotes a robust Nuclear Safety culture and SCWE. Requires objective evidence including: approved SCWE action plan, improving Corrective Action Program condition report effectiveness, absence of substantiated Harassment Intimidation Retaliation Discrimination and/or Chilling Effect concerns, mitigation of employee concerns and prevention for recurrence. (BWCS - p3) (PPPO - p 3)	X		X	PPPO PPPO-BCWS

**Appendix 2 - SAFETY CULTURE SUSTAINMENT PLAN REVIEW  
BEST SAFETY CULTURE PRACTICES IDENTIFIED FROM ACROSS THE EM COMPLEX**

BEST PRACTICE	DESCRIPTION / WHY IT'S A BEST PRACTICE	SAFETY FOCUS AREA			Site / Organization
		L	EE	OL	
<b>Monitoring Panels, Performance Metrics &amp; Indicators (10)</b>					
<b>NSQC Monitoring Panel</b>	Nuclear Safety & Quality Culture (NSQC) health is measured quarterly via a suite a metrics governed by 24590-WTP-GPG-MGT-0037 and <i>guided by DOE G 450.4-1C, Attachment 10, NEI 09-07</i> , and other industry info. Metrics are collected from Corrective Action Management Program (CAMP), Employee Concerns Program (ECP), Human Resources (HR), and other process/ programs. Used by Leadership Forum comprised of mgmt level monitoring panel and Sr. Leadership Team to evaluate over safety culture of organization. (p 10)				ORP - BNI/WTP
<b>Nuclear Safety Culture Dashboard</b>	Metrics used to monitor safety culture sustainability. Established a nuclear safety culture dashboard to monitor nuclear safety culture performance [demonstrated safety leadership (L); credibility, trust, and reporting of errors (OL)]. Key tool used to assess performance. The panel is the owner of the metric and may adjust the parameters as needed to respond to growth and additional focus areas. (SRR - p 5/V)	X		X	SR-SRR
<b>Safety Culture Monitoring Panel (SCMP)</b>	Provides active and systematic monitoring of Safety Culture performance through multiple means (FBP - p 4) [FBP-PM-CTR-0003, SCMP Charter and FBP-PM-0002, SC Monitoring at the Ports D&D Project - Program Description Document]	X		X	PPPO-FBP
<b>Performance indicators and metrics</b>	Monthly report reviewed by management to monitor safety culture (ORPS Company Level Performance Dashboard & Performance Summary). Revised the Executive Safety Review Board Charter to include the interface with Safety Culture Monitoring Panel (SCMP). (WRPS - p. 4) NOTE: Linked to Safety Culture Monitoring Panel	X		X	ORP-WRPS
<b>Safety Culture Monitoring Panel</b>	Metrics are collected from multiple means (stop work, PER, ECP, HR, surveys) and other process/ programs. Used by Leadership to monitor overall culture related issues. (WRPS - p 1) NOTE: Linked to Performance Indicators and metrics	X		X	ORP-WRPS
<b>SCWE Charter</b>	Charter establishes Fed/contractor review of project SCWE-related data to draw conclusions of current health of safety culture of project. (SPRU - p 2)	X		X	SPRU
<b>Organizational and Safety Culture Improvement Council (OSCIC)</b>	Employee driven council consists of staff members who provide training on safety culture/SCWE, propagate safety culture, and serve as the monitoring and feedback panel to improve safety culture; one senior leader is designated as champion to sponsor the council. (ORP - p 1/I)	X	X	X	ORP
<b>Cultural Growth Initiative (CGI)</b>	Federal program initiated by the Site Mgr to re-build trust - focuses on organizational climate and safety culture; prompted by SCWE self-assessment and survey data. The panel members identify issues & assist in overall improvements (SR - p 2/1).	X	X	X	SR

**Appendix 2 - SAFETY CULTURE SUSTAINMENT PLAN REVIEW  
BEST SAFETY CULTURE PRACTICES IDENTIFIED FROM ACROSS THE EM COMPLEX**

BEST PRACTICE	DESCRIPTION / WHY IT'S A BEST PRACTICE	SAFETY FOCUS AREA			Site / Organization
		L	EE	OL	
<b>Monitoring Panels, Performance Metrics &amp; Indicators (10) (cont)</b>					
<b>ISMS Performance Measures Dashboard / POMC includes Safety Culture &amp; SCWE Metrics</b>	Suite of POMCs (metrics) including leading indicators that measure overall well-being of safety culture & SCWE. This is the 3 <sup>rd</sup> year of SC measures which have morphed over time - include SCWE metrics to measure HIRD, demonstrating application of lessons learned (OL). (UCOR/p 10/2.3.3)	X		X	EMOR-UCOR
<b>Birthday Month Survey</b>	Monthly monitoring of safety culture through safety culture survey administered to all personnel on the month of their birthday. (SRNS)	X	X	X	SR-SRNS
<b>Clear Expectations &amp; Accountability - Behaviors (5)</b>					
<b>Key Behaviors and Cultural Goals</b>	Key behaviors and cultural goals (Exhibit 4), and leadership covenants (Exhibit 5), and accountability model (Exhibit 12) developed in response to 2012 safety culture assessment – all define and clarify expected behaviors, provide clarity on goals/expectations; initiated in response to SCWE self-assessment, tailored to facility to increase accountability. (BNI - p 5 / 2.1.1)				ORP-BNI/WTP
<b>Expectations for All Employees</b>	Describes behavioral attributes necessary to promote a positive organizational climate, safety culture, and SCWE (describes the behaviors and interactions).				ORP
<b>Leadership Teamwork Commitment</b>	Describes behavioral attributes necessary to promote a positive safety culture (e.g., what the behaviors looks like/feel like).				OREM
<b>Operating Principles</b>	Describes core values and behavioral attributes, as well as what they looks like/feels like. Reinforced through a variety of media on a daily basis (including posters, announcements, television monitors, discussing in all hands, etc.) (RL-App C)	X	X	X	RL
<b>Performance Standards</b>	Emphasis on clear expectations and accountability for management/supervisors (and employees) in the performance review process. Communicates and instills management and employee expectations. Performance review process <i>focuses on the ISM safety culture focus areas and attributes (behaviors)</i> - emphasis is on building a relationship of trust, listening, treating employees with respect, demonstrating honest and truthful behavior, teamwork, open communication, and promoting employee confidence in reporting concerns without fear of reprisal. (WEMS - p4/para 3)	X	X	X	PPPO-WEMS

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<b>Approach/Development of Safety Culture Implementation (5)</b>					
<b>Establishment of Nuclear Safety and Quality Culture (NSQC) construct</b>	Identifies and describes the tools used to sustain the nuclear safety quality culture and methodology for monitoring and sustaining the improving culture based on NEI 09-07. This is described in the Nuclear Safety Culture Monitoring Panel (see Organizational Learning).	X		X	ORP-BNI/WTP
<b>Site-wide Consistent Approach &amp; Methodology to Safety Culture Improvement</b>	Consolidated site-wide safety culture initiative; commonality in approach and methodology. The plans identify alignment toward a common vision, thorough incorporation of SC/SCWE principles and practices into systems, structures and processes; as well as a high level of leadership commitment and demonstrated actions to improve the Safety Culture, SCWE, and organizational culture. Improvement actions are directly connected to SCWE OFIs. (ID - p 5/para 3) (CWI - p 4) (ITG - p 4)	X		X	ID ID-CWI ID-ITG
<b>Collective significance review</b>	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 evidence beyond those addressed by individual reports. Recommendations were made as safety culture improvement initiatives. (CWI - p 3 / para 2).	X			ID-CWI
<b>Consolidated site-wide Approach &amp; Methodology to Safety Culture &amp; SCWE Improvement</b>	Site wide consolidated approach utilized for safety culture plans. Individual plans provided, but site-wide approach/vision discussed by SROO; well-planned, coordinated between Federal and contractor organizations; consistent format between plans w/exception of Parsons/SWPF. Demonstrates a high level of leadership commitment and demonstrated actions to improve the Safety Culture, SCWE and organizational culture. (SR/SRR/SRNS/WSI-SRS)	X	X	X	SR SR-SRR SR-SRNS SR-WSI-SRS
<b>Safety Culture Sustainment Plan included diversity &amp; inclusion</b>	Plan demonstrated a clear linkage between improvement actions and the SCWE self-assessment results, the FEVS data, and the impacts/ benefits/ connection to SCWE, Safety Culture, and organizational climate (SR - p 5).	X	X	X	SR

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<b>Safety Culture/SCWE Training (6)</b>					
<b>Safety culture training - New employees</b>	Safety culture training included in new employee/onboarding processes; emphasizes ISM and safety focus areas consistent w/DOE ISM and focuses on organizational behavioral expectations. (ORP - p 1)	X	X	X	ORP
<b>Safety Culture training - New employees</b>	SCWE training provided in on-boarding indoctrination & core training; trained 2300 personnel, including 2300 non-manuals, craft and sub-contractors. Previously recognized by "strength" by the independent safety culture assessment team. (BNI - p 4 / 2.1.1 & p 5 / 2.1.2)	X	X	X	ORP-BNI/WTP
<b>Journey through Leadership training</b>	Structured to provide leadership/ management principles & best business practices to first line managers (and for succession planning); specifically focuses on behaviors in the safety culture attributes identified in DOE G 450.4-1C. (ATL - p 6/para 1)	X		X	ORP-ATL
<b>Organizational Culture - Change Management Program Training</b>	Organizational mandated activity to improve accountability to culture related expectations, management maintains and effectively communicates a priority commitment to ISMS, with clear, formally documented expectations for the behaviors. Addresses culture on-going change activities along w/soliciting input on potential SC improvement opportunities. Completed for existing workforce and is conducted periodically as new workforce is added (recently, on a three month basis). (WRPS - p 4)	X	X	X	ORP-WRPS
<b>Coaching Positive Reinforcement Training</b>	Formal classroom training for CHBVW staff members that focuses on Integrated Safety Management (safety focus areas), VPP, HPI, EM and Big 6. (CHBVW - p 21)	X	X	X	WVDP-CHBVW
<b>Conducted "Right Picture" workshop</b>	Consists of two-part training session for a total of 8 hours, targeted to managers and supervisors, including union leaders/safety reps - <i>Leadership Safety Culture Training</i> and <i>The Right Picture</i> - focuses on values and behaviors to support a positive nuclear safety culture, using DOE G 450.4-1C, Safety Focus Areas. (NWP - p 2)	X		X	WIPP-NWP

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<b>Leadership Actions (8)</b>					
Visible leadership/ sponsorship of safety culture/SCWE	Company President initiated multiple actions to demonstrate safety leadership: <ul style="list-style-type: none"> <li>1-on-1 meetings w/employees within 2 hours of being onsite to discuss behavioral and safety culture expectations (review policy statement);</li> <li>Co-instructs "Speed of Trust" course w/Human Resource Director (required for every employee &amp; contractor) to develop/build trust - [became certified to become instructor];</li> <li>Initiated bagels w/the boss; routine/rotational meeting w/all employees to engage in informal setting to build relationship &amp; listen to issues.</li> </ul>	X	X	X	OR-Isotek
Visible leadership/ sponsorship of safety culture/SCWE	Company President was personally involved in the development <i>Leadership Safety Culture Training</i> and <i>The Right Picture</i> training modules; presents info throughout the course/day, demonstrating personal ownership & reinforcing importance of safety culture implementation. (NWP)	X			WIPP-NWP
Success/ Promotion of Safety Culture & SCWE	Idaho Operations Office Sr. Leadership sponsored contractor participation in the development and delivery of the pilot course for SCWE-199, SCWE for First Line Supervisors; a key deliverable in support of DNFSB 2011-1 (ID-p 5).	X		X	ID
Demonstrated Safety Leadership - Delivery of SCWE-199 Training	Personal commitment of CWI President. Dedicated over two weeks to prepare for and participate in delivery (as one of two Sr. Leader instructors; and the single contractor Sr. Leader from the DOE complex) of the Department's pilot course for SCWE-199, SCWE for First Line Supervisors (NTC & HAMMER) presented at Oak Ridge and Richland. (CWI - p 2)	X			ID-CWI
Safety EXPO - Promoted Open Communication & Fostering an Environment Free From Retribution	The SR safety EXPO is an annual event for the last four years. Similar to other sites in that it has 30-40 booths focused on safety elements; different in that for 2 <sup>nd</sup> year in a row Senior Leaders staff a booth dedicated to engagement with employees, so employees can ask questions in an offsite/casual environment (fostering environment that promotes open communication/environment free from retribution - building trust). For 2014, SRNS had employees sign a banner for personal commitment - <i>safety and security begin with me</i> to support the Voluntary Protection Program. (SRNS - p 3/table)	X	X		SR-SRNS
Leadership Impact Initiative (LII) Workshop	The Leadership Impact Initiative started in 2013 to prepare managers and supervisor to lead their teams to safely and successfully accomplish the mission; defined expectations. (CHPRC - p 4/3.1)	X			RL-CHPRC

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<b>Leadership Actions (8) (cont)</b>					
<b>Leadership Support for Development of Department Pilot SCWE Training Course</b>	CWI dedicated significant time and resources; provided outstanding leadership support (from multiple senior leaders/staff members) for development & delivery of the Department's pilot course, SCWE-199, SCWE for First Line Supervisors, enabling DOE to meet critical deliverables in support of DNFSB 2011-1. (CWI - p 2)	X		X	ID-CWI
<b>Safety Call to Action Plan</b>	Although implemented several years ago, the "Call to action" – demonstrates leadership ownership of safety culture; emphasizes the importance of the safety culture initiative and senior leadership commitment to make it happen. (SRNS)	X	X		SR-SRNS
<b>Safety Culture Survey Administration, Evaluation of Results &amp; Improvement Action Development (4)</b>					
<b>Evaluation of Survey Results - Independent Facilitator</b>	Independent facilitator used to conduct management meetings on Safety Culture and HPO surveys. Fosters open environment for discussions, provides insight and understanding of survey results and communication with workforce. (BWCS - P2)	X	X	X	PPPO-BWCS
<b>Evaluation of Survey Results - Focus Group</b>	Engagement w/employees to develop improvement actions. Established team of 7-8 staff employees was established (approx. 1 person per org) and tasked w/evaluating SC/FEVS survey results to get a "read" into overall rankings. Although no charter defined, developed Feedback Summary (Att A). Results & recommendations presented to Exec Leaders who developed improvement actions (in App B). Exec Team also developed App C as a result of overall org introspective look (prompted by SCWE self-assessment and EVS). (RL - p 2/b)	X	X	X	RL
<b>Evaluation of Survey Data - Panel</b>	The panel convenes to address self-assessment data/results (includes 3 SMEs, labor reps, Safety Sr. Leader, safety managers) to review self-assessment results, ECP data and PI&R data; developed proposed initial Improvement Actions. Presented proposed improvement actions to Pres and COO for approval. Improvement Action plan approved and submitted to Fed org; actions monitored through Performance Indicator. Broad audience including labor – to monitor all sources of input and data that reflect the health of the orgs safety culture.	X	X	X	RL-MSA
<b>Survey Instrument - DOE G 450.4-1C Criteria</b>	BWCS survey instrument for self-assessment referenced/used Safety Focus Areas & Associated Attributes. (BWCS - p2/3 <sup>rd</sup> para)	X	X	X	PPPO-BWCS

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		L	EE	OL	
<b>Miscellaneous Practices (20)</b>					
<b>Disciplinary Review Process</b>	Incorporates ISM behavioral expectations and evaluates potential for Harassment, Intimidation, Retaliation, Discrimination, and/or chilling effect <i>prior</i> to disciplinary action being taken. As cited on page 15, Discipline Review Process, "A thorough review of the facts to determine whether an intentional violation of acceptable work standards, practices or behaviors has occurred and/or if the performance issue was an honest error and there were other, organizational factors which led to the incident." (WRPS - p 2)	X		X	ORP-WRPS
<b>Operational Decision Making Procedure</b>	Documented process and form that formalized/documents the organization's operational decision making process (formal and informal stage, available on line). The written procedure and subsequent implementation was prompted by the results of an INPO-led safety culture assessment findings (and based on benchmarking w/Vogel, VC Summer and Sellafield) and was written to INPO standards; however, it supports risk-informed decision making as discussed in the Safety Focus Areas. (p 2/ Section I) [SRR - Manual S4, Proc AMD.56]	X		X	SR-SRR
<b>Senior Review Board</b>	Senior Management's inclusion of the USW Safety Representative as a member of the Senior Review Board in order to ensure worker's view are given ample opportunity to be heard and considered, even at the highest levels of the organization. (WEMS - p 4/3.1)	X	X	X	PPPO-WEMS
<b>INPO Assist Visit</b>	Independent, high caliber team of qualified experts used to conduct an independent safety culture assessment. Precedent setting as this is the first time INPO has conducted a safety culture assist visit using DOE G 450.4-1C, Integrated Safety Management, Attachment 10, Safety Focus Areas and Associated Attributes, as the standard for measurement (versus the INPO Traits for a Nuclear Safety Culture). (NWP - p 3)	X	X	X	WIPP-NWP
<b>INPO Assistance</b>	Requested INPO assist visit. Utilized approach and methodology in survey administration and development of improvement corrective actions.	X	X	X	SR
<b>Establishment of a NSQC Program Manager</b>	NSQC Program Manager is a full time position, independent of daily project execution demands; assigned to assist line management to ensure NSQC activities are viewed from a safety culture frame of reference. (BNI-p 1/pa 7)	X			ORP-BNI/WTP
<b>SCWE Manager</b>	SCWE Manager is a full time contractor position. Reports directly to the General Manager; establishment of this position demonstrates leadership commitment to the importance of safety culture initiative. (WVDP-p 17)	X			WVDP-CHBWV

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		L	EE	OL	
<b>Miscellaneous Practices (20) (cont)</b>					
<b>Employee Bulletin/ Communication used to reinforce Safety Culture Focus Areas and Associated Attributes</b> ["closing the loop" on a safety issue that impacted employee trust]	An employee bulletin provides an example of how to effectively leverage an employee bulletin to "close the loop" on a safety issues that was impacting trust. Following the identification of an issue in an employee survey, leadership communicated info back to employees utilizing an employee bulletin. The bulletin acknowledged the issue/concern, how it was raised, explains management's approach to addressing the concern, how the concern was prioritized, the rationale behind management's approach/decision, and reemphasized the importance of continuing to raise issues through the various avenues available. The bulletin provides one example of how a safety culture tool can be used to reinforce the Safety Focus Areas and Associated Attributes (e.g., desired behaviors). (p 5/CA 1) <i>Communicating the "why" behind decisions associated with safety issues reinforces a number of Safety Focus Areas and attributes:</i> <i>(L) - demonstrated safety leadership, risk-informed decision making, and open communication and fostering an environment without fear of retaliation;</i> <i>(EE) - personal commitment to everyone's safety; mindful of hazards and controls;</i> <i>(OL) - credibility, trust, and reporting errors and problems; and effective resolution of reported problems.</i>	X	X	X	SR-WSI-SRS
<b>Safety Culture Good Practices Evaluation</b>	A comprehensive report that evaluated best practices of RL site methods, processes, improvement initiatives and leadership actions that support safety culture; used the Safety Focus Areas as the guideline to evaluate best practices (Leadership, Employee Engagement, and Organizational Learning).	X		X	RL
<b>Nuclear Safety Culture Booklet</b>	Nuclear Safety Culture, <i>Transformation Guide to a Legendary Future</i> , focuses on the WIPP organizational values and behaviors necessary to sustain a positive safety culture, ISM, the three Safety Focus Areas, etc. (NWP)	X	X	X	WIPP-NWP
<b>Safety Management Program (SMP) Reviews</b>	Safety Management Program (SMP) info is presented by Mid-level Mgrs to Sr Mgrs in a consistent, highly interactive/ candid environment; promotes Mid-level Mgmt ownership and improves the relationship/ trust between Mgmt levels. (CWI - p 7/OL /3 <sup>RD</sup> bullet)	X		X	ID-CWI
<b>KEYS Program - Identifies At-Risk Behaviors</b>	KEYS - Keeping Everyone and Yourself Safe; part of the ESIT initiatives. At risk behaviors are discussed; actions are taken to apply feedback into future work for process improvement. (ITG - p 6 3.1.1) NOTE: Not considered a BP for safety culture metrics.		X	X	ID-ITG
<b>Cultivation of Union Relationship</b>	With participation of two full time union safety representatives, this establishes a bridge between management and bargaining unit employees to foster a more positive working relationship	X	X	X	ID-CWI

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<b>Miscellaneous Practices (20) (cont)</b>					
<b>Employee Safety Improvement Team (ESIT)</b>	The ESIT is a working committee, includes a union steward as a co-chair. Includes sub-committees which participate in addressing plant wide-issues and in improving relationships with & between management and workforce, incorporates safety culture attributes in interactions. (ITG-p 6 3.1.1)	X	X	X	ID-ITG
<b>Skip Level Meetings</b>	Sr. leaders meet with staff level without presence of middle managers to engage directly with employees, listen to issues and concerns. (EMCBC-p. 10)	X	X	X	EMCBC
<b>Identifying &amp; Employing Measures to Battle Complacency</b>	To combat complacency, the Project utilizes cross-training of personnel who perform repetitive tasks for sustained periods. Also rotates employees to combat complacency due to repetitive tasks (prompted by employee engagement - analysis of "mindful of hazards and controls -- prevention of accidents"). (Moab - p 4)	X	X		Moab
<b>Problem Identification and Resolution</b>	Process for reporting and documenting adverse conditions. Any employee can initiate issues electronically; concerns are prioritized based on safety significance; provides transparency/traceability in resolution of issues; trends evaluated by leadership. [CAMPATS 312-9.04] (ATL-p15/1 <sup>st</sup> bullet)	X	X	X	ORP-ATL
<b>Communications Assessment</b>	Prompted by SCWE self-assessment survey results that identified communications needed improvement. Small focus group feedback resulted in internal communications assessment which identified many opportunities to increase communications with organization/employees. Periodic communication assessment (now performed on biennial basis) identifies which areas leadership needs to focus to improve communications/ engagement with employees. (RL - p3/2c)	X	X	X	RL
<b>Management Engagement</b>	<i>Focuses on conditions and behaviors</i> with a goal of 80% for level I and II managers making field visits (building relationships). Included in POMC review, reported on monthly basis, and consistently exceed goal. (UCOR/p 4/2.1.3)	X		X	OR-UCOR
<b>Questioning attitude (QA) Recognition Program</b>	Started in 3/2014 to capture positive examples of questioning attitude; driven by an event that occurred on site - application of lessons learned (OL). Anyone can nominate someone who exhibits a questioning attitude (including subcontractor). Committee comprised of workforce & management representatives review and select 1-2 individuals/ examples; individual & supervisor recognized at PZAC; example shared via newsletters and thru television monitors. Revisiting types of recognition to keep fresh. Shared as a Best Practice at NNSA/Best Practices workshop. (UCOR/p 9/2.3.1 - 1 <sup>st</sup> bullet)	X	X	X	OR-UCOR

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		L	EE	OL	
<b>EM SITE -- SAFETY CULTURE/SCWE POINTS OF CONTACT</b>					
Organization	Name	Telephone		eMAIL	
		Office	Mobile		
HQ/EM-40	Julie Goeckner	702-295-0592	301-367-0684	<a href="mailto:Julie.Goeckner@em.doe.gov">Julie.Goeckner@em.doe.gov</a>	
EM Consolidated Business Center (EMCBC)	Ken Armstrong	513-246-1375	(513) 316-1078	<a href="mailto:ken.armstrong@emcbc.doe.gov">ken.armstrong@emcbc.doe.gov</a>	
Idaho Operations Office (ID)	Mark Brown	208 526 7065	208 497 8528	<a href="mailto:brownmc@id.doe.gov">brownmc@id.doe.gov</a>	
	Scott Ferrara	208-533-4279	208-351-7753	<a href="mailto:ferrarse@id.doe.gov">ferrarse@id.doe.gov</a>	
ID/CWI	Kevin Daniels	208 533 3475	208 881 8492	<a href="mailto:Kevin.daniels@icp.doe.gov">Kevin.daniels@icp.doe.gov</a>	
ID/ITG	Eddie Magness	208 557 6798	208 521 6942	<a href="mailto:Eddie.magness@amwtp.inl.gov">Eddie.magness@amwtp.inl.gov</a>	
Moab/UMTRA	Don Metzler	970-257-2115	202 834 1820	<a href="mailto:donald.metzler@gjem.doe.gov">donald.metzler@gjem.doe.gov</a>	
Oak Ridge EM (OREM)	Terry Allen	865-574-9210	None	<a href="mailto:allentb@emor.doe.gov">allentb@emor.doe.gov</a>	
OR/UCOR	Libby Gilley	865-241-5312	865-607-5673	<a href="mailto:Libby.gilley@ettp.doe.gov">Libby.gilley@ettp.doe.gov</a>	
OR/WAI-WEMS TRU Project	Mike Gaden	865-574-7621	760-505-6523	<a href="mailto:Mike.Gaden@truproject.com">Mike.Gaden@truproject.com</a>	
OR/Isotek	Jim Bolon	865-241-5707	865-335-8132	<a href="mailto:jjbolon@isotekllc.com">jjbolon@isotekllc.com</a>	
Office of River Protection (ORP)	Brian Harkins	509 376 3567	509 438 0483	<a href="mailto:Brian_a_harkins@orp.doe.gov">Brian a harkins@orp.doe.gov</a>	
ORP/WRPS	Ed Kennedy	509 376 0533	509 438 9283	<a href="mailto:Edward_e_kennedy@rl.gov">Edward e kennedy@rl.gov</a>	
ORP/BNI-WTP	Melinda d'Ouille	509-371-2981	509-942-8429	<a href="mailto:mjdouvil@bechtel.com">mjdouvil@bechtel.com</a>	
ORP/ATL	William (Bill) Leonard	509 373 1820	509 554 7522	<a href="mailto:W_j_iv_bill_leonard@rl.gov">W j iv bill leonard@rl.gov</a>	
Portsmouth Paducah Project Office (PPPO)	Russell McCallister	859-219-4012	859-227-5016	<a href="mailto:russell.mccallister@lex.doe.gov">russell.mccallister@lex.doe.gov</a>	
PPPO/WEMS	Matt Miller	740-897-3828	740-977-8182	<a href="mailto:millerm@wems-llc.com">millerm@wems-llc.com</a>	
PPPO/BWCS	Brenda Mills	859-685-9278	859-312-8408	<a href="mailto:Bgmills@duf6.com">Bgmills@duf6.com</a>	
PPPO/LATA KY	David Kent	270-441-5404	270-816-4993	<a href="mailto:David.kent@lataky.com">David.kent@lataky.com</a>	
PPPO/SST	John Hobbs	270-441-5018	none	<a href="mailto:John.hobbs@swiftstaley.com">John.hobbs@swiftstaley.com</a>	
PPPO/FBP	Robert French	740-897-3496	740-648-0721	<a href="mailto:Bob.french@fbports.com">Bob.french@fbports.com</a>	
PPPO/FFS Paducah (D&D)	Bill Harrison	270-441-6288	270-559-3265	<a href="mailto:Bill.harrison@ffspaducah.com">Bill.harrison@ffspaducah.com</a>	

**Appendix 2 - SAFETY CULTURE SUSTAINMENT PLAN REVIEW  
BEST SAFETY CULTURE PRACTICES IDENTIFIED FROM ACROSS THE EM COMPLEX**

BEST PRACTICE	DESCRIPTION / WHY IT'S A BEST PRACTICE			SAFETY FOCUS AREA			Site / Organization
				L	EE	OL	
<b>Richland Operations Office (RL)</b>	Joe (Ed) Parsons	509-376-2876	509 554 8004				<a href="mailto:joe.parsons@rl.doe.gov">joe.parsons@rl.doe.gov</a>
RL/WCH	Megan Proctor	509 372 9568	509-521-9622				<a href="mailto:mlprocto@wch-rcc.com">mlprocto@wch-rcc.com</a>
RL/CHPRC	Mike Hassel	509 376 3801	509 378 9669				<a href="mailto:Harold_m_hassell@rl.gov">Harold_m_hassell@rl.gov</a>
RL/MSA	Lanette Adams	509 373 9669	509 713 9044				<a href="mailto:Lanette_K_Adams@rl.gov">Lanette K Adams@rl.gov</a>
<b>SPRU</b>	Thomas Cochran	518-395-7201	518-335-5921				<a href="mailto:thomas.cochran@emcbc.doe.gov">thomas.cochran@emcbc.doe.gov</a>
<b>Savannah River Operations Office (SR)</b>	Scott Nicholson	803-952-9299	803-646-2319				<a href="mailto:Scott.nicholson@srs.gov">Scott.nicholson@srs.gov</a>
SR/SRNS	Dean Van Pelt	803-952-9650	803-761-2935				<a href="mailto:dean.vanpelt@srs.gov">dean.vanpelt@srs.gov</a>
SR/SRR	Sandra Hyman	803-208-1507	803-522-4682				<a href="mailto:Sandra.hyman@srs.gov">Sandra.hyman@srs.gov</a>
SR/WSI-SRS	Joyce Hopperton	803-952-7335					<a href="mailto:joyce.hopperton@srs.gov">joyce.hopperton@srs.gov</a>
SR/Parsons (SWPF)	Tom Helms	803-643-1655					<a href="mailto:Tom.helms@parsons.com">Tom.helms@parsons.com</a>
<b>WIPP/Carlsbad Field Office (CBFO)</b>	Jeff Carswell	575-234-7085	575-200-4819				<a href="mailto:Jeff.carswell@cbfo.doe.gov">Jeff.carswell@cbfo.doe.gov</a>
WIPP/NWP	Barbara Hill	575-234-8735					<a href="mailto:Barbara.hill@wipp.ws">Barbara.hill@wipp.ws</a>
<b>WVDP</b>	Dan Stachelski	716-942-4688	716-392-8000				<a href="mailto:daniel.stachelski@wv.doe.gov">daniel.stachelski@wv.doe.gov</a>
CHBWV	Sharon Cook	716-942-2311	716-799-7694				<a href="mailto:Sharon.cook@chbwv.com">Sharon.cook@chbwv.com</a>



**U. S. DEPARTMENT OF ENERGY | OFFICE OF ENVIRONMENTAL MANAGEMENT (EM)  
SAFETY CULTURE SUSTAINMENT PLAN REVIEW | SUMMARY TABLE & PROCESS OVERVIEW**

(2) SCSP Summary Table - WIPP Combined Site  
Specific Feedback

**DATA WITHIN THIS TABLE:** Data within this table captures some, but not all, of the tools and improvements actions identified within the Federal and contractor organizations' submitted Safety Culture Sustainment Plans (SCSPs). Evaluation of each SCSP was based upon the information submitted by each organization. The criteria identified (as discussed in the Summary Report) were utilized to provide objectivity in the review process and eliminate potential individual team member biases based upon knowledge and/or interface with various organizations.

The three columns on the left in the table below, identify three Safety Culture Focus Areas of Leadership, Employee Engagement, and Organizational Learning, as identified in DOE G 450.4-1C, Integrated Safety Management Guide, Attachment 10. These Safety Culture Focus Areas were used to capture data when individual organization's SCSPs categorized improvement actions and tools into one of the three specific Safety Culture Focus Areas. In instances where the SCSP did not identify/categorize the specific Safety Culture Focus Areas, data was captured in "Comment" column of the table on the right. It should be noted that a number of identified improvement actions and tools fell within multiple Safety Culture Focus Areas (and those are so noted in most, but not all, instances).

As identified in the Summary Report, this was the first time EM had initiated such a request, and as such this was a baseline effort. It is recognized this type of review is subjective in nature. To enable a fair and objective review process, many organizations were provided the opportunity to provide supplemental information, which is captured as an "Exhibit" to provide traceability and transparency (and is available hard copy and electronically). Approximately 120 "Exhibits" were submitted by organizations, reviewed to better understand the tool described, and then evaluated for the potential as a "Best Practice" or an "Area for Improvement."

**Best Practices:** Safety culture/SCWE improvement actions that are recognized as industry standard best practices which can be easily adapted to other organizations (shared as lessons learned). Exhibits were obtained to verify principles were implemented consistent with best practices.

**Areas for Improvement (AFI):** Safety culture/SCWE improvement actions that have been identified, but can be further strengthened, in some instances, elevating the practice to a best industry practice. An AFI is not to be interpreted as negative feedback, rather to be used for the sole purpose of improving, as part of a learning organization.

**Unique situations needing further consideration are identified in purple text.** These few unique situations could not be resolved within the scope of this review.

Even with supplemental information obtained, it should be noted that the SCSPs submitted may not be all inclusive, meaning that the SCSPs may not include each and every improvement action/tool an organization has initiated or implemented to improve their safety culture. This Review considered only the safety culture improvement actions/tools identified within SCSPs submitted, as well as supplemental information requested by the team and/or provided by the individual organization. It should be noted that the identification of either one or more "best practice(s)" or AFI within a SCSP or an organization does not reflect upon (positively or negatively), or provide an indication, as to the effectiveness of that organization's safety culture. This Review (of submitted SCSPs) did not evaluate any individual organization's (or any collective DOE site) safety culture or the effectiveness of any specifically identified improvement tool or improvement action.

**RECOMMENDATIONS FOR PSO APPROVAL:** The team provided recommendations to the PSO. The team presented the recommendations to EM-1 in a briefing held on 3/27/2015, as summarized in this table, for each submitted organization's SCSP (consistent with the Department's Implementation Plan as prepared in response to DNFSB 2011-1). The EM Chief of Nuclear Safety orally concurred on the overall recommendations contained in this table, as well as the Summary Report prepared by the team, expressing that CNS participated extensively in the review process. Recommendations for approval, conditional approval or non-approval of each SCSP were developed using the criteria identified in the Summary Report. Many plans were recommended for approval, meaning no follow up actions are recommended by the team at this time. Several plans were recommended for "conditional approval" meaning the team recommended approval dependent upon submission of supplemental documentation of safety culture sustainment improvement tools focused on specific areas (or as otherwise identified).

**EM SAFETY CULTURE SUSTAINMENT PLAN REVIEW SUMMARY TABLE - 4/16/2015**

<p align="center"><b>IDENTIFY Best Practice (BP), Opportunity for Improvement (AFIs)</b>  <i>NOTE: None of the plans requested assistance from HQ/EM-40</i></p>			<p>EM-1 LETTER/DIRECTION FOR SCSPs:  <i>"I expect that you are taking action on improvements to address your site's S/A findings."</i></p>
<p align="center"><b>SAFETY CULTURE FOCUS AREAS</b></p>			<p>Submit a SCSP which identifies:</p> <ol style="list-style-type: none"> <li>1) Specific sustainment tools your site will use;</li> <li>2) Description of the tools;</li> <li>3) Plans and schedules for implementation of the tools.</li> </ol>
LEADERSHIP	EMPLOYEE ENGAGEMENT	ORGANIZATIONAL LEARNING	<p>Must include: Tools and metrics field office and site will implement; suitable for site conditions; in alignment w/departmental actions recommended in consolidated report.</p>

**CARLSBAD FIELD OFFICE (CBFO) / WASTE ISOLATION PILOT PROJECT**

**Carlsbad Field Office (CBFO) | 4 pgs**

<ul style="list-style-type: none"> <li>• <b>BP: INPO assist visit scheduled for 1/2015 (p 3).</b> Independent, high caliber team of qualified experts used to conduct an assist visit to led by INPO using DOE G 450.4-1C, Attach 10, Safety Culture Focus Areas and Associated Attributes as the standard for measurement (versus the INPO Attributes for a Nuclear Safety Culture).</li> </ul>		<ul style="list-style-type: none"> <li>• The plan demonstrated:                             <ul style="list-style-type: none"> <li>• The EM-1 deliverable was met (in terms of providing "a plan" and tools); however, neither metrics/indicators or a schedule were provided</li> <li>• Improvement actions were not linked to SCWE S/A OFIs.</li> <li>• Improvement actions were NOT linked to DOE Consolidated EOC.</li> <li>• There is good intent by leadership to implement safety culture/SCWE as evidenced by the implementation of the best practice. However, the leadership tools identified were focused on external activities impacting the organization (e.g., reviews and training) rather than identification of tools that focus on "leader behaviors" (e.g., demonstrated safety leadership) or tools that demonstrate the organization has applied learning from training to improve the safety culture within the organization. Specific tools were not clearly identified for SCWE S/A OFIs in the Safety Culture Focus Area of Leadership (Demonstrated safety leadership). In addition there was no identification of tools to provide oversight of the contractor's implementation of safety culture.</li> </ul> </li> <li>• <b>AFI: The plan could be clear with more detail:</b> <ul style="list-style-type: none"> <li>• Linkage of improvement actions to SCWE S/A OFIs</li> <li>• Linkage of improvement actions to DOE consolidated report (EOC)</li> <li>• Oversight of contractor implementation of safety culture;</li> <li>• A schedule for improvement actions;</li> <li>• Metrics and/or indicators to measure safety culture (Federal and/or contractor organization).</li> </ul> </li> </ul> <p>As cited in the best practices, WIPP (CBFO/NWP) leadership invited INPO to conduct a safety culture assist visit for the purpose of determining what degree the facility has a health safety culture, a healthy respect for nuclear safety, and that nuclear safety is not compromised by production priorities. WIPP is to be commended for initiating this type of assist visit as it supports the very tenets of a learning organization.</p> <p>Consistent with the organizational learning Safety Culture Focus Area, the recipient organization should be</p>
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**EM SAFETY CULTURE SUSTAINMENT PLAN REVIEW SUMMARY TABLE - 4/16/2015**

IDENTIFY Best Practice (BP), Opportunity for Improvement (AFIs) <i>NOTE: None of the plans requested assistance from HQ/EM-40</i>			EM-1 LETTER/DIRECTION FOR SCSPs: <i>"I expect that you are taking action on improvements to address your site's S/A findings."</i>
SAFETY CULTURE FOCUS AREAS			Submit a SCSP which identifies: 1) Specific sustainment tools your site will use; 2) Description of the tools; 3) Plans and schedules for implementation of the tools.
LEADERSHIP	EMPLOYEE ENGAGEMENT	ORGANIZATIONAL LEARNING	Must include: Tools and metrics field office and site will implement; suitable for site conditions; in alignment w/departmental actions recommended in consolidated report.
			<p>provided the opportunity to "demonstrate continuous improvement by integrating the information obtained" from the recommendations and feedback "to improve systems, structures, processes, and systems" to ultimately strengthen the safety culture. As such, CBFO and NWP need adequate time to integrate recommendations provided by INPO into existing improvement actions or identify additional improvement actions.</p> <p><b>EM/HQ has identified a recognized expert in nuclear safety culture to assist in providing expertise and mentoring at CBFO and NWP.</b></p> <p>NOTE: The INPO safety culture assist visit review and/or report did not influence the recommendation for this Safety Culture Sustainment Plan.</p> <p><b>RECOMMENDATION: Conditional Approval</b></p> <p>Dependent upon:</p> <ul style="list-style-type: none"> <li>• Submission of a supplemental safety culture sustainment improvement tools, or existing documentation, addressing ongoing improvements for:             <ul style="list-style-type: none"> <li>• SCWE self-assessment OFIs, specifically in the Safety Culture Focus Areas of Leadership (demonstrated safety leadership)</li> <li>• Organizational Learning (Performance monitoring through multiple means)                 <ul style="list-style-type: none"> <li>• Oversight of the contractor's implementation of safety culture;</li> <li>• Development of metrics/indicators to measure safety culture/SCWE (for Federal and contractor organizations);</li> </ul> </li> </ul> </li> <li>• Prepared consistent with prior EM-1 guidance;</li> <li>• EM-40 review of supplemental Safety Culture Sustainment Plan, or existing documentation, within 30 days of submission; and</li> <li>• Approval by EM-1, with concurrence by the Chief of Nuclear Safety.</li> </ul>

**EM SAFETY CULTURE SUSTAINMENT PLAN REVIEW SUMMARY TABLE - 4/16/2015**

<b>IDENTIFY Best Practice (BP), Opportunity for Improvement (AFIs)</b> <i>NOTE: None of the plans requested assistance from HQ/EM-40</i>			<b>EM-1 LETTER/DIRECTION FOR SCSPs:</b> <i>"I expect that you are taking action on improvements to address your site's S/A findings."</i>
<b>SAFETY CULTURE FOCUS AREAS</b>			<b>Submit a SCSP which identifies:</b> 1) Specific sustainment tools your site will use; 2) Description of the tools; 3) Plans and schedules for implementation of the tools.
LEADERSHIP	EMPLOYEE ENGAGEMENT	ORGANIZATIONAL LEARNING	Must include: Tools and metrics field office and site will implement; suitable for site conditions; in alignment w/departmental actions recommended in consolidated report.
<b>Nuclear Waste Partnership, LLC (NWP)   5 pages</b>			
<ul style="list-style-type: none"> <li>• <b>BP: INPO assist visit scheduled for 1/2015 (p 3).</b> Independent, high caliber team of qualified experts used to conduct an assist visit to led by INPO using DOE G 450.4-1C, Attach 10, Safety Culture Focus Areas and Associated Attributes as the standard for measurement (versus the INPO Attributes for a Nuclear Safety Culture).</li> <li>• <b>BP: Conducted "Right Picture" workshop (P 2) [Exhibit 1 &amp; 2]</b> Consists of two-part training session for a total of 8 hours, targeted to managers and supervisors, including union leaders/safety reps - <i>Leadership Safety Culture Training and The Right Picture</i> - focuses on values and behaviors to support a nuclear safety culture, using DOE G 450.4-1C, Safety Culture Focus Areas.</li> <li>• <b>BP: Leader is visible sponsor of safety culture/SCWE.</b>  <i>Follow up conversation:</i> The President of the company was personally involved in the development of both the <i>Leadership Safety Culture Training</i> </li> </ul>			<ul style="list-style-type: none"> <li>• The plan demonstrated:                             <ul style="list-style-type: none"> <li>• The EM-1 deliverable was met in terms of providing "a plan," tools, and a generic schedule; however, metrics or indicators were not provided.</li> <li>• Improvement actions were linked to organization's SCWE S/A.  <i>Follow up conversation:</i> Initial documentation did not provide a link between identified tools/improvement actions and SCWE S/A OFIs. NWP provided additional documentation that demonstrated a Safety Culture Improvement Plan prepared in response to multiple Accident Investigation Reports and Judgments of Need identified in the reports (see below). NWP's Safety Culture Improvement Plan provided a detailed schedule for each improvement actions.</li> <li>• Improvement actions were indirectly linked to DOE Consolidated Report EOC (p. 1).</li> <li>• Leadership commitment to improve safety culture.</li> </ul>                             Although the plan does not directly discuss the linkage to the self-assessment OFIs, the plan responds to multiple Accident Investigation Board reports and a root cause analysis of the WIPP safety culture. The plan also provides, linkage to DOE G 450.4-1C Safety Culture Focus Areas, and specifically addresses the areas identified in the DOE Consolidated Report EOC. The plan identifies specific actions with deliverable dates, broken down by the three Safety Culture Focus Areas.  <b>AFI: The plan could be clear with more detail:</b> <ul style="list-style-type: none"> <li>• <b>Metrics and/or indicators to measure safety culture (Federal and/or contractor organization).</b></li> </ul> </li> <li>• <b>BP: Safety Culture Booklet [Exhibit 6]</b>  <i>Follow up conversation:</i> Nuclear Safety Culture, <i>Transformation Guide to a Legendary Future</i>, focuses on the WIPP organizational values and behaviors necessary to sustain a positive safety culture, ISM, the three Safety Culture Focus Areas, etc.                             </li> </ul> <p>As cited in the best practices, WIPP (CBFO/NWP) leadership invited INPO to conduct a safety culture assist visit for the purpose of determining the health of the site's safety culture and respect for nuclear safety along with determining if nuclear safety is compromised by production priorities. WIPP is to be commended for initiating this type of assist visit as it supports the very tenets of a learning organization.</p> <p>Consistent with the organizational learning Safety Culture Focus Area, the recipient organization should be</p>

**EM SAFETY CULTURE SUSTAINMENT PLAN REVIEW SUMMARY TABLE - 4/16/2015**

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<b>SAFETY CULTURE FOCUS AREAS</b>			<b>Submit a SCSP which identifies:</b>
<b>LEADERSHIP</b>	<b>EMPLOYEE ENGAGEMENT</b>	<b>ORGANIZATIONAL LEARNING</b>	1) Specific sustainment tools your site will use; 2) Description of the tools; 3) Plans and schedules for implementation of the tools.
			Must include: Tools and metrics field office and site will implement; suitable for site conditions; in alignment w/departmental actions recommended in consolidated report.
<p>and <i>The Right Picture</i> training modules, and often is present for the entire day to support the presentation of the course, demonstrating personal ownership for the responsibility for implementing a positive safety culture.</p> <ul style="list-style-type: none"> <li>WIPP-Wide Nuclear Culture Steering Team (p 3). [Exhibit 3] <u>Follow up conversation:</u> The committee has been active since approximately October 2014, operating under a draft charter pending approval. The charter has recently been revised to address the Accident Investigation Board Report and Judgment of Need 24.</li> </ul>			<p>provided the opportunity to "demonstrate continuous improvement by integrating the information obtained" from the recommendations and feedback "to improve systems, structures, and processes," to ultimately strengthen the safety culture. As such, CBFO and NWP need adequate time to integrate recommendations provided by INPO into existing improvement actions or identify additional improvement actions.</p> <p>EM/HQ has identified a recognized expert in nuclear safety culture to assist in providing expertise and mentoring at CBFO and NWP.</p> <p>NOTE: The INPO safety culture assist visit review and/or report did not influence the review of this Safety Culture Sustainment Plan.</p> <p><b>RECOMMENDATION: Approval</b></p>



**U. S. DEPARTMENT OF ENERGY | OFFICE OF ENVIRONMENTAL MANAGEMENT (EM)  
SAFETY CULTURE SUSTAINMENT PLAN REVIEW | SUMMARY TABLE & PROCESS OVERVIEW**

(2a) SCSP Summary Table - WIPP - CBFO Site Specific Feedback

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The three columns on the left in the table below, identify three Safety Culture Focus Areas of Leadership, Employee Engagement, and Organizational Learning, as identified in DOE G 450.4-1C, Integrated Safety Management Guide, Attachment 10. These Safety Culture Focus Areas were used to capture data when individual organization's SCSPs categorized improvement actions and tools into one of the three specific Safety Culture Focus Areas. In instances where the SCSP did not identify/categorize the specific Safety Culture Focus Areas, data was captured in "Comment" column of the table on the right. It should be noted that a number of identified improvement actions and tools fell within multiple Safety Culture Focus Areas (and those are so noted in most, but not all, instances).

As identified in the Summary Report, this was the first time EM had initiated such a request, and as such this was a baseline effort. It is recognized this type of review is subjective in nature. To enable a fair and objective review process, many organizations were provided the opportunity to provide supplemental information, which is captured as an "Exhibit" to provide traceability and transparency (and is available hard copy and electronically). Approximately 120 "Exhibits" were submitted by organizations, reviewed to better understand the tool described, and then evaluated for the potential as a "Best Practice" or an "Area for Improvement."

**Best Practices:** Safety culture/SCWE improvement actions that are recognized as industry standard best practices which can be easily adapted to other organizations (shared as lessons learned). Exhibits were obtained to verify principles were implemented consistent with best practices.

**Areas for Improvement (AFI):** Safety culture/SCWE improvement actions that have been identified, but can be further strengthened, in some instances, elevating the practice to a best industry practice. An AFI is not to be interpreted as negative feedback, rather to be used for the sole purpose of improving, as part of a learning organization.

**Unique situations needing further consideration are identified in purple text.** These few unique situations could not be resolved within the scope of this review.

Even with supplemental information obtained, it should be noted that the SCSPs submitted may not be all inclusive, meaning that the SCSPs may not include each and every improvement action/tool an organization has initiated or implemented to improve their safety culture. This Review considered only the safety culture improvement actions/tools identified within SCSPs submitted, as well as supplemental information requested by the team and/or provided by the individual organization. It should be noted that the identification of either one or more "best practice(s)" or AFI within a SCSP or an organization does not reflect upon (positively or negatively), or provide an indication, as to the effectiveness of that organization's safety culture. This Review (of submitted SCSPs) did not evaluate any individual organization's (or any collective DOE site) safety culture or the effectiveness of any specifically identified improvement tool or improvement action.

**RECOMMENDATIONS FOR PSO APPROVAL:** The team provided recommendations to the PSO. The team presented the recommendations to EM-1 in a briefing held on 3/27/2015, as summarized in this table, for each submitted organization's SCSP (consistent with the Department's Implementation Plan as prepared in response to DNFSB 2011-1). The EM Chief of Nuclear Safety orally concurred on the overall recommendations contained in this table, as well as the Summary Report prepared by the team, expressing that CNS participated extensively in the review process. Recommendations for approval, conditional approval or non-approval of each SCSP were developed using the criteria identified in the Summary Report. Many plans were recommended for approval, meaning no follow up actions are recommended by the team at this time. Several plans were recommended for "conditional approval" meaning the team recommended approval dependent upon submission of supplemental documentation of safety culture sustainment improvement tools focused on specific areas (or as otherwise identified).

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<b>IDENTIFY Best Practice (BP), Opportunity for Improvement (AFIs)</b> <i>NOTE: None of the plans requested assistance from HQ/EM-40</i>			<b>EM-1 LETTER/DIRECTION FOR SCSPs:</b> <i>"I expect that you are taking action on improvements to address your site's S/A findings."</i>
			Submit a SCSP which identifies: 1) Specific sustainment tools your site will use; 2) Description of the tools; 3) Plans and schedules for implementation of the tools.  Must include: Tools and metrics field office and site will implement; suitable for site conditions; in alignment w/departmental actions recommended in consolidated report.
<b>SAFETY CULTURE FOCUS AREAS</b>			
<b>LEADERSHIP</b>	<b>EMPLOYEE ENGAGEMENT</b>	<b>ORGANIZATIONAL LEARNING</b>	

<b>CARLSBAD FIELD OFFICE (CBFO) / WASTE ISOLATION PILOT PROJECT</b>			
<b>Carlsbad Field Office (CBFO)   4 pgs</b>			
<ul style="list-style-type: none"> <li>BP: INPO assist visit scheduled for 1/2015 (p 3). Independent, high caliber team of qualified experts used to conduct an assist visit to led by INPO using DOE G 450.4-1C, Attach 10, Safety Culture Focus Areas and Associated Attributes as the standard for measurement (versus the INPO Attributes for a Nuclear Safety Culture).</li> </ul>			<ul style="list-style-type: none"> <li>The plan demonstrated:                             <ul style="list-style-type: none"> <li>The EM-1 deliverable was met (in terms of providing "a plan" and tools); however, neither metrics/indicators or a schedule were provided</li> <li>Improvement actions were not linked to SCWE S/A OFIs.</li> <li>Improvement actions were NOT linked to DOE Consolidated EOC.</li> <li>There is good intent by leadership to implement safety culture/SCWE as evidenced by the implementation of the best practice. However, the leadership tools identified were focused on external activities impacting the organization (e.g., reviews and training) rather than identification of tools that focus on "leader behaviors" (e.g., demonstrated safety leadership) or tools that demonstrate the organization has applied learning from training to improve the safety culture within the organization. Specific tools were not clearly identified for SCWE S/A OFIs in the Safety Culture Focus Area of Leadership (Demonstrated safety leadership). In addition there was no identification of tools to provide oversight of the contractor's implementation of safety culture.</li> </ul> </li> <li>AFI: The plan could be clear with more detail:                             <ul style="list-style-type: none"> <li>Linkage of improvement actions to SCWE S/A OFIs</li> <li>Linkage of improvement actions to DOE consolidated report (EOC)</li> <li>Oversight of contractor implementation of safety culture;</li> <li>A schedule for improvement actions;</li> <li>Metrics and/or indicators to measure safety culture (Federal and/or contractor organization).</li> </ul> </li> </ul> <p>As cited in the best practices, WIPP (CBFO/NWP) leadership invited INPO to conduct a safety culture assist visit for the purpose of determining what degree the facility has a health safety culture, a healthy respect for nuclear safety, and that nuclear safety is not compromised by production priorities. WIPP is to be commended for initiating this type of assist visit as it supports the very tenets of a learning organization.</p> <p>Consistent with the organizational learning Safety Culture Focus Area, the recipient organization should be</p>

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			<p>provided the opportunity to "demonstrate continuous improvement by integrating the information obtained" from the recommendations and feedback "to improve systems, structures, processes, and systems" to ultimately strengthen the safety culture. As such, CBFO and NWP need adequate time to integrate recommendations provided by INPO into existing improvement actions or identify additional improvement actions.</p> <p>EM/HQ has identified a recognized expert in nuclear safety culture to assist in providing expertise and mentoring at CBFO and NWP.</p> <p>NOTE: The INPO safety culture assist visit review and/or report did not influence the recommendation for this Safety Culture Sustainment Plan.</p> <p><b>RECOMMENDATION: Conditional Approval</b></p> <p>Dependent upon:</p> <ul style="list-style-type: none"> <li>• Submission of a supplemental safety culture sustainment improvement tools, or existing documentation, addressing ongoing improvements for: <ul style="list-style-type: none"> <li>• SCWE self-assessment OFIs, specifically in the Safety Culture Focus Areas of Leadership (demonstrated safety leadership)</li> <li>• Organizational Learning (Performance monitoring through multiple means) <ul style="list-style-type: none"> <li>• Oversight of the contractor's implementation of safety culture;</li> <li>• Development of metrics/indicators to measure safety culture/SCWE (for Federal and contractor organizations);</li> </ul> </li> </ul> </li> <li>• Prepared consistent with prior EM-1 guidance;</li> <li>• EM-40 review of supplemental Safety Culture Sustainment Plan, or existing documentation, within 30 days of submission; and</li> <li>• Approval by EM-1, with concurrence by the Chief of Nuclear Safety.</li> </ul>



U. S. DEPARTMENT OF ENERGY | OFFICE OF ENVIRONMENTAL MANAGEMENT (EM)  
SAFETY CULTURE SUSTAINMENT PLAN REVIEW | SUMMARY TABLE & PROCESS OVERVIEW

(2b) SCSP Summary Table - WIPP - NWP Site  
Specific Feedback

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The three columns on the left in the table below, identify three Safety Culture Focus Areas of Leadership, Employee Engagement, and Organizational Learning, as identified in DOE G 450.4-1C, Integrated Safety Management Guide, Attachment 10. These Safety Culture Focus Areas were used to capture data when individual organization's SCSPs categorized improvement actions and tools into one of the three specific Safety Culture Focus Areas. In instances where the SCSP did not identify/categorize the specific Safety Culture Focus Areas, data was captured in "Comment" column of the table on the right. It should be noted that a number of identified improvement actions and tools fell within multiple Safety Culture Focus Areas (and those are so noted in most, but not all, instances).

As identified in the Summary Report, this was the first time EM had initiated such a request, and as such this was a baseline effort. It is recognized this type of review is subjective in nature. To enable a fair and objective review process, many organizations were provided the opportunity to provide supplemental information, which is captured as an "Exhibit" to provide traceability and transparency (and is available hard copy and electronically). Approximately 120 "Exhibits" were submitted by organizations, reviewed to better understand the tool described, and then evaluated for the potential as a "Best Practice" or an "Area for Improvement."

**Best Practices:** Safety culture/SCWE improvement actions that are recognized as industry standard best practices which can be easily adapted to other organizations (shared as lessons learned). Exhibits were obtained to verify principles were implemented consistent with best practices.

**Areas for Improvement (AFI):** Safety culture/SCWE improvement actions that have been identified, but can be further strengthened, in some instances, elevating the practice to a best industry practice. An AFI is not to be interpreted as negative feedback, rather to be used for the sole purpose of improving, as part of a learning organization.

**Unique situations needing further consideration are identified in purple text.** These few unique situations could not be resolved within the scope of this review.

Even with supplemental information obtained, it should be noted that the SCSPs submitted may not be all inclusive, meaning that the SCSPs may not include each and every improvement action/tool an organization has initiated or implemented to improve their safety culture. This Review considered only the safety culture improvement actions/tools identified within SCSPs submitted, as well as supplemental information requested by the team and/or provided by the individual organization. It should be noted that the identification of either one or more "best practice(s)" or AFI within a SCSP or an organization does not reflect upon (positively or negatively), or provide an indication, as to the effectiveness of that organization's safety culture. This Review (of submitted SCSPs) did not evaluate any individual organization's (or any collective DOE site) safety culture or the effectiveness of any specifically identified improvement tool or improvement action.

**RECOMMENDATIONS FOR PSO APPROVAL:** The team provided recommendations to the PSO. The team presented the recommendations to EM-1 in a briefing held on 3/27/2015, as summarized in this table, for each submitted organization's SCSP (consistent with the Department's Implementation Plan as prepared in response to DNFSB 2011-1). The EM Chief of Nuclear Safety orally concurred on the overall recommendations contained in this table, as well as the Summary Report prepared by the team, expressing that CNS participated extensively in the review process. Recommendations for approval, conditional approval or non-approval of each SCSP were developed using the criteria identified in the Summary Report. Many plans were recommended for approval, meaning no follow up actions are recommended by the team at this time. Several plans were recommended for "conditional approval" meaning the team recommended approval dependent upon submission of supplemental documentation of safety culture sustainment improvement tools focused on specific areas (or as otherwise identified).

**EM SAFETY CULTURE SUSTAINMENT PLAN REVIEW SUMMARY TABLE - 4/16/2015**

<p align="center"><b>IDENTIFY Best Practice (BP), Opportunity for Improvement (AFIs)</b>                  NOTE: None of the plans requested assistance from HQ/EM-40</p>			<p><b>EM-1 LETTER/DIRECTION FOR SCSPs:</b>                  "I expect that you are taking action on improvements to address your site's S/A findings."</p>
			<p>Submit a SCSP which identifies:</p> <ol style="list-style-type: none"> <li>1) Specific sustainment tools your site will use;</li> <li>2) Description of the tools;</li> <li>3) Plans and schedules for implementation of the tools.</li> </ol> <p>Must include: Tools and metrics field office and site will implement; suitable for site conditions; in alignment w/departmental actions recommended in consolidated report.</p>
<b>SAFETY CULTURE FOCUS AREAS</b>			
<b>LEADERSHIP</b>	<b>EMPLOYEE ENGAGEMENT</b>	<b>ORGANIZATIONAL LEARNING</b>	

**Nuclear Waste Partnership, LLC (NWP) | 5 pages**

<ul style="list-style-type: none"> <li>• <b>BP: INPO assist visit scheduled for 1/2015 (p 3).</b> Independent, high caliber team of qualified experts used to conduct an assist visit to led by INPO using DOE G 450.4-1C, Attach 10, Safety Culture Focus Areas and Associated Attributes as the standard for measurement (versus the INPO Attributes for a Nuclear Safety Culture).</li> <li>• <b>BP: Conducted "Right Picture" workshop (P 2)</b> [Exhibit 1 &amp; 2] Consists of two-part training session for a total of 8 hours, targeted to managers and supervisors, including union leaders/safety reps - <i>Leadership Safety Culture Training and The Right Picture</i> - focuses on values and behaviors to support a nuclear safety culture, using DOE G 450.4-1C, Safety Culture Focus Areas.</li> <li>• <b>BP: Leader is visible sponsor of safety culture/SCWE.</b>                  Follow up conversation: The President of the company was personally involved in the</li> </ul>		<ul style="list-style-type: none"> <li>• The plan demonstrated:                         <ul style="list-style-type: none"> <li>• The EM-1 deliverable was met in terms of providing "a plan," tools, and a generic schedule; however, metrics or indicators were not provided.</li> <li>• Improvement actions were linked to organization's SCWE S/A.                              Follow up conversation: Initial documentation did not provide a link between identified tools/improvement actions and SCWE S/A OFIs. NWP provided additional documentation that demonstrated a Safety Culture Improvement Plan prepared in response to multiple Accident Investigation Reports and Judgments of Need identified in the reports (see below). NWP's Safety Culture Improvement Plan provided a detailed schedule for each improvement actions.</li> <li>• Improvement actions were indirectly linked to DOE Consolidated Report EOC (p. 1).</li> <li>• Leadership commitment to improve safety culture.</li> </ul> <p>Although the plan does not directly discuss the linkage to the self-assessment OFIs, the plan responds to multiple Accident Investigation Board reports and a root cause analysis of the WIPP safety culture. The plan also provides, linkage to DOE G 450.4-1C Safety Culture Focus Areas, and specifically addresses the areas identified in the DOE Consolidated Report EOC. The plan identifies specific actions with deliverable dates, broken down by the three Safety Culture Focus Areas.</p> <p><b>AFI: The plan could be clear with more detail:</b></p> <ul style="list-style-type: none"> <li>• <b>Metrics and/or indicators to measure safety culture (Federal and/or contractor organization).</b></li> </ul> <li>• <b>BP: Safety Culture Booklet</b> [Exhibit 6]                  Follow up conversation: Nuclear Safety Culture, <i>Transformation Guide to a Legendary Future</i>, focuses on the WIPP organizational values and behaviors necessary to sustain a positive safety culture, ISM, the three Safety Culture Focus Areas, etc.</li> </li></ul> <p>As cited in the best practices, WIPP (CBFO/NWP) leadership invited INPO to conduct a safety culture assist visit for the purpose of determining the health of the site's safety culture and respect for nuclear safety along with determining if nuclear safety is compromised by production priorities. WIPP is to be commended for initiating this type of assist visit as it supports the very tenets of a learning organization.</p>
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**EM SAFETY CULTURE SUSTAINMENT PLAN REVIEW SUMMARY TABLE - 4/16/2015**

IDENTIFY Best Practice (BP), Opportunity for Improvement (AFIs) <i>NOTE: None of the plans requested assistance from HQ/EM-40</i>			EM-1 LETTER/DIRECTION FOR SCSPs: <i>"I expect that you are taking action on improvements to address your site's S/A findings."</i>
SAFETY CULTURE FOCUS AREAS			Submit a SCSP which identifies: 1) Specific sustainment tools your site will use; 2) Description of the tools; 3) Plans and schedules for implementation of the tools.
LEADERSHIP	EMPLOYEE ENGAGEMENT	ORGANIZATIONAL LEARNING	Must include: Tools and metrics field office and site will implement; suitable for site conditions; in alignment w/departmental actions recommended in consolidated report.
<p>development of both the <i>Leadership Safety Culture Training</i> and <i>The Right Picture</i> training modules, and often is present for the entire day to support the presentation of the course, demonstrating personal ownership for the responsibility for implementing a positive safety culture.</p> <ul style="list-style-type: none"> <li>WIPP-Wide Nuclear Culture Steering Team (p 3). [Exhibit 3] <u>Follow up conversation:</u> The committee has been active since approximately October 2014, operating under a draft charter pending approval. The charter has recently been revised to address the Accident Investigation Board Report and Judgment of Need 24.</li> </ul>			<p>Consistent with the organizational learning Safety Culture Focus Area, the recipient organization should be provided the opportunity to "demonstrate continuous improvement by integrating the information obtained" from the recommendations and feedback "to improve systems, structures, and processes," to ultimately strengthen the safety culture. As such, CBFO and NWP need adequate time to integrate recommendations provided by INPO into existing improvement actions or identify additional improvement actions.</p> <p><b>EM/HQ has identified a recognized expert in nuclear safety culture to assist in providing expertise and mentoring at CBFO and NWP.</b></p> <p><b>NOTE: The INPO safety culture assist visit review and/or report did not influence the review of this Safety Culture Sustainment Plan.</b></p> <p><b>RECOMMENDATION: Approval</b></p>