



FLUOR HANFORD, INC.

Waste Stabilization and Disposition (WSD) Project

**Report from the DOE Voluntary Protection Program
Onsite Review, March 21-24, 2005**



U.S. Department of Energy

Office of Environment, Safety and Health
Office of Corporate Performance Assessment
Office of Quality Assurance Programs
Washington, D.C. 20585

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“...Some of us will serve in government for a season; others will spend an entire career here. But all of us should dedicate ourselves to great goals: We are not here to mark time, but to make progress, to achieve results, and to leave a record of excellence.”

-- **George W. Bush**
President of the United States
October 15, 2001
Constitution Hall, Washington, DC

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Abbreviations and Acronyms

ACES	Access Control Entry System
AJHA	Automated Job Hazard Analysis
ALARA	As Low As Reasonably Achievable
AMH	AdvanceMed Hanford
BEP	Building Emergency Plan
BLS	Bureau of Labor Statistics
BTR	Buyer Technical Representative
CAMS	Corrective Action Management System
CIH	Certified Industrial Hygienist
COE	Centers of Expertise
CPR	Cardio Pulmonary Resuscitation
CS	Capsule Storage
CSB	Canister Storage Building
CSP	Certified Safety Professionals
CWC	Central Waste Complex
D&D	Decommission & Decontamination
DEG	Deficiency Evaluation Group
DOE	U.S. Department of Energy
DSA	Document Safety Analysis
DTS	Deficiency Tracking System
EJTA	Employee Job Task Analysis
EP	Emergency Preparedness
ERO	Emergency Response Organization
ES&H	Environment, Safety and Health
ESH&Q	Environment, Safety, Health and Quality
ETF	Effluent Treatment Facility
EZAC	Employee Zero Accident Council
FH	Fluor Hanford

FWS	Field Work Supervisor
FY	Fiscal Year
HAMMER	Hazardous Materials Management and Emergency Response Training Center
HAMTC	Hanford Atomic Metal Trades Council
HFD	Hanford Fire Department
HGET	Hanford General Employee Training
HPT	Health Physics Technician
HQ	U.S. Department of Energy
IS/IH	Industrial Safety/Industrial Hygienist
ISMS	Integrated Safety Management System
ITEM	Integrated Training Electronic Matrix
JCS	Job Control System
JHA	Job Hazards Analysis
JSA	Job Safety Analysis
KRA	Key Result Area
LERF	Liquid Effluent Retention Facility
LLBG	Low Level Burial Grounds
LLW	Low Level Waste
LPCS	Liquid Processing Capsule Storage
LWPF	Liquid Waste Processing Facilities
MLLW	Mixed Low-Level Waste
NAICS	North American Industry Classification System
OJE	On-the-Job Evaluation
OJT	On-the-Job Training
OSHA	Occupational Safety and Health Administration
PBS	Project Baseline Summaries
PHMC	Project Hanford Management Contract
PM	Preventive Maintenance
PNNL	Pacific Northwest National Labs
PPE	Personal Protection Equipment

PZAC	Presidents' Zero Accident Council
QAAG	Quality Assurance Assessment Group
RL	Richland Operations Office
RPP	Radiation Protection Program
RWP	Radiological Work Permits
Safety Expo	Hanford Health and Safety Exposition
SAR	Safety Analysis Report
SAT	Systematic Approach to Training
SIC	Standard Industrial Classification
SIP	Safety Improvement Plan
SDU	Storage and Disposal Unit
S&H	Safety and Health
SWSD	Solid Waste Storage & Disposal
TEDF	Treated Effluent Disposal Facility
TRU	Transuranic
VPP	Voluntary Protection Program
WESF	Waste Encapsulation & Storage Facility
WIPP	Waste Isolation Pilot Project
WRAP	Waste Receiving and Processing Facility
WS	Waste Services
WSD	Waste Stabilization and Disposition Project

Executive Summary

This report presents the findings of the Department of Energy-Voluntary Protection Program (DOE-VPP) onsite review of the Fluor Hanford, Inc., Waste Stabilization and Disposition (WSD) Project, which took place during the week of March 21-24, 2005, in Richland, Washington. The WSD Project is managed by Fluor Hanford for DOE. The following summarizes the observations and analysis of the DOE-VPP Review Team (Team) organized by VPP tenet.

Management Leadership

The Team found a high degree of management commitment to safety and health (S&H) at WSD. Managers are personally committed to VPP. Project leadership is capable, competent, and well directed. Additionally, the Team found WSD leadership, both top management and those in the field, is fully engaged. The Vice President of WSD and other WSD managers visibly participate in safety programs and have successfully established an organization for implementing the DOE-VPP. WSD management believes that all accidents are preventable and encourages a safety culture based on an “injury-free workplace.” The Team found that the VPP is well integrated throughout most of the Project and that it complements the overall S&H efforts of its client.

Employee Involvement

WSD employees strongly expressed their commitment to safety to the Team. Employees work with management to implement S&H programs at WSD. Their involvement occurs not only through participation in safety meetings and training activities, but also through safety observation processes. Employees stated that they felt responsible not only for their own safety, but also for the safety of their peers. The Team observed that a strong safety culture has developed at this Site. Although the Team observed that WSD managers, including first-level supervisors, understood the purpose of VPP, this same level of understanding does not appear to flow down through all of the Project’s employees.

Worksite Analysis

Members of WSD work groups participate in preuse/prestart assessments and inspections. Job hazard analyses (JHA) are well developed, communicated, and used. Employees are encouraged to communicate any unsafe conditions or issues. The Team found that both oral and written methods are well developed and used by employees throughout the organization. Examples include the reporting of S&H concerns to the Hanford Atomic Metal Trades Council (HAMTC) Safety Representative, who handles the concern while maintaining employee privacy, and the

use of the WSD Safety Ideas/Issues Program, which promotes employee reporting of problems or ideas for improving workplace safety. Identified hazards are addressed, the condition or issue is documented, action is assigned to a responder, and actions are tracked to completion. Accident investigation processes are also developed and implemented through this program.

Hazard Prevention and Control

The Team found that WSD satisfies the general requirements of the DOE-VPP hazard prevention and control tenet. WSD has a well-qualified group of S&H professionals in the environment, safety, and health (ES&H) services that help to ensure that its safety and health rules and work practices, as well as use of personal protective equipment (PPE) meet DOE-VPP requirements. The Project uses preventive maintenance programs to reduce the chances of unplanned equipment failure, thereby enhancing safe operations.

The HAMTC safety representative program has improved communication among workers, managers, and S&H professionals and has benefited the entire Site in the process.

Safety and Health Training

All WSD employees, including managers and supervisors, receive training and maintain qualifications appropriate to their job descriptions and responsibilities. Documented records are kept of training required and completed. Employees at all levels know how to identify and protect themselves and others from hazards associated with their jobs. Supervisors reinforce the importance of training through regular staff meetings and safety meetings. Employees stated in interviews that the training they have received has made them more conscious of health and safety issues in their work environment.

The Team determined that WSD satisfies S&H training requirements. Training is comprehensive and addresses employees at all levels.

Conclusion

The Team concluded that WSD has satisfied the requirements for participation in the DOE-VPP and recommends that DOE grant WSD Merit status.

To attain Star status, WSD must demonstrate the following.

- WSD managers need to develop a true S&H partnership with all employees by clearly communicating S&H policies and procedures.
- Employees who stop work for safety concerns should receive recognition for their efforts.

- WSD managers should make every effort to eliminate any potential perception that production takes a higher priority over safety.
- Employees must be actively involved in planning, executing, and assessing workplace S&H programs. As owners of S&H programs, they must work with management to design, develop, implement, monitor, evaluate, and recommend necessary enhancements to the VPP.

Fluor Hanford would greatly benefit from improving their methods for disseminating safety concerns and problem solutions between teams and organizations.

I. Introduction

The DOE-VPP Review Team (Team) conducted its onsite review of the Waste Stabilization and Disposition (WSD) Project from March 21 to 24, 2005, in Richland, Washington. Fluor Hanford, Inc. (FH), a project of the Fluor Corporation, is the operating contractor for waste management and other activities at the Hanford Site. WSD has approximately 746 full-time employees working at the Hanford Site.

In October 1996, FH was awarded the prime contract for the Project Hanford Management Contract (PHMC) management and integration contract, reporting to the Department of Energy (DOE) Richland Operations Office (RL). The WSD Project manages programmatic activities related to radioactive solid waste treatment and processing, liquid waste management, cesium and strontium capsule safe storage and monitoring, and waste retrieval. The WSD Project and subprojects extend throughout the Hanford Reservation. Major WSD subprojects are listed below.

- Solid Waste Storage and Disposal Facility
- Liquid Processing and Capsule Storage Facilities
- Solid Waste Treatment Facility (T Plant)
- Waste Receiving and Processing Facility
- Waste Services Organization
- The Transuranic (TRU) Assay Facility

Most of the associated safety hazards at WSD are common to general industry. WSD safety hazards include fire and electrical hazards; production and development hazards; non-production chemical hazards; explosives; natural phenomena; and unique radiological contamination and exposure hazards. Typical workplace hazard sources include electrical power distribution, hot cells, maintenance, operations activities and surveillances, waste retrieval and treatment, and waste handling.

The Team, which consisted of safety professionals from DOE Headquarters, Kansas City Plant, Yucca Mountain Project, and the Hanford Site, compared the WSD safety programs with Department of Energy-Voluntary Protection Program (DOE-VPP) requirements. During the onsite visit, the Team evaluated relevant safety documents and conducted interviews to evaluate and verify the information submitted with the WSD-VPP application. The Appendix contains the Team roster and areas of assigned responsibility.

II. Injury and Illness Data Assessment

The WSD injury and illness rates remain significantly below those of comparable private industry; therefore, the company continues to satisfy the basic DOE-VPP criterion for recognition. In general, safety performance (as indicated by the statistics in the following table) has continued to improve at Hanford during the past 3 years.

WSD INJURY AND ILLNESS DATA					
<i>Calendar Year</i>	<i>Lost Workday Cases</i>	<i>Total Recordable Cases</i>	<i>Employee Hours</i>	<i>Lost Workday Case Incident Rate</i>	<i>Total Recordable Case Incident Rate</i>
2002	3	10	1,343,499	0.45	1.49
2003	0	6	1,103,000	0.00	1.09
2004	2	6	1,242,285	.32	.99
3-Year Avg.	1.67	7.3	1,229,594	0.26	1.19
<i>Bureau of Labor Statistics (BLS) average for Standard Industry Classification (SIC)</i>				4.0	6.3
SIC 495 (Sanitary Service) North American Industry Classification Standard (NAICS) 5629					
<i>Percent below BLS rate</i>				93	81

The information on the OSHA 200/300 logs supports the data provided in the application, the organization’s first report of injury forms, and other recordkeeping documents. BLS information on this activity for SIC comparison is not available (N/A) for total recordable case incident rates.

III. Management Leadership

A. VPP Commitment

The Team believes that WSD management is committed to safety and health. Their level of commitment is reflected by their availability to workers and by their involvement in the various Employee Zero Accident Council (EZAC) meetings that are held. For example, managers allow workers to attend scheduled EZAC meetings. Stop-work responsibility is well ingrained in both managers and workers.

Most employees felt that their managers were accessible and willing to communicate formally and informally with them. The Team found this evidence of the open-communication aspect of the management-labor relationship to be very encouraging. Site-specific S&H requirements are met and enforced. Managers use both positive and negative reinforcement to attain positive behaviors. Negative behaviors are addressed through a management disciplinary review team; positive behaviors are addressed through employee recognition award programs.

Some managers observe work being performed in the field and interact with work crews on a regular basis. Management's direct observation of work being performed is an integral part of ensuring a safe work site.

Managers' roles, responsibilities, and accountability were well defined and realized. The Team observed the WSD vice president at the President's Zero Accident Council (PZAC) meeting, and he appeared to take an active role in the safety committee. The managers all believe in the zero-accident philosophy and stress the importance of reporting all accidents, injuries, or incidents. A safety log book is used at all facilities to track safety deficiencies to correction; however, the Team observed problems with the process at one facility. Emergency drills are conducted regularly at the facilities. EZAC meetings are held as scheduled, and management allows employees time to attend these committees.

B. Leadership

Leadership at the Site appears to be strong. Managers ensure that the environment, safety, and health (ES&H) goals are available for employees to review and continually address the goals at committee meetings. Some negative feedback was received during interviews at the Waste Receiving and Processing (WRAP) facility, where Team members were told that production goals and budget constraints have kept some of the safety-book items from being completed in an expeditious manner. Employees also stated that at times they felt that production goals override safety goals.

C. Organization

Management at the Site is organized to support its roles, responsibilities, and policies. Safety and health (S&H) programs are well established and appear to meet the needs of the workers

involved in day-to-day activities. Adequate Personal Protection Equipment (PPE) is available, and managers are always available to discuss additional tools or equipment needed to perform a task.

D. Responsibility

Managers are fully aware of their roles, responsibilities, accountabilities, and authorities for worker S&H, and they ensure that their workers have the proper training to perform the tasks at hand. Management uses the safety log book to track safety issues, and accountability for completion of safety items are the manager's responsibility. Procedural compliance appears to be an important component of their work order process. Procedural noncompliance issues are dealt with appropriately.

E. Accountability

Management is committed to providing leadership direction, goals, training, and resources to assist employees in performing their duties in a safe and healthful manner. Management has a disciplinary review board that is used when disciplinary action is appropriate for Exempt and/or Bargaining Unit personnel, in accordance with documented Flour Hanford (FH) Standards of Conduct. Interviews reflected that some employees felt that discipline was not always applied fairly across the board. An employee recognition program is in place for rewarding safe behaviors.

F. Authority and Resources

The ability to invoke the use of "Stop Work Authority" has been clearly communicated to the entire staff, along with the understanding that any perceived repercussions would not be tolerated. Likewise, top management maintains an "Open Door" policy that rarely is used because managers are typically both available and responsive to individual employee safety issues and concerns. There were several examples of "stop work" during the review process, but not all of them were documented.

G. Planning

Employee involvement in the planning stages of work orders and the development of Automated Job Hazards (AJHA) was encouraging. It appears that all work goes through a planning process and a comprehensive pre-job briefing before any work is performed. All principal parties at the Site have sign-offs on the work order, as well as review authority.

H. Contract Workers

Contractors are required to use the same processes and follow the same rules as FH employees. FH managers review the safety performance history of all contractors before a contract is awarded. Periodic inspections of contractor work activities are performed on a regular basis. Violations of S&H procedures result in immediate work stoppage and possible contract termination. Subcontractors interviewed were aware of both the stop work program and the

S&H requirements of the work site. Adequate oversight appeared to be provided by the prime contractor.

I. Program Evaluation

The majority of the programs reviewed during this assessment appear to be in place and being utilized to promote a safe work environment. Notable programs included the labor/management EZAC and the PZAC, the AJHA and work order process, the LO/TO (lock out/tagout) program, and the employee recognition program. There was some negative input from personnel at the WRAP facility. Some interviewees stated they were not always included in the planning process and that changing a procedure was extremely difficult due to the interaction between them and the **Waste Isolation Pilot Project facility in Carlsbad, New Mexico**. The stop-work responsibility was used when these issues restricted employees from continuing their work either as required by procedure or in a safe manner.

J. Site Orientation

WSD provides Site orientation for both visitors and new associates. These orientations consist of a general orientation and a brochure. Additional training on Site-specific programs or hazards is provided as needed. There were some concerns raised about the way training is currently utilized. Some workers perceived that there was too much emphasis on getting workers to the field in an expeditious manner versus providing quality training. This concern mainly dealt with LO/TO and NCO training.

K. Employee Notification

Employee notification was evident by the number of bulletin boards and the level of communication through safety committees observed during this review. The majority of employees were aware of the Integrated Safety Management (ISMS) and VPP principles, with a few exceptions that were noted during interviews. All employees interviewed were aware of the Site safety goals and the location of the Safety Book used to track safety issues. Employees were concerned about a recent change in the hardhat policy. They felt that management is requiring them to wear hardhats in areas where they are not necessary. They also stated that this change was perceived to have been made with very little or no feedback from the general workforce. This issue, which involved an FH directive to require hardhat coverage in most areas of the Site to demonstrate safety awareness and culture, was investigated by the Team and was found to be an item that WSD had begun to address before the Team's onsite visit.

L. Management Visibility

Site managers were both visible and accessible to their workers. The open door policy appeared to be well ingrained at the sites visited by the Team. The majority of the workers felt that they could talk to their managers about issues without fear of reprisal. Often issues are resolved by managers or supervisors on the spot without the need for the issue to go to the EZAC for inclusion in the safety book. While this is commendable, it presents a problem in tracking the

number of issues a site may have, as well as a problem in tracking and trending the issues and sharing lessons learned with their other facilities.

M. Conclusion

The Team found a strong management commitment to the overall safety of Site workers. However, leadership in the implementation of some of the key elements, as noted above, is lacking. Complete implementation of the elements previously described can serve as goals in assisting WSD to the Star level of the VPP program.

IV. Employee Involvement

The Team learned from worker interviews that employees are actively engaged in the S&H program. A review of program documents and the information collected from interviews with employees indicated that management, for the most part, has fully empowered employees to proactively own the S&H program at this Site. At most of the facilities, the commitment between management and employees to implement a safe workplace is evident at most levels within the Project. Several of the facility programs and their employees need to improve the level of familiarity with the purpose and benefits of VPP and increase employee involvement to the level that would be desired for a VPP Star Site.

A. Degree and Manner of Involvement

The information gathered for this portion of the report relies heavily on VPP Team member observations of WSD workers in their workplaces conducting their routine duties and on both formal and informal interviews with the employees and managers from all Project work areas. According to the VPP Star criteria, employees at all levels must be involved in the work process and operation of the health and safety program, as well as in decisions that affect employee health and safety. Also managers and employees at all levels must feel they own the ES&H culture. Most facility workers agreed they were involved in and had input to their S&H programs. However, based on worker interviews, improved communications on new policies and procedures between the managers and workers at some facilities will, over time, contribute more to the achievement of a fully implemented safety culture.

Employee expectations go hand-in-hand with each employee's individual right to notify appropriate managers of hazardous conditions and practices. Employees at most levels expressed their comfort in raising and elevating safety concerns. Some barriers to effective communication with WSD management do still exist, however, relative to the goal of achieving a fully implemented health and S&H culture.

Employees were candid and showed no fear in talking with the Team during both formal and informal interviews. Most employees indicated that they understood their rights and responsibilities and were very knowledgeable overall about their responsibilities regarding S&H.

Interviews confirmed that some improvements still remain to be implemented in the areas of communication and the perception of production over safety. Most employees interviewed (both formally and informally) strongly expressed their readiness to stop work if they felt conditions were unsafe for themselves or their co-workers. Their belief was that management would support their action in most cases. Many employees were able to give examples of when they intervened after observing an unsafe act or condition, and most felt that their interventions were positively received by their management.

Based on worker interviews, most employees were familiar with efforts to continue to improve S&H programs at WSD. Again, the managers, including the first-level supervisors, understood

the purpose of VPP, but this same level of understanding was not shown to flow down through all Project employees. Most employees stated that they had access to timely and complete written feedback (e.g., online access to the Near Miss program), allowing them the opportunity for followup and to see what corrective actions were taken. They were also given oral feedback to S&H questions and issues.

Overall, based on worker interviews and a review of documentation, it was clear that the workforce has enthusiastically welcomed the opportunity for increased participation in all aspects of the organization's work processes and safety. They indicated that the company's efforts have kept safety in the forefront. Some comments made during the interviews were the following.

- *“Employees see the benefits to themselves and their co-workers from a safe workplace.”*
- *“Employees do not hesitate to come into my office with a safety concern.”*
- *“Employees feel they have a great safety environment, and others see how management is working hard for improvements.”*

B. Safety and Health Committees

For a site to meet the expectations of a VPP Star program, a safety committee that meets VPP criteria is expected to be the major driver of the project's work processes and S&H program. This would include a joint management/worker membership reflective of the project's populace. In addition, a percentage of workers would rotate through the committee frequently enough to allow more personnel participate on the committee over a reasonable period of time, while having terms long enough to develop sufficient expertise to be of assistance. The EZAC should consider performing periodic conduct hazard assessments that cover the entire worksite (but not limited to behavioral observations). In addition, the committee could be expected to plan and conduct health and safety awareness programs and should be the vehicle for VPP program development, implementation, and oversight.

A committee meeting these specific expectations is currently in place.

C. Conclusion

Employee ownership is strongly rooted in some forms across the Project. However, there is still an opportunity for management to foster employee ownership of the VPP program throughout the Project by (1) improving communications both throughout the Project and between the local facilities; (2) changing the “perspective of production over safety”; (3) developing opportunities for employee work-process involvement; and (4) contributing to achieving a unified safety culture across the Project.

The WSD Project should have a seamless level of safety across the Project, even though each facility's mission, goals and objectives are different. The Project managers and workers reflect pride in their processes at their worksite and most feel safety is integral to maintaining a world-

class organization. However, there remain opportunities for improvement in this area, and these improvements can serve as goals for achieving the next level of safety excellence, workplace quality, and a VPP Star Site culture.

V. Worksite Analysis

The worksite analysis processes across WSD are structured and implemented according to disciplined core functions and guiding principles, and they adequately identify hazards to the workers, the environment, and the public. Formal worksite analysis processes for control of operations and the mitigation of hazards or potential hazards are in place. Personnel interviewed during this review, and observations made by the Team, confirmed that these processes are used and understood throughout the organization. Description of the processes and activities for worksite analysis are presented below.

A. Pre-use/Pre-startup Analysis

New or modified facility designs, operations, and processes are reviewed and analyzed to identify and mitigate potential hazards before work is started. New and modified equipment must meet requirements for safety (e.g., guarding, electrical safety, noise levels) prior to use. When a new design or modification is related to safety-significant systems, additional documentation is required. A Document Safety Analysis (DSA) is required for any major modification and/or change that impacts safety. Operations personnel perform acceptance and operational testing procedures for equipment to ensure safety, equipment function, and procedure correctness. There is a formal procedure that requires appropriate personnel to ensure that risks and hazards are controlled as specified in the work plan and pre-hazard analysis. Other reviews such as JHAs, Readiness Reviews, and Readiness Assessments are also conducted according to WSD procedures and requirements.

Interviews and records reviews demonstrated that S&H professionals are routinely involved in this process. Interviews with the S&H professionals and maintenance personnel highlighted the process and its effectiveness.

B. Comprehensive Surveys

Comprehensive hazard reviews are completed. These reviews provide the basis for a number of DOE-prescribed activities. Among these are facility baseline hazard assessments, risk-based monitoring, radiological monitoring, personal exposure sampling and monitoring, and general worksite and field walkdowns. Many support emergency preparedness, development of industrial hygiene monitoring plans, assessment of physical requirements and working conditions, and other work purposes. These reviews are conducted by certified and/or qualified S&H professionals and provide a narrative description and a checklist or matrix. The survey identifies physical and environmental hazards. Routine examination and analysis of hazards associated with the individual jobs are exemplified in the surveys that are conducted.

C. Self-Inspections

Inspections are documented on Project-level health and safety checklists to meet HNF-RD-7652, "Safety and Health Inspections." Inspections are conducted by qualified S&H professionals, line

managers, and employees. The Team confirmed that noncompliances and issues are documented and that actions are tracked to completion. The inspection process is well defined and includes such routine activities as the inspections of eye washes, safety showers, fall protection devices, first aid kits, company vehicles, and housekeeping. Results of inspections are analyzed to produce information useful to improving performance and preventing recurrence of negative issues.

D. Routine Hazard Analyses

All work performed — including training, travel, general office, construction (performed by contractors), maintenance work, emergency response, and similar work — is analyzed, and control measures are defined using one of the hazard analysis methods (e.g., Preliminary Job Planning, AJHA). This process is fully described in the WSD ES&H documents.

When routine tasks are performed, provided the safety conditions have not changed since the JHA was last reviewed and approved, the JHA can replace the need to complete another hazard evaluation. This allows routine activities, such as normal maintenance, to proceed without additional hazard analysis. However, for those tasks involving activities not previously analyzed or activities involving changed or changing conditions, a new hazard analysis is required. The Team also noted that pre-job briefings are held for both new and revised JHAs, as well as for many routinely performed activities that involve a higher level of risk.

E. Employee Reporting of Hazards

Employees are encouraged and expected to identify and report unsafe conditions, and they can do so without fear of reprisal. Most employees interviewed stated they have no problem communicating a concern or making a comment to their managers or co-workers.

WSD has several avenues in place for reporting and communicating health and safety concerns. These include management's "open-door" policy regarding S&H, the WSD Safety Ideas/Issues Program, the Idea/Issues form, the HAMTAC Safety Representatives and the employee stop or refuse work responsibility.

Employees stated they felt that any of these systems can be used to report an "imminent danger" situation. However, a small number of employees mentioned that due to a "production over safety" mindset in some work areas, a stop work is not always initially looked upon favorably. One interviewee commented: "...if stop work is invoked, an employee would get flack." In spite of this, employees did not feel they would continue with any work that they personally did not feel was in their best interest or the safety of their co-workers. Employees stated that they felt comfortable intervening when seeing another employee working in an unsafe manner. Throughout the course of this evaluation the Team repeatedly heard that employees look out for each other as they would a family member.

All safety concerns and issues are tracked using the Safety Idea/Issues Program, Corrective Action Management System (CAMS) or Facility Issue Tracking System. WSD deficiencies are

evaluated to define root and direct or contributing causes and are tracked to correction through the CAMS.

F. Accident Investigations

WSD accident investigations are performed by trained employees, who use a risk-based system, documented in their ES&H procedures, to investigate accidents and incidents.

ES&H representatives are responsible for formal accident investigations that result from injuries and illnesses, property or vehicle damage, and near misses. Accident investigations are conducted by teams of trained employees who have attended a WSD-sponsored Accident Investigation Workshop. Team members conduct the investigations of significant events and ensure that root causes are properly evaluated and addressed. All OSHA-recordable incidents are reported, and subject matter experts are used when needed. Lessons learned are shared through electronic mail, staff and safety meetings, required reading, and formal training.

Formal lessons learned from accident investigations are sent to the Hanford Site Lessons Learned Coordinator for distribution to the appropriate managers for further distribution to supervisors and workers through formal discussion and/or the required reading process.

G. Trend Analysis

Safety and health performance and trends are tracked at the Project and facility level. Data of occupational injury/illness statistics are presented to management and facility EZACs and discussed at the monthly WSD EZAC meetings. Facility-specific data are also made available and are shared at facility staff and EZAC meetings. Trending information is posted in each facility. The VPP criterion is that trend analysis must be conducted for all data accumulated under the health and safety program (including injury/illness statistics, inspections, and employee reports of hazards) to help identify systemic problems that may not be noticed when only isolated incidents are considered.

WSD develops monthly trending reports for hazards and hazard assessments, radiological exposure data, and injury and illness experience. The hazard/hazard assessment report provides summary data of each subproject on performance to monitor the processes used to reduce hazards. WSD uses the Site-wide Access Control Entry System (ACES) to track radiation dose tracking, worker training qualification, and verification. Exposure levels, rates, and skin/clothing contaminations are also tracked and trended for both positive and negative indicators. The monthly WSD injury and illness report is issued to management and the WSD EZACs, who then share the information with the employees.

Best/Good Practice

The Solid Waste Storage and Disposal (SWSD) organization has developed a safety and health self-assessment process to assist SWSD employees in performing routine walk-around assessments. This process includes a formal 2-hour training course (#300702 – Solid Waste

Storage And Disposal Field Safety Checklist) and a very detailed and informative SWSD Field Safety Checklist.

The checklist contains four main sections addressing specific topics, as follows:

- I. *Baseline Personal Protective Equipment Requirements*
This section identifies the baseline PPE requirements for personnel working at the SWSD facility.
- II. *Common Hazards, Lessons Learned, and Injury Prevention Measures*
This section contains several potential hazards conditions/circumstances, with detailed explanations to assist the assessor. Topics included are: (1) Insects, Birds, Reptiles and Rodents; (2) Environmental Conditions; (Weather); (3) Walking/Working Surfaces; (4) Vehicle Traffic; Ergonomics; and (5) Radiological Hazards. Each of these topic areas contains descriptive details useful to the assessor.
- III. *Central West Complex (CWC) and IV. Low Level Burial Grounds (LLBG)*
This section contains several potential hazards conditions/circumstances, with detailed explanations to assist the assessor. Topics included are: (1) Walking/Working Surfaces; (2) Ergonomics; (3) Chemical; and (4) Other. Each of these topic areas contains descriptive details useful to the assessor.
- IV. *Low Level Burial Grounds (LLBG)*
This section contains several potential hazards conditions and circumstances, with detailed explanations to assist the assessor. Topics included are: (1) Walking/Working Surfaces; (2) Subsidence; (3) Void Spaces; (4) Leachate Pumping; and (5) Wood-decked Flatbed Trailers. Each of these topic areas contain descriptive details useful to the assessor.

H. Conclusion

Worksite analysis methods are effective in addressing the hazards for existing and new hazards. WSD meets all of the requirements of the Worksite Analysis tenet.

VI. Hazard Prevention and Control

The level and complexity of the hazard prevention and control program found at this Site meet DOE-VPP criteria. Sub-elements of this tenet are addressed and described below.

A. Access to Certified Professionals

WSD has chosen to maintain a highly qualified S&H staff to meet the needs of their projects and assigned facilities. Personnel in the Industrial Hygiene, Occupational Safety, Fire Protection, and Radiological Control organizations have the education, training, experience, and professional certifications to provide high quality support to facility personnel. The staff includes Certified Industrial Hygienists (CIH), CSP, radiation protection technologists, and qualified fire protection engineers. Communication from this professional staff to the employees is encouraged and supported through various mechanisms, including the following:

- Holding meetings to discuss new regulations, technology, concerns, and other Site issues;
- Examining Site electrical issues (performed by the Hanford Workplace Electrical Safety Board);
- Establishing Centers of Expertise, including S&H, Radiological Control, and Nuclear Safety; and
- Locating technical experts near the work.

WSD depends on services available at the Hanford Site to complement their expertise. The Hanford Site maintains trained and qualified medical, fire department, and emergency response personnel and services. The Hanford Occupational Medical contractor, AdvanceMed Hanford (AMH), provides occupational medical personnel. AMH needs to assign a physician to work with WSD employees. There is a perception among some workers that the supervisors will work with AMH to predispose a doctor visit resulting from a workplace injury/illness so that the outcome is favorable to the company (i.e. does not result in an OSHA recordable incident). . Periodic meetings between AMH and employees should be held to discuss new regulations, technologies, concerns, or other Site-wide issues.

Services provided by AMH include case management, ergonomics assessments, exercise physiology, fitness for duty evaluations, health education, immediate health care, infection control, medical surveillance, occupational medicine and nursing, psychology and counseling, and work-suitability evaluations. AMH has been encouraged to perform Site visits throughout the year and to become more knowledgeable about field operations and potential medical risk factors. Communication from this staff of technical experts to the employees is encouraged and supported by a number of processes and policies.

It appears that safety is addressed routinely on an informal basis through the natural teams that exist. While this approach allows issues to be addressed quickly and efficiently, the informal nature of the system does not allow for any tracking or trending of issues at one site or across multiple sites. This could lead to repetitive circumstances since there is no opportunity for lessons learned. The use of the safety log book at the T Plant is a good example of a way to address this concern, but this is not used consistently across WSD.

NOTABLE: The HAMTC safety program has increased the communication among the workforce, managers, and S&H professionals. By implementing this safety representative program, the entire Site has benefited in a positive way.

B. Methods of Prevention and Control

Hazards at this Site are controlled using engineering controls, PPE, and work practice guidelines. These controls are reviewed and only need to be updated with worker input as needed. The Team found that all Site S&H rules, safe work practices, and PPE usage met requirements. The Site currently maintains Material Safety Data Sheets in a central location at all projects for access for their employees.

Notable:

Through the Job Control System (JCS) and AJHA processes, the planners are building work packages that include pictures which have been marked to show the work steps to be performed. This use of visual guides allows more thorough work package reviews because workers and planners can see the setup and identify any potential issues or hazards before going out in the field. The work in the field, once started, is then less likely to be interrupted due to unforeseen circumstances.

C. Safety and Health Rules

Rules and expectations have been clearly laid out for all workers and managers and are reinforced in various ways. WSD employees receive positive reinforcement, as well as discipline, when necessary. Senior managers are responsible for establishing and enforcing disciplinary policy in accordance with the documented FH Standards of Conduct. Violations of S&H procedures, activities, or standards can result in disciplinary action, up to and including dismissal. Interviewed employees indicated that they are aware that a disciplinary process exists, but many did not seem familiar with the details.

The WSD employee recognition process for rewarding noteworthy safety support appears to be in full force. Employees can nominate their peers to receive an award, if the suggestion is deemed to be worthy. At some facilities, the program has recently been expanded to include recognition eligibility for both the employee who nominated a peer and the nominee. Examples of actions that have been rewarded include spreading salt on ice- or snow-packed steps and cleaning snow from the windows on a snow-covered van.

The subcontractors throughout WSD follow the S&H practices. These employees were not fully integrated into the VPP process. The interviews with most of these employees indicated that they were not exposed to the VPP program.

NOTABLE: The use of Bingo cards at the LLBG/TRU and the safety hat at TRU are excellent ways to maintain safety awareness. Signing the safety hat at TRU, with the expectation that it will be passed along when a safe action is observed is a good example, as it promotes an awareness of what other workers are doing.

D. Personal Protective Equipment

Providing the necessary required PPE is site policy and protects workers from hazards that cannot be otherwise eliminated or avoided by engineering or administrative controls. Many types of equipment (e.g., gloves, boots, safety glasses, hearing protection, and respirators) are made available. Employees must receive training and appropriate medical evaluation before being permitted to use PPE. Training includes information about the maintenance, care, inspection, storage, disposal, and use of PPE. Where PPE is used, instructions for using it are integrated into task-specific procedures. Appropriate PPE was made available for visitors.

The requirement to wear hardhats was brought up as an issue more than once. While the requirement was established by the Fluor president, the decision about where to wear hardhats was delegated to the facility managers. Some employees expressed an opinion that they did not feel included in the decision about where hardhats should be required. They felt that the requirements as they are today in the LLBG, for instance, do not increase their safety.

E. Preventive/Predictive Maintenance

WSD has implemented a preventive maintenance (PM) program. Preventive and predictive maintenance is used to mitigate the chance of unplanned equipment failure and its effects, thereby enhancing safe and effective operations.

T Plant managers have created a system to schedule required PM before official notification from the MAXIMO system, as notifications do not always occur in a timely fashion. This system provides better control of scheduling these important activities.

F. Emergency Preparedness and Response

WSD has a mature emergency preparedness program, but it appears to have a weakness: although practice scenarios (drills and exercises) are conducted throughout WSD, few such scenarios are conducted at LLBG. WSD maintains a comprehensive set of response plans to a variety of potential scenarios and also participates in Hanford Site-wide emergency drills each year. There are a number of drills, covering a variety of potential hazards, throughout the year. Employees are trained annually on the Building Emergency Plans and facility hazards.

Employees interviewed were aware of emergency procedures and effectively explained the evacuation processes. WSD has several methods for communicating emergency conditions,

including alert phones, sirens, computers, intercoms, offsite radios, and so on. Weather emergencies are also communicated to employees, as was noted by the use of the crash phone system the previous week to evacuate the Site during a severe dust storm. Additionally, VPP Team members were briefed on Site emergency procedures and (although escorted during the VPP review) received orientation to Site alarms, postings, and various WSD hazards.

G. Radiation Protection Program

The Site has implemented the As Low As Reasonably Achievable (ALARA) program to maintain the highest standards of ES&H protection possible. The program includes appropriate levels of self-assessment and oversight to ensure compliance with departmental requirements and to ensure that established radiological work practices are being implemented. WSD ensures that personnel responsible for performing radiological work activities are appropriately trained and have the technical competence needed to implement and oversee the Radiological Control Program (RCP). Radiological Work Permits (RWP) are used to ensure that radiological operations are planned and performed properly. Data and trends are monitored to ensure adequate performance.

Care should be taken to ensure that the RWP review at daily meetings does not become too routine and, therefore, ignored. A concern was raised that the review of RWPs at T Plant was becoming cursory because everyone is very familiar with the work there. This type of complacency needs to be guarded against to maintain an awareness of the risks and safety mechanisms.

Employee interviews indicated that management holds the protection of employees from exposure to radiological hazards very important. Employee awareness of the WSD ALARA program was evident throughout this review.

H. Medical Programs

The Site has integrated medical services with ES&H. The WSD Project safety organization provides direct support and planning to the facilities on occupational health-related processes. The Team noted the prevalence of AEDs throughout the Site and was impressed by the number of workers who have been formally trained to use them. In addition, there was a clear understanding by many workers that the expectation is that anyone could use the AED in an emergency situation.

WSD uses the Employee Job Task Analysis (EJTA) system to match work-related hazards that require medical evaluation and essential job functions. Medical examinations are then scheduled, with notification to the employee and his/her supervisor. The Team found these combined systems to be unique and extremely efficient.

I. Conclusion

The Team did not identify any major weaknesses in the area of Hazard Prevention and Control, but has identified some areas for improvement. WSD meets all of the requirements for this tenet and its sub-elements, as described above, at the Merit level.

VII. Safety and Health Training

The S&H training programs and processes at WSD are well structured and effectively implemented throughout the majority of the Project's associated facilities. Training processes are in place that formally define the training required and ensure completion for employees and managers/supervisors/team leaders, and others. The current programs and processes adequately help train all workers to recognize hazards and perform work safely. Team interviews and overall observations confirmed that the training programs and processes are used and understood by appropriate personnel throughout the organization. The onsite review showed and confirmed that WSD training components are effectively developed, communicated, implemented, and self-assessed. The combined FH/WSD Training Organization is responsible for ensuring that the S&H training provided to the workforce remains accurate and up-to-date. The onsite Team assessment also confirmed that course revisions are made to procedures, standards, and regulations, as needed, to maintain accuracy and adequacy.

The Team did identify some weaknesses and room for improvement in management commitment to training. There are not enough experienced trainers available to support required on-the-job training (OJT) in limited select work areas at some facilities. The Team also learned during various employee interviews (e.g., at the WRAP and T-Plant facilities) that management may be relying too much on the use of OJT only in some work areas. The Team was also told that new employees do not always receive sufficient formal, detailed, classroom instruction tied to certain work to be done per procedures. There also appeared to be a lack of effort or focus across the WSD complex to factor learning (or knowledge) of operations into the training process to help support training on procedures to do the work. The Team also found that management commitment to ensuring an appropriate and sufficient level of employee training lagged behind at the WRAP facility as compared to the status or level of training at other WSD Project facilities. Refer to the Conclusion section below for more discussion on these findings.

An overall description of the programs, processes, and activities for safety and health training is discussed in the appropriate sections below.

A. Employees

In general terms, employees receive the appropriate training to do their job. Classroom training OJT, emergency training, and fitness examinations ensure team-member knowledge and the development of safe work practices to protect themselves, co-workers, the public, and the environment. Requalification programs are provided at regular intervals to update qualifications and maintain the proficiency of the workforce. Much of employee training occurs at the Hazardous Material Management Emergency Response (HAMMER) training facility with the fundamental concept being "workers training workers." A partnership with the training center and labor unions allows Bargaining Unit employees with subject-specific expertise to train other employees in a hands-on environment.

The Team confirmed by interviews, observations, and document reviews that each employee receives adequate training to work safely commensurate with their job description, responsibilities, and authority. The majority of employees interviewed reported that they are taught how to protect themselves and others from the hazards of their jobs, with a significant focus on the training program for WSD. There was evidence from observation, documentation, and interviews that where PPE is required, employees understand the need for it and can demonstrate that they know how to use and maintain it. Overall employee training is described more specifically below.

Orientation training for new hires includes S&H information that addresses reporting employee concerns, Hanford Site history, and employee benefits. The training also includes a presentation on overall worker S&H. The S&H presentation reviews the Fluor safety philosophy, worker responsibility for safety, “Stop Work” responsibilities, the “Worker’s Bill of Rights,” and safety councils. There is also an overview of the Integrated Safety Management System (ISMS) and VPP and a video on worker involvement in the FH safety program.

Following the new-hire orientation, the employee is required to complete the Hanford General Employee Training (HGET) course. The HGET is an interactive, computer-based course. This training satisfies requirements for employee, vendor, and long-term visitor access to the Hanford Site. For unescorted access to the Hanford Site, HGET covers basic information to enable the employee to work safely and in compliance with directives for computer and industrial security, emergency preparedness, environmental and waste management, hazard recognition, industrial safety and health, and radiological safety. The HGET course must be taken annually by every Site employee for proper validation requirements.

Facility and job-specific formal training is developed using a systematic approach to training (SAT) process. The SAT incorporates a stringent set of tools for analyzing the job position tasks and uses this information as a base to develop course work and in-field training materials to teach employees job-related tasks. The SAT program is evaluated for effectiveness to ensure that employees are fully qualified to perform job-related tasks, including how to respond to abnormal and emergency situations. Employee testing includes written examinations, performance demonstrations, and oral exams.

Hazards are identified through the AJHA program, and the results are used to identify and develop input into the training process. The AJHA process is a primary focus for support of developing procedures for training requirements and assists in identifying potential hazards and solutions before work begins. During interviews employees stated that use of the AJHA process has been increased significantly during the past year at a majority of the facilities that comprise the WSD Project. This is a valuable hazard recognition process that can provide task activity refresher training for AJHA participants. It is important for WSD management to continue to ensure that the AJHA process is used effectively within in each of the facility organizations, especially at WRAP and the Central Waste Complex (CWC).

OJT is used as necessary to ensure that the workers obtain the skills required to perform their specific job functions safely and effectively. This process is under the direction of a qualified OJT trainer/evaluator. Employees receive ‘hands-on’ training that is valuable in providing the

trainee with personal observation and possible hands-on experience. The employee's understanding and proficiency are documented to complete the process. The OJT trainer/evaluator is often a fellow employee or co-worker with sufficient experience and technical competence to evaluate a student's performance.

Informal training varies by group. However, a combination of pre-job meetings, safety awareness programs, vendor training, staff safety meetings, and workshops is used as an effective tool to get the safety message out to the employees, thereby increasing employee knowledge of safety hazards and concerns both on and off the job. There is ongoing, continuing training as applicable to help maintain and enhance the knowledge and capabilities of the employees. Examples include delivering lessons learned and keeping employees up-to-date on system configuration and procedure changes.

Courses are assigned tracking numbers by FH using training activity sheets on the Integrated Training Electronic Matrix (ITEM) system. Numbers are used to track training attendance and course completion information and are included in an electronic database for easy, quick access. FH also maintains hardcopy training records and dispositions them according to the approved Record Inventory Disposition Schedule. Rosters are kept for informal training attendance and are initiated for safety and pre-job meetings, workshops, or vendor training sessions.

PPE is used when required. WSD has a program that provides a process for identifying the need for PPE and includes responsibilities related to its selection and use. Where required, PPE is specified in work or job documents, such as in those related to operating and maintenance procedures, technical documents, and the AJHA. PPE is controlled and distributed by facility operations organizations as required for performing work activities.

B. Managers / Supervisors / Team Leaders

Management personnel interviewed reflected that they had been given sufficient training in proportion to, and within the scope of, their authority and responsibilities for employee safety. They were able to describe their S&H responsibilities and were able to appropriately describe the hazards associated with jobs under their supervision and the potential adverse effects on employees performing the jobs. Those interviewed appeared to be aware of their overall responsibilities related to general safety program responsibilities. Specifics of overall management training, including responsibilities, are discussed later in this section.

WSD has a safety strategy that includes its commitment to using OSHA-VPP standards in addition to those bound in their contract. For example, the vice president is responsible for serving on the President's Zero Accident Council; approving and presenting awards and other special employee recognition; and allocating budgets sufficient to ensure safety resources at all assigned facilities. Other senior managers within WSD are involved in similar activities within their respective facilities and organizations. This includes being involved in developing goals and objectives contained in the annual facility/project Safety Improvement Plans (SIPs), attending EZAC meetings, and making presentations to employees on the various aspects of the S&H program.

Managers and supervisors administer the program and procedures essential to supporting the S&H policy, with a focus on continual improvement in safety. They are responsible for ensuring that workers are adequately trained; and most importantly, that workers both understand and are aware of hazards in the workplace inherent to their job-related tasks. Line management is further responsible for ensuring that resources are available for safe performance of all work activities and that all WSD S&H functions are sufficiently funded, including training programs. The training budget has maintained a steady level for the most part over the last few years. The overall onsite review confirmed that the funds for training are adequate to maintain a safe work environment at the facilities.

Depending on the work scope, some managers, supervisors, and team leads attend additional courses, such as the 8-hour Hazardous Waste Supervisor course and Dangerous Waste Handling. They also attend compliance-based training courses (e.g., Lock and Tag, Confined Space Entry, and Radiation Worker II). WSD managers, supervisors, and team leads receive fundamentally the same S&H training as the employees, with the exception of some greater, or more in-depth, training regarding the specific responsibilities required for management positions. Overall management training is documented and tracked identically to that of the employees (i.e., by the ITEM system).

There is supplemental training for managers in a course that teaches them about various levels of management roles and responsibilities as S&H program leaders and how to set meaningful goals and objectives and achieve employee involvement. This supplemental course also addresses the importance of daily commitment to safety. An advanced session is being developed to reach a goal of more in-depth training for management.

Additional training given to supervisors and team leads may include accident investigation, safety assessments, conduct of operations, electrical safety, injury and illness recordkeeping, risk evaluation, and similar topics. Managers and supervisors also receive “Safety Leadership” training, which provides training in accident investigations, ISMS, worker and team roles in work planning, and pre- and post-job reviews.

WSD management’s use of the disciplinary system program in accordance with the documented FH Standards of Conduct may be used to ensure employee (Exempt and Bargaining Unit personnel) conformance to safety rules and safe work practices.

Line managers, supervisors, team leads, emergency directors, and facility personnel participation in facility drills and critiques ensures appropriate emergency response. Information from the critiques is shared with employees to improve emergency response and used as a training tool. Revised drill scenarios are then run to validate the use of new skills and processes. Training is completed as necessary on command and control center, emergency classification, formal communications during emergencies, personnel accountability and response, and available tools such as checklists and rosters.

C. Conclusion

The Team found that overall there is a strong management commitment to S&H training for both WSD managers and workforce. This was evidenced by the active and effective involvement of management and employees throughout the complex to achieve an overall safe working environment at the Site. Managers, supervisors, and employees sufficiently know and understand the policies, rules, and procedures established to help prevent unnecessary exposure to the hazards associated with the workplace mission. It appeared that overall responsibilities are understood regarding the WSD S&H training process. For the most part, employee ownership seemed to exist throughout the worksite as created by the training program in place at WSD. The training process allows an opportunity for management to create employee ownership of the program throughout the complex. Workers appeared for the most part to be proud of their worksite and felt that safety was integral to the work being done.

Overall, the Team did not identify any major weaknesses in the area of S&H training for the majority of WSD employees. However, the Team did find opportunities for improvement that can serve as goals for achieving full potential for the VPP training tenet). These included the relying too much, or primarily, on OJT across the complex and the lack of availability or use of experienced trainers as required. This is true especially when coupled with the need or focus to get work completed in relation to production schedules.

At WRAP, specifically, the Team was told during interviews that if new employees or workers on the job are not familiar with the problematic history tied to performing certain work and are not sufficiently or adequately trained in the entire process associated with specific work situations (i.e., learn only the basics through minimal OJT without classroom instruction and experienced trainers) they might not sufficiently understand and follow the work procedures. This could result in serious hazardous conditions, injuries, and unwarranted disciplinary actions. It is a particularly important issue in relation to training workers in those areas (e.g., LO/TO) where there is a history across the DOE Complex of incorrect/incomplete performance resulting in serious job-related safety hazards.

One area of focus during the onsite assessment was LO/TO. Clarifying information provided to the Team members subsequent to the site visit verified that Site LOTO training requires every person (Bargaining Unit and Exempt) who participates in the LOTO program (Operations Controlling Organization and Authorized Workers) to attend a formal 9-hour training course with qualified instructors. The formal training includes actual hands-on personal demonstrations evaluated by qualified instructors. Required annual retraining is also part of the program. This process was initiated on the Site in April 2004, and all workers (Bargaining Unit and Exempt) in the LOTO Program have completed that training, which addresses concerns expressed by workers about proper training.

More time may be needed (specifically at the WRAP facility) to demonstrate management's continued commitment to ensuring that S&H training will develop into an appropriate level to meet its full potential.

There is room for improvement in training programs to ensure that workers throughout the WSD Project-related facilities learn more about the operations and procedures developed and used for work that supports the overall mission operational functions. This should include training based on operations manuals.

Although management clearly remains committed to overall safety throughout WSD, management leadership in implementing VPP has not yet reached its full potential regarding STAR status for training for WSD as a whole or for all facilities.

VIII. Conclusion

The Team found WSD to have a viable VPP program. Because of the uniqueness of the company structure and its diverse operations, however, the Team found some areas/organizations were not carrying out all of the VPP tenets to maximum across the board. Some organizations were consistently strong in all tenets; others were not.

The Team observed management to be committed to safety overall. Management leadership in the actual implementation of the VPP Program in some organizations, however, has not met its full potential. This may be related to recent changes in positions as well as a lack of in-depth knowledge of VPP Programs. This is also reflected in employees' feelings of uncertainty of the forthcoming reduction in staff.

Implementing improvements in communication throughout the Project, as well as at local facilities; changing the "perception of production over safety"; developing opportunities for employee work process involvement; and increasing involvement in achieving a unified safety culture across the Project will enhance the WSD VPP.

The Team concludes that WSD has satisfied the requirements for participation in DOE-VPP and recommends that DOE approve Merit VPP Status for WSD at this time.

APPENDIX: Team Roster and Areas of Responsibility
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Name	Organization	Areas of Responsibility
Carlos Coffman	DOE/EH	Team Leader
Bob Stevens	DOE/EH	Safety and Health Training
Theo Martin	DOE/RL	Employee Involvement
Theresa Aldridge	DOE/PNSO	Employee Involvement
Catherine Karney	DOE/KCP	Hazard Prevention and Control
John Cavanaugh	DOE/RL	Safety and Health Training
Steve Goheen	PNNL	Management Leadership
Steve Maki	HAMTC/BTC	Hazard Prevention and Control
Martin Rajsich	Yucca Mountain	Worksite Analysis
Mike Tinker	PNNL	Worksite Analysis
Kirby Ward	Yucca Mountain	Management Leadership

