



**Written Testimony of Ms. Neile Miller
Acting Administrator, National Nuclear Security Administration
and
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U.S. Department of Energy**

**Before the
Defense Nuclear Facilities Safety Board
Pantex Plant Public Meeting
Amarillo Civic Center
401 S. Buchanan Street
Amarillo, TX, 79101**

March 14, 2013

Chairman Winokur, Vice Chairman Roberson, Dr. Mansfield, Mr. Bader, and Mr. Sullivan:

INTRODUCTION

Thank you for inviting us here today to address the National Nuclear Security Administration's (NNSA) and Department of Energy's (DOE) ongoing work to improve the safety culture at the Pantex Plant and, more broadly, our ongoing efforts to improve our safety culture across the DOE complex. I am joined today by Dr. Don Nichols, Associate Administrator for Safety and Health and Chief, Defense Nuclear Safety; Mr. James McConnell, Deputy Associate Administrator for Infrastructure and Operations, and Mr. Steve Erhart, Manager of the NNSA Production Office (NPO). My colleagues will be available at a later time to discuss safety culture efforts and answer additional technical questions from you.

I want to thank each of them not only for their willingness to testify today, but also for their leadership on responding to the Board's concerns in this public meeting and so much more. While I hold the responsibility for operations and specifically the safety culture in the NNSA, Steve Erhart has been helping me on the day to day at the NPO and has been extremely diligent on his commitment to bringing improvements in the safety culture at the Pantex Plant and the NPO, as well as sharing his insights and knowledge with the remainder of the enterprise. Dr.

Don Nichols supports me as the NNSA Central Technical Authority (CTA), and James McConnell serves as the Cognizant Secretarial Officer for Pantex. In that capacity, he leads and manages safety and operations for the enterprise facilities that support the program mission. This is a strong team and one I am sure has both the technical capability, and the personal, and professional desire to execute our mission safely.

In my time here with you today, I want to assure you of two things. First, I am fully aware of the significant safety culture concerns that have been raised by our workers here at the Pantex Plant. Second, we are engaged in — and fully committed to — the timely resolution of any and all nuclear safety deficiencies within the Department, be they cultural, managerial, contractual, design, or operational in origin. This holds true across the NNSA as well as the broader DOE complex, including Environmental Management. I reaffirm the Administration's and the Department's commitment to safe and secure work environments for all Federal and contractor employees.

BACKGROUND DISCUSSION

As you know, the Office of Health, Safety, and Security (HSS) recently completed an assessment of the safety culture at the Pantex Plant. The results were sobering; so sobering in fact, that my staff immediately convened to discuss options that could be quickly implemented to address these findings, even as we contemplate longer-term actions to fully implement the recommendations from the HSS report. After a detailed, forthright, and open discussion of the situation, we decided to immediately implement a set of corrective actions that Steve Erhart was instrumental in executing. We also developed a detailed plan for both correcting the contributing issues as well as establishing the controls and processes to keep us on a road to continuous safety culture improvement. A strong safety culture is essential to ensure work is performed properly at the Pantex Plant. There is no other way; there is no other substitute. The contractor, Babcock and Wilcox, Pantex (B&W Pantex), also understands the very serious nature of the findings and the importance of the recommendations of the report.

I would like to discuss the potential impact of a flawed safety culture on Nuclear Explosive Safety (NES) operations. Let me say unequivocally, that the negative impact due to such flaws is intolerable. I would like to continue by addressing both the short-term and long term corrective actions, which we have taken to ensure the continued safe execution of the NNSA mission here at the Pantex Plant.

Specific to NES, B&W Pantex initiated an investigation to address the issues identified in your March 2nd letter. The investigation generated 8 judgments of need. Following review of these results, the NPO requested additional causal analysis to address the “people issues” that may have contributed. This analysis resulted in the expansion of seven of the original corrective actions associated with the judgments of need and one additional, new action. NNSA conducted and independent review of this analysis to confirm the results. The review identified a number of weaknesses and provided 13 recommendations. NNSA, along with B&W Pantex, is making good progress in addressing these matters.

I have personally taken action to increase the independence of the oversight of NES processes. In a memorandum dated 30 January, 2013, I have directed the realignment of NES oversight processes. The responsibility for NES policy will now reside with the Associate Administrator for Safety and Health (NA-SH). This was formerly a responsibility of the Deputy Administrator for Defense Programs. I have also transferred the responsibility for oversight of the implementation of NES requirements to NA-SH, along with the contracting authority and the staffing authorizations to execute this function. The transfer of NES oversight responsibility will be fully effective once funding and reporting relationships have been realigned. In the interim, the Associate Administrator for Safety and Health and the Deputy Administrator for Defense Programs will direct actions as appropriate to ensure a smooth transition of this responsibility. These actions will help to address our concerns with the process and ensure direct access to me regarding any issues that may arise. I am grateful that Don Nichols was willing to take on this responsibility and I am sure he will identify the right people to staff and execute this function.

SAFETY CULTURE ACTIONS AT PANTEX

Immediately following the out briefing by HSS regarding its safety culture findings at Pantex, NNSA issued a letter to B&W Pantex directing immediate focus at all management and working levels to a safety conscious work environment (SCWE) for all on-going activities and operations. This focus included the investigation and correction in any real, potential, or perceived lack of clarity for all activities approved under applicable NES evaluations. NNSA also directed B&W Pantex to evaluate the process used to identify, assess, and resolve matters to ensure clarity and traceability regarding the decision making process in these cases. We also directed the contractor to conduct an extent of condition review for other NES Evaluations. Other immediate actions included the development of a single stop/pause work process which was provided to all employees and discussed at daily work planning meetings. The Employee Concerns Program and Equal Opportunity Office reporting chain was immediately elevated to a direct report to the General Manager's Office, providing the highest level accesses for any employee concerns in these areas. Additionally, the differing professional opinion process was reinstated providing a formal mechanism for recognition and resolution of differing views on technical matters.

Further, this letter directed B&W Pantex to prepare a comprehensive long-term corrective action plan mentioned previously, taking into account the Institute of Nuclear Power Operations (INPO) paper on the principles of a strong nuclear safety culture. Our initial actions serve the needed goal of quickly bringing this issue to the front and center of attention to our federal and contractor management at the Pantex Plant. They also demonstrated to the Plant personnel the commitment of management to correct the problems identified and the need to rebuild a culture of trust between the workforce and management at the Plant. NPO will be closely monitoring these changes and assessing the progress throughout the completion of this plan. I can report to you that the execution of this plan commenced prior to the completion of the HSS final report on November 29, 2012.

In the development of the long term plan for improvements in the safety culture, the key elements identified in the Nuclear Regulatory Commission (NRC) procedures and documented

in the HSS report were used as a guideline for our actions. These are nine traits that are viewed to be necessary in the promotion of a strong safety culture:

- Leadership Safety Values and Actions
- Problem Identification and Resolution
- Personal Accountability
- Work Processes
- Continuous Learning
- Environment for Raising Concerns
- Effective Safety Communication
- Respectful Work Environment
- Questioning Attitude

Creating an environment that cultivates and rewards these traits is a key objective of the management actions that we are taking to improve the Pantex safety culture. I would also like to highlight the three specific recommendations in the HSS report to provide a context for the corrective actions I will discuss with you. Following are recommendations from the HSS report for specific actions which will result in improved safe and reliable performance:

- Significant efforts are needed by Pantex Senior Management to gain the respect and trust of the employee population. Behaviors that demonstrate the commitment to the principles and values of an HRO must become obvious and internalized by the Management Team in order to model the efforts that they should expect and want from the employees.
- Management should take prompt actions to improve the quality of work life at the Plant. Small changes would go a long way to engaging the employee population in believing that the organization is committed not only to the mission, the customer and the award fees, but to the employees as well.
- Consider additional efforts to enhance awareness of the employee concerns program (ECP) and differing professional opinion (DPO) process.

These recommendations will inform my discussion of the corrective actions that are being undertaken at the plant.

The near term commitments in the Safety Culture plan are significant and I would like to take a moment and highlight some of them that will build towards long term improvements. In the near term, the contractor has set aside \$2 million to support workplace enhancements that are being identified by a safety culture focus team. The members of this team include five members from the Pantex Guards Union, five members from the Metals Trade Council, and five other non-management representatives. The focus team members received training on the process in December and are actively engaged in the development of site enhancements. The near term improvements, identified by members of the workforce and supported by management resources, will serve as a key indicator of the trust and value management places on the workforce and demonstrates leadership safety values and actions. Through this and similar mechanisms, workers on the plant floor will see real evidence very quickly of management's commitment to improving the safety culture at the plant.

As another example of actions being taken, NPO federal staff, and contractor staff at Pantex and Y-12, engaged with one another in a seminar format to discuss and better understand the attributes of a High Reliability Organizations (HRO) from a systems level perspective. Key HRO elements include a very high level of trust and an open and questioning attitude that is both encouraged and rewarded. This level of communication between federal and contractor personnel is essential in developing a shared understanding and common values regarding the need for continuous improvement and the identification of safety culture shortfalls in the long term. The development of HRO principles and instilling these principles in the work force will help to ensure we do not travel this path again.

To strengthen understanding and inculcate values at the management level, senior federal and contractor staff took part in an interactive learning environment on the essentials of a Safety Conscious Work Environment (SCWE), developed through the Office of Infrastructure and Operations of the NNSA. We are providing this training throughout the enterprise to improve our broader safety culture, and develop a higher level of consistency in our organization. The

training emphasizes personal accountability and responsibility for corrective actions to address identified safety culture issues. We are directing our senior managers to encourage an open and questioning attitude and to fully solicit and welcome questions and concerns from all workers.

B&W Pantex has also engaged their own corporate resources to support the improvement programs at the Pantex Plant. Additional personnel with specific experience in safety culture were added to the site in October 2012. These personnel were deployed immediately to the shop floor to engage with workers and management and begin to break down barriers and improve communications. To further and broaden these immediate actions, corporate, NNSA/DOE, and industrial leaders with successful safety culture improvement experience were engaged to provide benchmarking and validate that reforms undertaken were moving the plant in the right direction for long term, sustainable improvement.

The final and complete results of the HSS Safety Culture review were communicated to all plant personnel when the final report was received. Plant management accepted ownership of the identified issues and engaged their workers to develop the immediate and long term plans to rectify the situation, and to ensure all personnel were aware of the actions being taken. This was the first step in a longer term communication plan, developed in December 2012, to foster more open communications between management and plant personnel. A key element of this communications included the development and issuance of a consolidated NPO/Pantex/Y-12 Joint Nuclear Safety Culture policy. The key elements of this policy are:

- Individual Commitment to Safety
 - Personal Accountability: Everyone takes personal responsibility for safety.
 - Questioning Attitude: We avoid complacency and appropriately challenge existing conditions and activities to ensure safety remains the priority.
 - Safety Communication: Our communications help us stay focused on safety.
- Management Commitment to Safety
 - Leadership Accountability: Our leaders demonstrate their commitment to safety through their communications and behaviors.

- Decision-making: Our management confirms their commitment to safety through conservative decision making.
- Respectful Work Environment: We trust and respect each other.
- Management Systems
 - Continuous Learning: We seek to learn more about safety so that we can apply that knowledge to our work.
 - Problem Identification and Resolution: We promptly identify, evaluate, and address potential safety issues.
 - Environment for Raising Concerns: We maintain a safety conscious work environment where everyone feels free to raise safety concerns without fear of retaliation, intimidation, harassment, or discrimination.
 - Work Processes: We plan, control, and conduct work activities safely.

Additional steps to strengthen personal responsibility and accountability have been taken. These included the alignment of performance evaluations for personnel at all levels with nuclear safety culture principles. Incentives and other plant reward processes were aligned to ensure that a strong positive incentive exists for all employees both to support and further the continuous improvement of the safety culture at the plant. Both these actions will help to align performance with management expectations, as well as holding management accountable to the same standards as the work force in the process of improving the plant safety culture.

Having reviewed DNFSB Recommendation 2011-1 as well as our own analysis, the NNSA and DOE have embraced the need for an intensified effort to embed a strong safety culture in all Departmental policies, programs, and personnel.

Also at a corporate level, we are reviewing our contracting and technical issue resolution processes to understand how they may be affecting safety and what changes are necessary to promote a strong safety culture. We are also developing training for Department of Energy Federal and contractor senior leaders on establishing and maintaining an open and collaborative work environment within the department. These efforts will help to ensure that we measure and

understand safety status and that we have current and reliable data on safety issues to support informed decision-making.

Drawing on the lessons from the safety culture reviews across DOE and NNSA, we have established within NNSA a corporate board, led by Jim McConnell, responsible for coordinating our efforts to improve safety culture within NNSA. One of our principle initiatives is to conduct a safety culture survey of NNSA headquarters. During the week of February 19, we trained 23 NNSA personnel from a wide variety of offices on safety culture principles and the process of conducting safety culture surveys. The participating offices included General Counsel, Defense Programs, Emergency Management, Infrastructure and Operations, Project Management, Management and Budget, and Safety and Health. The training was led by the same expert who has been leading the safety culture surveys for the Department. I consider it essential that we understand the extent to which leadership may be unintentionally undermining the very culture we are trying to promote, and areas where we can improve. I expect the actual review of NNSA headquarters to be conducted this spring, and will use this team of trained evaluators to support subsequent reviews across our complex.

CONCLUSION

Let me close with a few additional thoughts. As an organization tasked with one of the Nation's most critical missions, we at DOE understand the fundamental, make-or-break challenges that our work entails. The safe and successful execution of our mission greatly affects our Nation's safety and security, and demands the very best of all of us, year in and year out. That is why it is so important to embed the commitment to safety deeply in the culture of the NNSA enterprise, so that it will be embraced by all those who succeed us. Our safety culture is critical to protecting and improving the NNSA legacy. We must not fail in this effort.

Our commitment to safety is reflected in the personal passion for safety that the Secretary has expressed on several occasions. His message is clear, and my senior managers and I reinforce it whenever we meet with our workers and stakeholders:

The Department has an unwavering commitment to maintain safe and secure work environments for all Federal and contractor employees. Furthermore, we will ensure that the Department's and contractor's operations do not adversely affect the health, safety, or security of the surrounding communities or the nation.

I will continue to discuss our progress and your concerns with you in our regular interactions. As always, I invite you to contact me directly if you have any concerns about our activities involving our safety culture improvements.

Thank you again for the opportunity to discuss the NNSA's safety culture improvement efforts at the Pantex Plant.