

United States Government

Department of Energy

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: OCT 15 2014

REPLY TO
ATTN OF: CBFO:OOM:RZ:MAG:14-0067:UFC 3790.00

SUBJECT: Carlsbad Field Office Submittal of Safety Culture Sustainment Plan

TO: James A. Hutton, Associate Deputy Assistant Secretary
Safety, Security and Quality Programs, EM-40

On June 27, 2014, the Acting Assistant Secretary for Environmental Management (EM), EM-1, issued a directive for all field offices and contractors to develop Safety Culture Sustainment Plans (SCSP) to ensure strong and sustained safety cultures throughout EM. In an effort to ensure a sustained safety culture at the U.S. Department of Energy Carlsbad Field Office (CBFO) and the Waste Isolation Pilot Plant, the CBFO developed this SCSP to describe the tools to pursue continuous improvement and measure progress towards these improvements. The attached sustainment plan discusses improvements in the Leadership Focus Area, Employee/Worker Engagement Focus Area, and the Organizational Learning Focus Area.

Questions concerning this matter may be addressed to Ms. Rochelle Zimmerman at (575) 234-7406. Thank you.

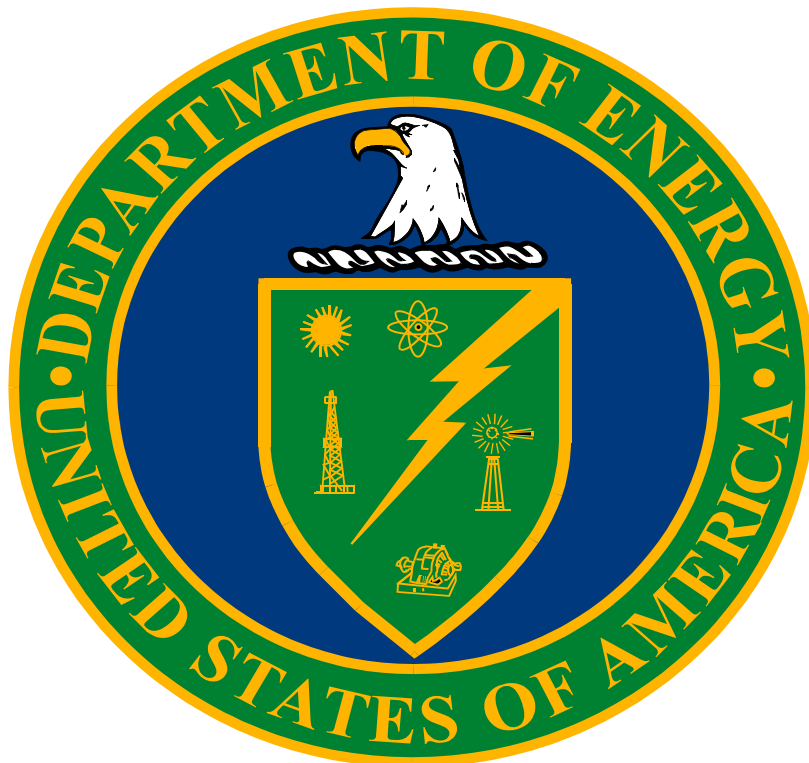
Jose R. Franco
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Attachment

cc: w/attachment
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**Carlsbad Field Office
Safety Culture Sustainment Plan**

October 2014



Carlsbad Field Office Safety Culture Sustainment Plan

BACKGROUND/PURPOSE

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

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

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

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

SUSTAINMENT PLAN

The DOE-CBFO is committed to ensuring a strong safety conscious work environment. To accomplish this goal, a number of methods will be used to sustain and improve upon the DOE-CBFO work environment. The CBFO developed actions and activities in accordance with the Safety Culture Focus Areas and attributes defined in Attachment 10 of DOE G 450.4-1C, *Integrated Safety Management System Guide*. In the DOE "Consolidated Report for Defense Nuclear Facilities Safety Board Recommendation 2011-1 Action 2-8 and 2-9, *Safety Culture at the Waste Treatment and Immobilization Plant*," dated May 2014, the report identifies four primary attributes for safety culture continuous improvement at DOE sites. This sustainment plan discusses DOE-CBFO improvements in those areas (listed under their associated focus areas):

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

Leadership

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

- Integrated Safety Management System (ISMS) Review – Environmental Management Consolidated Business Center (EMCBC) will conduct a Full ISMS Review of both the CBFO and the Waste Isolation Pilot Plant (WIPP) management and operating contractor, Nuclear Waste Partnerships LLC (NWP), in Spring/Summer 2015.
- CBFO Management commits to documented field assessments at specified frequency as part of their annual performance plan.

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

- Institute of Nuclear Power Operations (INPO) training offered to select CBFO and NWP staff in December 2014.
- INPO WIPP Assist Visit conducted in January 2015.
- Safety Conscious Work Environment (SCWE) training conducted by EM-HQ personnel (November 2014)

Employee/Worker Engagement

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

- Monthly All Hands Meetings that provide information and foster questioning attitude.
- Steering Committee comprised of management and staff to address organizational communications and teamwork issues

Organizational Learning

Credibility, Trust, and Reporting Errors and Problems: The DOE-CBFO SCWE self-assessment identified this as a potential vulnerability. Specific actions and tools being implemented include:

- Formal evaluation of the Employee Viewpoint Survey responses with development and implementation of corrective actions, incorporating incomplete actions from the CBFO's existing workplace improvement initiatives.

Conclusion

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

The DOE-CBFO has reviewed and approved the NWP sustainment plan. We are currently working with NWP to encompass their sustainment plan with the DOE-CBFO.

COORDINATED DOE-CBFO / NWP

SAFETY CULTURE SUSTAINMENT PLAN for WIPP

The U.S. Department of Energy (DOE) Carlsbad Field Office (CBFO) and the Waste Isolation Pilot Plant (WIPP) primary contractor (Nuclear Waste Partnership [NWP], LLC) are committed to establishing and maintaining a strong and sustained nuclear safety culture. A positive safety culture is an integral aspect of an effective Integrated Safety Management (ISM) system. The DOE's commitment to a positive safety culture is expressed in DOE P 450.4A, *Integrated Safety Management Policy*:

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

Furthermore, a strong nuclear safety culture is supported by a Safety Conscious Work Environment (SCWE) that is defined as:

A work environment in which employees feel free to raise safety concerns to management (and a regulator) without fear of retaliation.

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

The DOE-CBFO and NWP are committed to ensuring a strong safety conscious work environment. To accomplish this goal, a number of tools, including activities and ongoing actions, will be used to sustain and improve upon the present safety culture at the WIPP. All subject tools, as discussed below, are representative of Safety Culture tenets emphasized in Attachment 10 of DOE G 450.4-1C, *Integrated Safety Management System Guide*, as well as those underscored in the "Consolidated Report for Defense Nuclear Facilities Safety Board Recommendation 2011-1 Action 2-8 and 2-9, *Safety Culture at the Waste Treatment and Immobilization Plant*," dated May 2014.

In summary, all noted key actions and activities are either planned, are presently in-progress, or have already been completed, and fall within three primary categorical areas necessary for perpetual safety culture enrichment:

- *Leadership Focus Area*
- *Employee/Worker Engagement Focus Area*
- *Organizational Learning Focus Area*

In order to enable progress in all three Focus Areas, an additional category, *Continuous Improvement*, has been included to ensure that improvement is sustained for the life of the project.

LEADERSHIP FOCUS AREA

Demonstrated Safety Leadership

Consultation with nationally recognized experts in developing nuclear safety culture improvement activities: (PRESENTLY ONGOING)

NWP established a consulting contract with Rear Admiral Michael Coyle of Longenecker & Associates to assist with improvements to the WIPP's Nuclear Safety Culture. With 33 years in the Navy and 11 years in commercial nuclear power including executive leadership during plant turnarounds, his expertise has already been key in initial improvements. While assigned at the Nuclear Energy Institute (NEI) reporting directly to NEI's Chief Nuclear Officer, he served as the coordinator for the nuclear industry task force working with the NRC in developing the initial framework for regulating nuclear safety culture. Subsequently he led the implementation of the commercial nuclear industry's initiative to foster a strong nuclear safety culture, NEI 09-07 at the Hanford Waste Treatment and Immobilization Plant (WTP). At the WIPP, thus far, he has led the Root Cause Analysis on the Program's degraded safety culture as identified in the AIB Reports. He is also presently focusing on addressing the recommendations in the Root Cause Analysis, as well as additionally working through the Program's Nuclear Safety Culture Improvement Plan.

To further ensure success in the realms of Leadership Effectiveness, Organizational Effectiveness, and Operational Effectiveness in meeting Nuclear Safety Culture Improvement expectations, NWP has brought in Dr. Mary Jo Rogers to further assist in these efforts. Dr. Rogers is a recognized expert in nuclear leadership and organizational effectiveness during periods of transition. From developing the renowned management talent process for Exelon Nuclear to coaching and development of individuals and teams, she has used these approaches with the NEI, NRC, INPO, and a number of individual commercial nuclear facilities. She has significant experience with nuclear power plant "turnarounds" with companies after an event, having to completely modify their facility leadership and operational effectiveness to stay operational. A partner in Strategic Talent Solutions, a firm that works closely with nuclear leaders to transform their organizations, she has a monthly column and guest columns in several magazines such as Power Engineering. She is the author of the book, *Nuclear Energy Leadership; Lessons Learned from U.S. Operators*. With a key focus on factors such as executive intelligence, engagement, execution, and change management, she brings an invaluable cadre of resources to the Leadership table.

Conduct "Right Picture" Workshop and develop resulting Tools/Products to establish and align vision, mission, core values, and behaviors representing values in action for WIPP as a joint CBFO/NWP initiative: (PRESENTLY ONGOING)

The subject Workshop has been conducted, with several candidate strategies evaluated for program-wide implementation. The final steps of screening, refining, and rendering the Tools and Products that will systematically set these strategies into motion are pending a final assessment review and management approval.

Initiate “WIPP-Wide” Nuclear Safety Culture Steering Team to lead the Nuclear Safety Culture Improvement Initiative: (PLANNED)

Management engagement and oversight in the establishment of a Nuclear Safety Culture (NSC) Steering Team will drive and foster continuous improvement in the realm of SCWE, which is core to the success of a nuclear safety culture.

After the right picture is developed, the NSC Steering Team will launch efforts such as having managers communicate behavioral- and value-expectations appropriate to a strong Nuclear Safety Culture which reflect the ISM Safety Culture Focus Area attributes from ISM Guide 450.4-1C, Attachment 10. Further implementation in employee/worker engagement will include the Culture Champions initiative, sponsored by the NSC Steering Team.

Open Communication and Fostering an Environment Free from Retribution

The Judgment of Need 24.3 Evaluation determined “Evaluate Corrective Action Plans for findings and opportunities for improvement identified in previous reviews with safety culture components such as ISM safety culture focus areas, SCWE Assessments, and Voluntary Protection Program reviews conducted since October 1, 2012, and take additional actions as appropriate. As previous findings in these include WIPP Forms, employee concern program renderings, and differing professional opinion process components, the corrective actions for these programs will be included in the documented Nuclear Safety Culture Program Plan referenced in JON 24.2.”

In the interim, both the CBFO and NWP have developed several value-added actions to foster open communication and a retribution-free environment. Such actions include the following:

- Managers interfacing with field staff weekly to foster open communication, provide project updates/changes, discuss safety culture events and concerns, contract updates, collect workforce feedback, and build credibility and trust. **(PRESENTLY ONGOING)**
- Periodic All-Hands meetings with employees to update departmental goals, discuss organizational or process changes, emphasize open-door policies, and to facilitate Q&A sessions. **(PRESENTLY ONGOING)**
- Establishment of a formal Change Management Process/Program to promote successful development, planning, communication, implementation, and evaluation of changes. **(PLANNED)**
- Program procedures will be revised to be more user-friendly and to provide a clear path to voice concerns, whether through the Employee Concerns Program, Differing Professional Opinion Process, or other mechanisms. **(PRESENTLY ONGOING)**
- Conduct of SCWE Management Assessments at the WIPP Generator Sites. **(COMPLETED for FY14)**
- The CBFO will also be implementing a related initiative to improve professional culture. Root issues impacting professional culture will also impact nuclear safety culture. **(PLANNED)**

EMPLOYEE/WORKER ENGAGEMENT FOCUS AREA

Teamwork and Mutual Respect

The CBFO and NWP have developed specific actions to employ tools to improve communication and teamwork across the organization. Specific actions and tools being implemented include:

Development and Implementation of a Culture Champions Program: (PLANNED)

Per the Judgment of Need 24.3 Evaluation, it was determined that the inception of a Culture Champions Program, sponsored by the NSC Steering Team, would be a pivotal step in enhancing employee engagement for continuous improvement of disciplined operations. The Culture Champions Program will be used to assist in implementing NSC values and behaviors by providing feedback and by:

- Identifying existing organizational processes and behaviors that may be counter to desired behaviors, and develop actions to align existing processes and behaviors with new desired behaviors.
- Taking actions to eliminate or minimize the influence of forces that may be restraining achievement of desired behaviors.
- Working with Culture Champions Program team members to develop the necessary tools and supporting structures and processes so that desired behaviors can be consistently performed.
- Monitoring performance and continuing to provide direct, timely, and specific feedback to employees regarding their behaviors.

The culture champions will be tasked with challenging unsafe acts and conditions in the field and with coaching of peers in areas impacting nuclear safety culture that include safety, conduct of operations, human performance, quality compliance, and high reliability organization expectations. Employees selected will receive extended training, conduct benchmarking, and will be assigned as “coaches.” These champions will be working in a positive, constructive way, and reinforcing appropriate behaviors consistently in the field. Records of their efforts will be tracked and trended accordingly.

ORGANIZATIONAL LEARNING FOCUS AREA

Credibility, Trust, and Reporting Errors and Problems

Recent CBFO and NWP SCWE management- and self-assessments identified this as a potential vulnerability and provided several recommendations for improvement in this area. Clear expectations and accountability were also related areas which were determined to be in need of enhancement. As a whole, surveys associated with these Assessments found that upwards of 40 percent of NWP and 60% of CBFO employees were reluctant to raise issues to management. From these results, the existence of a Chilled-Effect can be inferred.

Per the aforementioned Assessment recommendations as well as those established from various related AIB-JONs on the subject item, the following remedial actions were determined for implementation in this area:

Development of a Contractor Assurance Program Description: (PLANNED AND IN-PROCESS)

- Review of the URS Issues Management Framework Document for improvement ideas
- Conduct management training to ensure responsibilities are understood for fostering a robust issues management process.
- Establish metrics to monitor the health of Contractor Assurance Program elements
- Incorporation of a Benchmarking Plan

In the upcoming FY15 interim, subsequent Safety Culture Assessments will be performed as “Effectiveness Reviews,” using DOE G 450.4-1C, Attachment 10, after all JON 24.1-7 corrective actions have been closed out. Review Teams will include both NWP and corporate/external SMEs to ensure objective evaluation.

CONTINUOUS IMPROVEMENT

Nuclear Safety Culture Program Plan

Programmatic enhancement in this realm, per the NWP Nuclear Safety Culture Improvement Plan, will be derived via establishing a foundation for long-term improvement. The Nuclear Safety Culture Program Plan will serve as that foundation and will include components such as expectations, training, monitoring, and assessments.

INPO Assistance

An INPO-Assist Visit is currently scheduled for January 2015. Prior to the visit, INPO will provide training in December 2014 to the select members of the CBFO and NWP staff who will be part of the INPO-led team.

CONCLUSION

CBFO and NWP management understands the development of an effective, open, and healthy safety culture is modeled from the top down, and is essential to long-term mission success. The CBFO and NWP management team(s) have devoted resources and expertise to develop and implement measures to ensure sustained improvement in the WIPP Program safety culture. Continued, ongoing monitoring of these and future actions is recognized as vital to ensuring sustained improvement within this critical arena.