



## Wackenhut Services, Inc. - Nevada

**Report from the DOE  
Voluntary Protection Program  
Onsite Review  
March 19-30, 2007**



**U.S. Department of Energy**  
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# Foreword

THE DEPARTMENT OF ENERGY (DOE) recognizes that true excellence can be encouraged and guided but not standardized. For this reason, on January 26, 1994, the Department initiated the DOE Voluntary Protection Program (DOE-VPP) to encourage and recognize excellence in occupational safety and health protection. The DOE-VPP closely parallels the Occupational Safety and Health Administration (OSHA) Voluntary Protection Program (VPP), which was established by OSHA in 1982 and has demonstrated that cooperative action among government, industry, and labor can achieve excellence in worker health and safety.

DOE-VPP outlines areas where DOE contractors and subcontractors can comply with DOE Orders and OSHA standards while also “stretching for excellence.” DOE-VPP emphasizes systematic and creative approaches involving cooperative efforts of everyone in the contractor or subcontractor workforce at DOE sites, including contractor managers and workers.

Requirements for DOE-VPP participation are based on comprehensive management systems, with employees actively involved in assessing, preventing, and controlling the potential health and safety hazards at their sites. DOE-VPP is designed to apply to all contractors in the DOE complex and encompasses production facilities, research and development operations, and various subcontractors and support organizations.

DOE contractors are not required to apply for participation in the DOE-VPP. In keeping with OSHA’s VPP philosophy, participation is strictly voluntary. Additionally, participants may withdraw from the program at any time.

DOE-VPP consists of three programs, which are based on and similar to those in OSHA’s VPP. These programs are Star, Merit, and Demonstration. The Star program is the core of DOE-VPP, and its achievement indicates truly outstanding protectors of employee safety and health. The Merit program is a steppingstone for contractors and subcontractors that have good safety and health programs but need time and DOE guidance to achieve Star status. The Demonstration program is expected to be used rarely; it exists to allow DOE to recognize achievements in unusual situations about which DOE needs to learn more before determining approval requirements for the Star program.

By approving an applicant for participation in DOE-VPP, DOE recognizes that the applicant is meeting, at a minimum, the basic elements of ongoing, systematic protection of employees at the site. The symbols of this recognition are DOE-provided certificates of approval and the right to fly the VPP flags (e.g., VPP Star flag for sites with Star status). The participant may also choose to use the DOE-VPP logo on letterhead or on award items for employee incentive programs. Further, each approved site will have a designated DOE staff person to handle information and assistance requests from DOE contractors, and DOE will work cooperatively with the contractors to resolve health and safety problems.

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**ABBREVIATIONS AND ACRONYMS**

ABCD	Above and Beyond the Call of Duty
BLS	Bureau of Labor Statistics
CO	Carbon Monoxide
DART	Days Away, Restricted, or Transferred
DAF	Device Assembly Facility
DOE	U.S. Department of Energy
DOE-VPP	U.S. Department of Energy Voluntary Protection Program
ESC	Employee Safety Committee
ES & H	Environment, Safety & Health
ESS	Engagement Simulations Systems
FIST	Fighting Station
HRP	Human Reliability Program
HSS	Office of Health, Safety and Security
IGAN	Independent Guard Association of Nevada
IH	Industrial Hygienist
IDLH	Immediately Dangerous to Life or Health
ISMS	Integrated Safety Management System
LSPT	Limited Scope Performance Test
MILES	Multiple Integrated Laser Equipment
M&O	Management and Operating
NAICS	North American Industry Classification System
NNSA	National Nuclear Security Administration
NTS	Nevada Test Site
NSTec	National Security Technologies
NSO	Nevada Site Office
OSH	Occupational Safety and Health
OSHA	U.S. Department of Labor's Occupational Safety and Health Administration
PPE	Personal Protective Equipment
RAR	Risk Assessment Report
REOP	Real Estate Operating Permit
SPO	Security Police Officer
SRT	Special Response Team
SSSP	Site Safeguards Security Plan
TRC	Total Recordable Case
VPP	Voluntary Protection Program
WSI-NV	Wackenhut Services, Inc. – Nevada

## EXECUTIVE SUMMARY

Wackenhut Services Incorporated – Nevada (WSI-NV) is responsible for providing security to all Nevada Test Site (NTS) personnel, facilities, equipment, material, and operations and for traffic control, visitor control and badging operations, and safeguards and security awareness programs. In 2004, WSI-NV was also tasked with establishing a special response team capability.

WSI-NV was originally awarded VPP Star Status in 2001, and was recertified in 2004. Since 2004, WSI-NV has grown almost four times larger, been through a long period of contract uncertainty, and renegotiated the collective bargaining agreement with the Independent Guard Association of Nevada. The organizational stresses associated with these changes have had a detrimental impact on the VPP implementation. Management leadership in the VPP has not been sufficient to sustain the corporate program, self assessments have not been adequately self-critical to identify developing problems and trends, employees have not been oriented and trained in the tenets of VPP, worksite inspections and analyses have not been sufficiently rigorous.

Despite these weaknesses, WSI-NV managers and employees continue to exhibit a desire to restore the VPP to its former strength. The dominant hazards and dangers associated with the rigorous training necessary to accomplish the WSI-NV mission are recognized and adequately controlled. WSI-NV has taken the lead for the complex in identifying, analyzing, and addressing lead and Carbon Monoxide (CO) hazards associated with the use of blank ammunition.

In cases where VPP performance has not been sufficient to maintain Star status, the contractor can be recommended for a Conditional Star rating. This rating requires the contractor to address the specific problems identified, and then be reinspected after 12 months. The team is making the recommendation that WSI-NV be awarded a Conditional Star rating. In order to regain Star status, WSI-NV must address the Opportunities for Improvement identified in this report. HSS will then perform a reinspection in 2008 to evaluate progress.

**Table 1. Opportunities for Improvement**

<b>Opportunity for Improvement</b>	<b>See Page</b>
WSI-NV should analyze and document the root causes for negative trend in TRC and DART case rates, and use that analysis to identify specific actions to reduce accident and injury rates in 2007. Further, specific numerical goals should be established to demonstrate effectiveness of those actions.	4
WSI-NV and IGAN should find additional opportunities to encourage and improve communications between managers and workers by providing more top management visibility. Look for opportunities to encourage workers to ask questions of managers, and ensure those questions are answered openly.	5
WSI-NV should perform and document an assessment of management processes to determine which processes require change to better support the rapid growth and expected size of the workforce. This review should include a specific assessment of existing ES&H procedures. WSI-NV should identify those areas where it is not in compliance with existing procedures, and determine appropriate corrective actions.	6
WSI-NV should expand the current ES&H section to include one or more Industrial Hygienists, Safety Engineers, and Certified Safety Professionals. Use this expertise to assist in performance of hazard surveys and analysis, as well as selection and implementation of controls.	6
WSI-NV –NV should expand and maintain a more systematic and integrated approach to capturing, prioritizing, and trending internally identified issues, that includes identification of corrective actions, tracking those actions to closure, verifying effectiveness of the corrective actions, and providing regular status to managers and employees. This process should include items identified by internal management assessments and walk-arounds, Employee Safety Committee concerns and issues, Safety Patrols, and individual employee identified concerns or suggestions.	7
WSI-NV should improve the quality of annual program assessments of both VPP and ISMS to ensure the assessments focus not just on the existence of processes and procedures, but on effective implementation of those procedures through performance based inspections.	8
WSI-NV and IGAN should cooperate to ensure workers can raise safety concerns without regard to seniority, and without fear of retribution by managers, supervisors, or fellow employees.	9
WSI-NV should form a standing equipment review committee chaired by an appropriate manager and including participation by knowledgeable employees and supervisors to review existing and proposed new equipment to ensure employee concerns with equipment safety and suitability are adequately addressed. Ensure management decisions for equipment procurement are clearly explained, particularly when decisions involve potential conflicts between safety and security performance.	10

WSI-NV should expand the ESC to include a tiered structure of committees that include geographically or functionally located subcommittees, the current employee safety committee, and a General Manager's safety committee. Establish a process for each of the committees to raise safety concerns (e.g. subcommittees meet weekly or biweekly, ESC meets monthly, and GM committee meets quarterly).	10
WSI-NV should resume safety patrols per SP2-020, and periodically include professional safety expertise (e.g. Industrial Hygiene or Safety Engineer) along with the employees performing the safety patrol. Ensure results of the safety patrols are tracked and trended. Establish a minimum set of inspection criteria used during the patrol that include vehicle safety checks, first aid kits, availability and use of water, and any other recurring safety concerns. Encourage employees to look beyond the checklists and identify and correct unsafe behaviors without regard to seniority.	11
WSI-NV and IGAN should cooperate to reestablish their commitment to the VPP. Provide regular briefings by both WSI-NV managers and IGAN representatives to all employees that focus on the necessary commitment to partnership and excellence in safety performance, not just compliance. Ensure all employees truly understand the tenets of VPP, and their individual responsibilities for maintaining VPP Star status.	12
WSI-NV should perform formal hazard surveys of all work areas and worksites to identify previously unrecognized hazards (e.g. use of chemicals in electronics maintenance areas) and missing controls (e.g. lead surveys, eye-wash stations). The results of these surveys should be compared to existing Risk Analysis Reports, and discrepancies or errors should be documented and corrected.	14
WSI-NV should establish clear management expectations that all injuries, no matter how minor, are reported to supervisors. This should include minor, self first aid, as these cases could indicate precursors to more significant safety problems. Identify and trend data from injuries and illnesses to identify at risk behaviors.	15
WSI-NV should improve tracking of maintenance requests submitted to NSTec to include regular reports to WSI-NV regarding current backlog, priority, and scheduling of work requests. Make these reports available to the supervisors, and encourage supervisors to share them with individual employees. Ensure work orders open longer than 90 days are clearly identified, and decisions to either increase the priority or drop the request are documented and communicated.	19
WSI-NV should provide training to field supervisors on proper investigation and documentation of accidents and injuries to ensure essential information is captured and preserved.	20
WSI-NV should provide additional dedicated safety topics during muster, daily briefings, or other training venues as appropriate. Dedicate sufficient time (e.g.	21

<p>10-15 minutes at a single muster each week) to specific topics that reinforce basic safety training. Topics to consider for regular review include basic radiological controls, the purpose for wearing dosimeters and the expected doses to workers, lead awareness and controls, carbon monoxide, respirator use and effectiveness, vehicle safety, heat and cold stress management, vehicle placards, emergency response expectations (e.g. leaking vehicle) and other topics that might be raised by individual employee questions.</p>	
<p>WSI-NV should provide a structured, written briefing for all guard mounts, including safety topics, and keep those written briefings in notebooks at all posts. Encourage individual employees to review the guard mount briefings from all guard mounts since their previous duty.</p>	21
<p>WSI-NV and IGAN should cooperate to establish a formal mentoring process between senior protective force members and new members. Mentors should be selected from volunteers that exhibit the necessary commitment and attitude to teach new members of the protective force appropriate safe behaviors while performing their duties, as well as improve integration of new employees into the ranks.</p>	21



## I. INTRODUCTION

The U.S. Department of Energy Voluntary Protection Program (DOE-VPP) onsite review of Wackenhut Services, Inc. – Nevada (WSI-NV), was conducted March 19-30, 2007, at the Nevada Test Site (NTS), Nevada. WSI-NV is the prime contractor for safeguards and security at the NTS. The National Nuclear Safety Administration (NNSA) Nevada Site Office (NSO) manages the contract and provides direction and oversight of WSI-NV.

WSI-NV has been contracting with DOE since 1965. WSI-NV provides for physical security protection of equipment and devices that are vital to the national security. The company's specially trained personnel are skilled in the use of special weapons and equipment and in paramilitary operations. WSI-NV is responsible for providing security to all NTS personnel, facilities, equipment, material, and operations and for traffic control, visitor control and badging operations, and safeguards and security awareness programs. WSI-NV also patrols security boundaries, fences, gates, and other protective devices, providing appropriate response actions when necessary. Since 2004, WSI-NV has also been tasked with training and maintaining a special response team (SRT).

WSI-NV was originally certified as a DOE-VPP Star site in 2001. Since that time, they have received one triennial recertification. Immediately following that recertification, they received an Independent Oversight Assessment of Safeguards and Security that identified a number of findings related to the security response and security posture. Additionally since that time, they have renegotiated the contract with the NNSA/NSO, and renegotiated the collective bargaining agreement with the Independent Guard Association of Nevada (IGAN), the bargaining unit representative union. At the previous review in 2004, WSI-NV had a total of 242 workers. Since that time, due to changes in the NTS mission and security requirements, WSI-NV has grown to over 460 employees, and is planning on having over 500 employees within the next year.

Continuation in the DOE-VPP requires an onsite review every three years by the Office of Health, Safety and Security (HSS) DOE-VPP team (Team) to determine whether the applicant is continuing to perform at a level deserving VPP recognition. The HSS Team, consisting of safety professionals with VPP experience and expertise from DOE Headquarters and other DOE sites, evaluated WSI-NV's safety programs against the provisions of the DOE-VPP. In order to ensure an appropriate balance between safety and security concerns, the HSS Team included one member with a security background. During the site visit, the HSS Team observed extensive work activities, evaluated relevant safety documents and procedures, and conducted interviews to assess the strength and effectiveness of WSI-NV's health and safety programs. Additionally, the HSS review of VPP was conducted concurrently with an HSS Independent Oversight Inspection of Environment, Safety and Health. The two teams coordinated their activities to minimize impact on WSI-NV operations, and ensure consistent results

The Team interviewed many employees either formally or during observation of field activities. Interviews included uniformed, non-uniformed, supervisory, and management personnel. Most of the safety hazards encountered during WSI-NV work are associated with paramilitary training, storage of weapons and explosives, as well as some standard industrial hazards associated with maintenance activities. Environmental hazards, such as heat or cold stress, poisonous snakes and insects, and weather also make up a significant portion of the risk

exposure. While these are the predominant hazards, workers may also encounter radiological hazards that may be present at the NTS from both historical and current testing activities.

## II. INJURY INCIDENCE / LOST WORKDAYS CASE RATE

The HSS Team conducted a review of the Occupational Safety and Health Administration (OSHA) 300 logs, but relied significantly on the review performed by the Independent Oversight inspection. The tables below summarize the OSHA reportable data for WSI-NV employees as reported by WSI-NV.

### WACKENHUT SERVICES, INC., NEVADA INJURY INCIDENCE / LOST WORKDAYS CASE RATE

Injury Incidence / Lost Workdays Case Rate (WSI-NV)					
Calendar Year	Hours Worked	Total Recordable Cases (TRC)	Total Recordable Case Incidence Rate	DART Cases	DART Case Rate
2004	633,984	7	2.2	7	2.2
2005	908,345	13	2.9	12	2.6
2006	1,119,918	16	2.9	13	2.3
Three Years	2,662,247	36		32	
Bureau of Labor Statistics (BLS-2005) average for NAICS* Code # 5616			3.4		1.7

**\*Note: North American Industry Classification System**

**Total Recordable Case Incidence Rate: 2.7**

**Lost or Restricted Workday Case Incidence Rate including subcontractors: 2.4**

### Conclusion

The reported WSI-NV TRC rates are below the average for the comparable industry and meet the criteria for participation in the DOE-VPP program at the Star level. The three-year average Days Away, Restricted, or Transferred (DART) rate is above the comparison industry rate. Further, the TRC rate indicates an increasing trend. WSI-NV comparison to these industries may not be completely valid, as the NAICS code does not adequately address paramilitary operations, armored guard movements, and special response teams and tactics. A more accurate comparison would be with military training units, but those statistics are not available for comparison.

The Independent Oversight team performed a detailed review of accident/injury reporting and statistics in connection with their review. That review found some problems with accident and injury categorization. The Independent Oversight team identified an additional six cases that it believed were reportable cases, two of which also represented restricted cases. If that correction is applied, the TRC rate becomes 3.9 for 2006 with a three-year average of 3.16. The TRC rate having an increasing trend, and being above the average for the industry is cause for concern, and warrants action by WSI-NV to establish specific goals, and actively manage achievement of that goal. There is no evidence that the incorrectly classified cases were intentional, but more represent the staffing shortages within the Environment, Safety & Health (ES&H) section

responsible for tracking and trending the OSHA 300 data. The trend in accident and injury statistics may be related to the increased rigor of required training, but is also probably related to the need for additional attention by members of the protective force and workers to safe work practices.

**WSI-NV should analyze and document the root causes for negative trend in TRC and DART case rates, and use that analysis to identify specific actions to reduce accident and injury rates in 2007. Further, specific numerical goals should be established to demonstrate effectiveness of those actions.**

### III. MANAGEMENT LEADERSHIP

Management and leadership is a key element of obtaining and sustaining an effective safety culture. The contractor must demonstrate senior-level management commitment to occupational safety and health in general and to meeting the requirements of the DOE-VPP. Management systems for comprehensive planning must address health and safety requirements and initiatives. As with any other management system, authority and responsibility for employee health and safety must be integrated with the management system of the organization and must involve employees at all levels of the organization. Elements of that management system must include clearly communicated policies and goals, clear definition and appropriate assignment of responsibility and authority, adequate resources, and accountability for both managers and workers. Finally, managers must be visible, accessible, and credible to employees.

Interviews with managers and supervisors, from the General Manager to the shift lieutenants and shop supervisors indicated a clear commitment to safety. However, as described in the Employee Involvement section, workers were not always convinced of managers' commitment to safety. Some workers have raised issues that may or may not relate to safety, but have not always received timely feedback, or the answers for which they were hoping. These responses (or lack thereof) from managers and supervisors are subsequently viewed as a lack of management commitment to improving safety. This perception is not widespread, but it is indicative of the need for all levels of management to ensure that worker questions or suggestions are addressed in a clear and timely manner.

**WSI-NV and IGAN should find additional opportunities to encourage and improve communications between managers and workers by providing more top management visibility. Look for opportunities to encourage workers to ask questions of managers, and ensure those questions are answered openly.**

WSI-NV Policy P2-01, *Environment, Safety and Health*, clearly establishes a written policy that WSI-NV will conduct all its operations in a manner that reduces employee exposure to hazards, minimizes impact on the environment, and actively involves all employees. That policy has recently been updated to reflect recent organizational changes. That policy also clearly assigns responsibility to managers, directors, and supervisors for implementation. This policy is available via the company web page. Further, the company mission statement, including safety, is posted throughout various locations on bulletin boards. All managers and employees understand the written policy.

WSI-NV has a unique challenge related to setting the priority for safety and health. Their primary mission, which is paramount, is the protection of special nuclear material and classified information. This mission requires a highly trained, disciplined, paramilitary force. The protective force must be ready, willing, and able to respond without question to orders given by their commanders in the field, even if following those orders may result in their injury or death. In a normal safety oriented culture, workers are encouraged, even required, to question actions that could result in injury or death. The challenge to WSI-NV is to strike a balance between these two seemingly cross purposes. Observations and interviews would indicate that WSI-NV has managed to establish an appropriate balance.

In 2004, the NTS received a new mission requiring a significantly increased security capability. WSI-NV has been challenged since then to add additional protective force personnel, train them, obtain security clearances, and then get them certified in the Human Reliability Program (HRP). Concurrent with this increase in mission, WSI-NV was in the process of rebidding the contract with NNSA, and negotiating a new collective bargaining agreement with IGAN. Uncertainty over the contract award has had a significant affect on staff hiring decisions. Managers have been so focused on these mission requirements and contract changes that actions to maintain the VPP program have lapsed. Information provided to new employees has not been sufficient to ensure new employees fully understand their role in the VPP program. While managers did clearly express their concern with providing a safe and healthy workplace, they did not demonstrate an understanding that VPP participants must be proactive in pursuing excellence in safety performance that goes beyond simply complying with requirements. Further, there were no clear examples that could be provided that would have reflected this commitment to excellence.

**WSI-NV should perform and document an assessment of management processes to determine which processes require change to better support the rapid growth and expected size of the work force. This review should include a specific assessment of existing ES&H procedures. WSI-NV should identify those areas where it is not in compliance with existing procedures, and determine appropriate corrective actions.**

The safety and health program is contained in a number of separate procedures that include an Integrated Safety Management System Description Document and a variety of program implementing procedures. These procedures are available electronically to all employees via the company webpage, although employees do not always have ready computer access. In some cases, these procedures are not all effectively implemented and followed. For example, SP2-003, *Industrial Hygiene*, requires the performance of periodic health hazard surveys and assessments that have not been performed due to lack of industrial hygiene or industrial safety experience and qualification within the ES&H staff. WSI-NV relies on National Securities Technologies (NSTec) to provide industrial hygiene and safety expertise on an on call basis. This expertise is used for large or new projects, but is not used to help identify and control more routine hazards, such as chemical use or soldering in workshops, regular inspection or assessment of workplace hazards, or regular monitoring of hazards.

**WSI-NV should expand the current ES&H section to include one or more Industrial Hygienists, Safety Engineers, or Certified Safety Professionals. Use this expertise to assist in performance of hazard surveys and analysis, as well as selection and implementation of controls.**

Accountability for WSI-NV is accomplished through regular performance evaluations. In addition, there is a documented disciplinary process that can be invoked for severe breaches of duty. Those breaches can include unsafe acts that lead to accident, injury, or death. The process includes a hearing that may be chaired by the General Manager if the punishment may include terminating the employee.

WSI-NV uses a variety of awards to encourage safe behaviors. At the lowest level, supervisors and managers have the authority and resources to give “safety bravo” awards to workers. These consist of a variety of gift cards, typically \$20 value to recognize an act that clearly demonstrates the purpose and goals of the employee safety program. The Employee Safety Committee (ESC) awards a monthly \$50 award for a safety slogan that is published in the company newsletter, posted on bulletin boards with credit to the author. The company has recently revised its driver safety award to provide a \$25 award to each employee that goes three months without having a preventable traffic accident or incident. Another award is the “Above and Beyond the Call of Duty (ABCD)” award, which may include safety.

Top management involvement in safety and health activities for the protective force is evident through regular participation in protective force musters, annual protective force training, and regular management meetings. Management expectations for safety are included in muster announcements, as well as inspections of field personnel during the shift. Management presence for non-uniformed personnel is less evident as these employees do not participate in daily musters and are not regularly inspected by their supervision. The General Manager has a clearly written open door policy, but few employees take advantage of this policy, preferring to voice their safety concerns and issues through the union safety representatives.

WSI-NV has a system for evaluating the operation of the safety and health program. SP2-101, *Assessment Program*, establishes the basic framework of an assessment program and identifies general responsibilities for scheduling and conducting assessments, as well as tracking corrective actions. There is a schedule of major program assessments produced by the Quality Assurance section. Additional assessments include management walk-arounds, performance tests and exercises, drills, and line review assessments. SP2-015, *ES&H Inspection, Assessment and Employee Involvement Program*, establishes the ES&H oversight program for WSI-NV and includes performance of the annual VPP and ISMS evaluations.

Findings and observations from independent assessments are prioritized and tracked in a central database (Consolidated Action Tracking System) maintained by the Quality Assurance section. Findings and observations from other assessments (walking the spaces reports, safety patrols, employee safety committee issues, and employee concerns or suggestions) are not formally tracked to closure in an integrated action tracking system. If there are any documented reports from these activities, there may be some documentation of closure, but it is inconsistent. Managers have the option (SP2-101, *Assessment Program*) to report those issues to the Quality Assurance section, but that option is rarely exercised. Without a central, integrated means of screening, prioritizing, and tracking these observations or issues, WSI-NV misses the opportunity to trend the observations and correct conditions that may indicate more significant problems.

**WSI-NV should expand and maintain a more systematic and integrated approach to capturing, prioritizing, and trending internally identified issues, that includes identification of corrective actions, tracking those actions to closure, verifying effectiveness of the corrective actions, and providing regular status to managers and employees. This process should include items identified by internal management assessments and walk-arounds, Employee Safety Committee concerns and issues, Safety Patrols, and individual employee identified concerns or suggestions.**

Immediately prior to this annual certification, WSI-NV submitted the results of their annual VPP self-evaluation to NNSA. That report, although not yet reviewed by NNSA/NSO, was provided to the HSS Team for their review during this triennial recertification. The report is clearly structured around the VPP tenets and includes an assessment against the goals established for 2006.

The annual report as submitted does not reflect a critical self-evaluation of VPP performance. The assessment was performed by the ES&H section staff, the Chair of the ESC, and another IGAN representative. The report identifies that WSI-NV did not successfully accomplish all of its goals for 2006, but does not perform any critical analysis of why those goals were not met. The report did not identify any opportunities for improvement in any of the program areas evaluated. Finally, the report failed to address the three unauthorized discharges that occurred in the past year, even though these events may have provided some insight to unsafe behaviors and attitudes that probably contributed to the negative trends in TRC and DART statistics.

A key aspect of participation in the VPP is the ability and commitment to critical self-evaluation. WSI-NV has not been effective over the past three years in identifying and correcting weaknesses that have developed in their safety program. These weaknesses stem from a significant strain that has been placed on WSI-NV due to rapid personnel growth, increased mission requirements, and increased DOE expectations for security response personnel. Although WSI-NV has effectively managed most of the change required, they have been focused primarily on compliance with safety requirements. The annual VPP assessment and the annual ISMS assessment have both missed critical program weaknesses.

**WSI-NV should improve the quality of annual program assessments of both VPP and ISMS to ensure the assessments focus not just on the existence of processes and procedures, but on effective implementation of those procedures through performance based inspections.**

## Conclusion

WSI-NV is clearly committed to providing a safe and healthy workplace for all employees, but their leadership has not been sufficient to maintain an effective voluntary protection program. Due to a number of factors over the past three years, including significant staffing increases, increases in mission requirements, and contract uncertainty, managers have not provided adequate leadership to maintain DOE-VPP Star level performance. Annual assessments have not been sufficiently detailed to identify failure points, and some critical weaknesses have developed. Program assessments have been left to the ES&H section, with support from the ESC, and do not include a broad range of experience and knowledge, particularly with respect to Industrial Hygiene.



#### IV. EMPLOYEE INVOLVEMENT

Employees at all levels must be involved in the structure and operation of the safety and health program and in decisions that affect employee health and safety. Employee participation is in addition to the individual right to notify appropriate managers of hazardous conditions and practices.

The company's procedures and open door policy clearly indicate that there are multiple avenues of employee participation available. Employees can contact managers, immediate supervisors, safety and health personnel, ESC members, or union representatives when they have a safety concern.

The employees interviewed by the HSS Team have worked for WSI-NV for periods ranging less than a year to over 20 years. While employees are formally empowered to raise a concern, some do not know who to contact to fix a problem. Most hourly employees felt that they did not participate in the safety and health program directly, but relied on their representative from the ESC or Union Safety Representative. A few expressed concern that raising issues might make them a target of retaliation either by supervisors or their peers. This concern about raising issues may have been a factor in one of the unauthorized discharge incidents in the past year. In that case, one Security Police Officer (SPO) did not stop another from practicing drawing his weapon because of seniority. Supervisors and employees need to be reminded of ways they can participate in safety, their rights, and the company's policy that no reprisals will occur for reporting safety concerns or issues. Furthermore, WSI-NV and IGAN must be ever vigilant looking for any sign or appearance of reprisals for safety concerns and correct them immediately.

**WSI-NV and IGAN should cooperate to ensure workers can raise safety concerns without regard to seniority and without fear of retribution by managers, supervisors, or fellow employees.**

Company policies do not clearly encourage employee participation in the selection of new equipment. Since the last recertification, WSI-NV has changed the side weapon and holster used by the protective force. Additionally, many members of the protective force expressed dissatisfaction with wearing respirators on their legs, the comfort and usability of some security vehicles, and the type of boots required to be worn. Although WSI-NV sought assistance in these equipment selections through Quality Improvement Teams, Subject Matter Experts, and IGAN, many members of the protective force believed their concerns with the equipment and its affect on their response capabilities were not adequately addressed. While the SPO's do not expect to have a popular vote on the choice of the company issued equipment, they believed that the employees concerns were not adequately factored into these decisions. Protective force members perceived that the equipment selections were not always objective, and that better choices were not considered. Other changes will be occurring regarding the type of equipment being used, and hourly employees would like to be part of the decision making process. Improving employee input through a standing equipment review committee would work to build trust between employees and managers, and provide an effective forum for managers and employees to better express concerns and the decision basis for equipment selection. Although many of these decisions are not safety decisions, building of worker trust is an essential element of a high performing safety culture.

**WSI-NV should form a standing equipment review committee chaired by an appropriate manager and including participation by knowledgeable employees and supervisors to review existing and proposed new equipment to ensure employee concerns with equipment safety and suitability are adequately addressed. Ensure management decisions for equipment procurement are clearly explained, particularly when decisions involve potential conflicts between safety and security performance.**

WSI-NV has an active ESC that meets monthly. Minutes are posted throughout the company and available on the company website. The members are appointed by their management or their union and are designated to represent the various elements of the organization. The ESC members are trained in the roles and responsibilities of the ESC. ESC members complete quarterly inspections of the facilities. The ESC representatives bring issues to the monthly meetings from their own observations or from the employees they represent. The 2004 HSS Team suggested that the ESC track the issues raised. The minutes for the last year indicate that the issues being raised are tracked from one month to the next. Some issues take an extended period to resolve, which frustrates the employee that raised the point. The ESC does not have a dedicated budget, and has been unable to follow through on some ideas for increasing employee involvement in safety. Interviews with employees indicated a high degree of trust with their representative on the ESC. Numerically, the union employees appear to be under represented in terms of number of committee members. While employees or their representatives raised no complaints, with just three members it must be difficult to be available to cover all the shifts in all locations year round.

The current structure of the ESC has not changed despite the growth of the company. Consequently, the committee may not be adequately structured to perform its mission. WSI-NV may want to expand the ESC to include a tiered approach, based on function and geographical location in order for the ESC to share more of the responsibilities. Further, it would be valuable to demonstrate management commitment to employee involvement by forming a manager's safety committee, with key representatives from the existing safety committee, to ensure that concerns receive a greater degree of senior management attention.

**WSI-NV should expand the ESC to include a tiered structure of committees that include geographically or functionally located subcommittees, the current employee safety committee, and a General Manager's safety committee. Establish a process for each of the committees to encourage employee involvement and raise safety concerns (e.g. subcommittees meet weekly or biweekly, ESC meets monthly, and General Manager committee meets quarterly).**

One area where many employees expressed concern was maintenance and cleanliness of facilities and equipment. Employees expressed frustration with inaction regarding what they considered a safety issue, or less than adequate resolution of the issue. Newer personnel in particular were unsure regarding responsibilities for facilities maintenance, and were often frustrated with the amount of time it took for concerns to be addressed. Conditions repeatedly noted were dirty air vents and filters, signs of rodent and insect infestation, dust buildup in vehicles, mold in showers and locker rooms, and guard stations in disrepair. Managers and supervisors have not been effective in communicating status of work requests to workers.

Further, WSI-NV has not been effective in identifying and addressing the systemic nature of these concerns. (See Hazard Prevention and Control for the Opportunity for Improvement)

Employees and supervisors have been encouraged to fix problems when they see them. An effect of this encouragement has been a dependence on informal mechanisms to report concerns. Consequently, concerns are not documented, tracked, or trended, and recurring or systemic problems are missed. For example, the hidden release button for the rifle rack at Gate 100 has only worked sporadically for the last six weeks. The SPO's unlock the rack with their handcuff key and have passed the information from one shift to another. It was not clear if a work order to repair the condition had been submitted, or that managers were aware of the problem. This is an example of a work-a-round and serious safety issues not being reported, understood, or resolved. This leads to a lax safety culture.

WSI-NV does encourage employee participation by providing awards (see Management Leadership). WSI-NV has policies and procedures in place to encourage employees to participate in the safety and health programs, but the level of participation is limited. WSI-NV needs to explore methods by which employees can actively join in the program to the point where employees consider themselves part of safety and health program. Opportunities to consider include finding ways to acknowledge employees for doing those things managers expect them to do to protect themselves. For example, employees should be acknowledged for correctly performing a vehicle safety check, or for identifying a safety problem and “dead-lining” the vehicle when appropriate. This could also contribute to employees' willingness to raise safety issues/concerns, or report an event when the issue involves more senior personnel.

Some aspects of the VPP reviewed in 2004 are no longer being used. For example, safety patrols (SP2-020) were noted as a strength of the WSI-NV safety program, and were an excellent way for employees to get involved by inspecting their fellow workers. SPOs conducted spot checks of patrol vehicles, visited security stations, discussed safety issues with those on duty, and documented the results. This procedure provided an opportunity for unseasoned personnel to participate with seasoned individuals and learn what is expected in terms of a safe environment and practices. Problems with availability of cleared and qualified staff led to discontinuation of the program.

**WSI-NV should resume safety patrols per SP2-020, and periodically include professional safety expertise (e.g. Industrial Hygiene or Safety Engineer) along with the employees performing the safety patrol. Ensure results of the safety patrols are tracked and trended. Establish a minimum set of inspection criteria used during the patrol that include vehicle safety checks, first aid kits, availability and use of water, and any other recurring safety concerns. Encourage employees to look beyond the checklists and identify and correct unsafe behaviors without regard to seniority.**

A final critical element of employee participation is the commitment by the bargaining unit to VPP. IGAN appears to be committed, but their actions to promote VPP have been minimal. In order for VPP to remain effective, both the bargaining unit and WSI-NV management need to cooperate to reestablish the commitment to excellence ingrained in the VPP process.

**WSI-NV and IGAN should cooperate to reestablish their commitment to the VPP. Provide regular briefings by both WSI-NV managers and IGAN representatives to all employees that focus on the necessary commitment to partnership and excellence in safety performance, not just compliance. Ensure all employees truly understand the tenets of VPP and their individual responsibilities for maintaining VPP Star status.**

## **Conclusion**

Although employees are involved in safety, their level of participation in VPP has waned as the organization has grown. Informal mechanisms for identifying and correcting individual deficiencies have shifted the focus from tracking and trending, and seeking fixes that address systemic weaknesses. Employee concerns may not be adequately voiced due to individual concerns regarding peer pressure and seniority, or individual perceptions about intimidation. WSI-NV managers and IGAN leadership have not partnered effectively over the past three years to ensure all new employees are fully trained on relevant aspects of VPP, and that the VPP tenets are effectively ingrained into all aspects of the WSI-NV mission.

## V. WORKSITE ANALYSIS

Management of health and safety programs must begin with a thorough understanding of all hazards that might be encountered during the course of work, and the ability to recognize and correct new hazards. There must be a systematic approach to identify and analyze all hazards encountered during the course of work. The results of the analysis must be used in subsequent work planning efforts. Effective safety programs also integrate feedback from workers regarding additional hazards that are encountered and a system to ensure those new or newly recognized hazards are properly addressed.

WSI-NV has a number of tools available for performing worksite hazard analysis. One of the primary tools is SP2-016, *Risk Analysis Program*. That program places primary responsibility on directors and managers to direct that a Risk Evaluation or Risk Analysis Report (RAR) be completed at any time. Any questions regarding the need for an evaluation or RAR are to be coordinated with the ES&H Section staff. The rules established by the procedure require managers to perform a risk evaluation of all new or modified tasks, operations, projects, facilities, equipment, training, exercises, hazardous materials procurement or use (or non-hazardous materials that may present a potential hazard in their use or application) to determine if a new RAR must be developed or revisions made to an existing RAR. The procedure further requires the preparation of a RAR for firearms and/or explosives related facilities, training, and operations; physical fitness training facilities, equipment and operations; maintenance activities on or near energized electrical equipment; radiological activities; short term or limited scope operations. The procedure outlines a qualitative method, using a variety of available expertise, to evaluate the risks, assign severity codes, and then provide a means of defining how those risks should be controlled based on the risk.

A second hazard analysis tool is contained in SP2-003, *Industrial Hygiene Program*. That procedure establishes a requirement for a triennial health hazard inventory and assessment for all WSI-NV facilities. This assessment is designed to identify potential exposures to hazardous or toxic materials, and determine the need for monitoring. This also provides a means to determine if adequate controls are in place or need to be developed to minimize employee exposure to hazardous materials.

The most significant hazards faced by WSI-NV workers are the conduct of live fire training exercises or force-on-force exercises using Multiple Integrated Laser Engagement System (MILES) gear. These activities take place on ranges designed specifically for these purposes, and include open field exercises, a Live Fire Shoot House, performance tests within existing facilities, and other appropriately designated sites. The WSI-NV training department utilizes DOE approved lesson plans for all of their training activities. Prior to conducting any training there is a review of procedures, walk downs, and a safety class. There is a risk analysis for all of their approved lesson plans. An independent oversight inspection of safeguards and security published in October 2005 had identified some safety concerns regarding controls of weapons and ammunition during force-on-force exercises, but those concerns were not evident during this VPP recertification inspection. There were no opportunities to observe force-on-force exercises during this review, but procedures and protocols reviewed appeared to adequately address the concerns.

WSI-NV is one of the sites that are being used to demonstrate new security technologies. In that role, they have been tasked with evaluating safety and effectiveness of some new systems. One

example is the Fighting Station (FIST) that was developed by Sandia National Laboratories. WSI-NV personnel recognized that there were several risks associated with use of this station, and sought assistance from the Management and Operating (M&O) contractor to evaluate those risks. As a result of the WSI-NV evaluations, excess noise, CO and lead were all identified as risks that were above acceptable levels. WSI-NV further used information gained from that experience to evaluate other locations where lead and CO could pose unevaluated hazards to the protective force. As a result of those evaluations, WSI-NV has now recognized the need for additional controls, surveys, and ventilation in some locations.

Several RARs were reviewed during the course of this HSS inspection, and adequately addressed the hazards and necessary controls. In one case, the RAR for general electronics shop operations performed by the Electronic Systems Support section, some hazards were missed, and one identified control was not implemented. Chemical use in the shop while performing soldering activities (use of isopropanol for cleaning) had not been identified on the RAR. Consequently, the adequacy of existing ventilation at the workbenches where it was used had not been evaluated. The RAR did identify the potential for lead residue on the work bench from soldering activities, and established a requirement that the bench be evaluated biannually for lead residue. No such evaluation had been performed.

SP2-003, *Industrial Hygiene Program* has not been effectively implemented. No health hazard inventories or assessments per SP2-003 had been performed on any WSI-NV work areas. Reviews of the shops might have identified the existence of chemical hazards previously discussed, and further identified the potential need for supplemental ventilation and eyewash stations. No eyewash stations were present in the shop areas. When identified by this HSS inspection, the ESS Section Manager initiated action to procure portable eyewash stations for the shops. An essential reason for not performing the Health Hazards Assessments was the lack of professional industrial hygiene and safety staff to conduct the assessments (see Management Leadership).

**WSI-NV should perform formal hazard surveys of all work areas and worksites to identify previously unrecognized hazards (e.g. use of chemicals in electronics maintenance areas) and missing controls (e.g. lead surveys, eyewash stations). The results of these surveys should be compared to existing Risk Analysis Reports, and discrepancies or errors should be documented and corrected.**

Another mechanism used by WSI-NV for identifying worksite safety concerns is the use of quarterly safety inspections by the ESC (see Employee Involvement). Self-inspections are scheduled to be completed monthly, and cover all work areas quarterly. These inspections are being completed by ESC members. There is an excellent opportunity for more employees' involvement if more employees are included in the inspection. Only two SPOs have been involved in safety inspections. In general, when concerns or findings are readily fixable by WSI-NV, the concerns or findings were corrected in a timely manner, but more difficult issues were not quickly addressed or tracked.

The training staff is required to perform daily walk downs of the training areas. These walk downs are required by each training instructor. Anyone that is involved with training to include students is required to report any safety issue. They are instructed to report safety issues to any

instructor. There is a safety form that can be filled out if needed. If the issues involve maintenance, it is the responsibility of range manager or range master to put in a work request.

The worksite inspections are not being adequately reviewed for indications of more significant trends or hazards. A random review of inspection reports indicated that findings and concerns identified during inspections were documented on the inspection form, but were not entered into the consolidated action tracking system. For example, housekeeping was noted as a reoccurring concern on numerous inspections, but has never been identified as an area requiring management attention with the site M&O contractor. None of the safety inspections identified that first aid kits were being depleted by personnel using the kits for self-administered first aid. While the ability to self-administer first aid for minor cuts and abrasions is good, the fact that these minor cuts and abrasions are not being reported or tracked was not identified. Further, the system for reporting these minor injuries is cumbersome, and discourages workers and supervisors from reporting those injuries. Consequently, potentially unsafe conditions that are causing the minor injuries are not being identified or analyzed.

A system for accident/incident investigation is in place that includes written procedures, identification of causes, and provisions for preventive or corrective actions. The accident investigation process at WSI-NV is identified in WSI-NV Standard Practice, SP2-002, *Accident Investigation, Reporting and Record Keeping*. Supervisors and above have the responsibility for ensuring that all accidents involving employees under their supervision are investigated in a thorough and timely manner. They also have the responsibility to ensure that corrective actions are identified and implemented to prevent reoccurrence. The involved employee must fill out a Form C-1 after the accident occurs. The supervisor then must fill out the DOE Form 5484.3 including all signatures, other documents and/or supporting evidence. Summaries of accidents/incidents are discussed in the monthly ESC meeting. As stated above, minor injuries (cuts and scrapes) often go unreported. In the two accidents reviewed, information on the Form C-1 was very brief and the DOE 5483.3 forms did not include complete information, corrective actions to prevent reoccurrence, or any supporting documentation. These were both minor incidents during training activities, but according to WSI-NV procedure should have included more detailed information.

More significant incidents, like the three unauthorized discharges that occurred in the past year, are thoroughly investigated. In those three cases, WSI-NV conducted detailed investigations of the event and the contributing circumstances. The corrective actions identified were appropriate, although corrective actions addressing some of the unsafe behaviors and attitudes were not specified. For example, no corrective actions were identified to address the fact that a junior SPO failed to stop another SPO (30 days senior to him) from practicing drawing his side arm. The investigation also did not address the SPO concerns over qualification that led him to want to practice this action at his post, rather than on an approved range.

**WSI-NV should establish clear management expectations that all injuries, no matter how minor, are reported to supervisors, and simplify the reporting procedures for minor injuries. This should include minor self first aid, as these cases could indicate precursors to more significant safety problems. Identify and trend data from injuries and illnesses to identify at risk behaviors.**

Safety and health statistics are being kept by WSI-NV per OSHA 300. The Independent Oversight team performed a detailed review of those statistics, and did identify some deficiencies in the logs and statistics. As discussed in Section II, WSI-NV has not effectively analyzed or documented an analysis of the rising trend in the TRC or DART case rates. They have not used that data to identify specific actions that should be taken to reduce those rates, and have not clearly identified the root causes for that rise. The popular assumption that the rising rate is due to increased rigor of training for the Special Response Team (SRT) may be true, but it has not been proven. (see Section II for opportunity for improvement)

SP2-015 states that it is the responsibility of employees to report concerns and hazards. Employees have several methods to report or identify safety concerns. Those methods include but are not limited to reporting issues directly to their manager, supervisor, union safety representative, members of the ESC, or even DOE. ESC member inspection review indicated that a system has been in place for the past year. Field observation demonstrated evidence that SPO's reported issues to their union safety representatives not their supervisor. No written process for reporting hazards was identified by any hourly employee interviewed. Protective force personnel do receive information through a muster/guard mount prior to each shift. The majority of interviewed hourly employees indicated that when they reported safety concerns to ESC members they had no fear of reprisal, although a few did express some concerns (see Employee Involvement). The majority indicated that they knew if they reported a safety concern to their ESC representative it would be taken care as soon as practical or feasible.

Interviews provided evidence that occupational health as well as safety experts have completed surveys when potential hazards were identified by employees. For example, an employee concern had been raised regarding personnel limits of the muster room (125) building 1000 area 23 and adjoining areas as well as safety and health survey of Station 270 and hazard assessment for Hogback road access. Each of these concerns received an assessment by the appropriate experts. However, there was no evidence that all identified hazards, concerns, or conditions were being trended, or that identified concerns and hazards were being placed in the tracking system, or that information related to that particular hazard or concern was being included in the tracking system.

## **Conclusion**

WSI-NV has several methods available to perform worksite analysis, and is aware of the significant hazards routinely encountered by employees in the performance of their duties. Some newly identified hazards associated with use of blank rounds during performance testing have been identified and analyzed, and the results are being used to improve associated controls. WSI-NV has been less effective in performing routine analysis and surveys for other hazards. They have not implemented their Industrial Hygiene program as written, and are not effectively analyzing negative trends in safety and health statistics.



## VI. HAZARD PREVENTION AND CONTROL

Once hazards have been identified and analyzed, they must be eliminated (substitution or changing work methods) or addressed by the implementation of effective controls (engineered controls, administrative controls, and/or Personal Protective Equipment (PPE)). Equipment maintenance, PPE, processes to ensure compliance with requirements, and emergency preparedness must also be implemented where necessary. Safety rules and work procedures must be developed, communicated, and understood by supervisors and employees, and followed by everyone in the workplace to prevent mishaps or control their frequency and/or severity.

During the visit 30 SPO's were interviewed and a spot check on their assigned equipment was performed. SPO's are required to carry or wear their assigned PPE while on duty. Some of the SPO's did not have body armor issued to them per DOE requirements. During firearms training instructors and students were observed using appropriate hearing and eye protection during weapons fire and used elbow and knee pads during obstacle course training. During post inspections there were safety kits that did not have proper equipment in them. This was corrected the following day by two members of the ESC.

WSI-NV SPOs are all Radiation Worker I trained. SPO's are enrolled in the dosimetry program and are monitored on a quarterly basis to assure their radiation exposure is within the DOE requirements.

The Real Estate Operating Permit (REOP) is the process used by NSTec and NSO to control and set the limits for the operational boundaries for operations at the range facility. From the REOP, RARs are developed for individual activities to be performed at the facility.

One particularly poignant example of hazard prevention and control has been the response to lead and CO exposures to SPOs during training and performance exercises. A standing Fighting Station (FIST) was a new technology developed by Sandia, and was to be installed in the Device Assembly Facility (DAF) to increase its defensive positions. When received, the safety group requested the performance testing and evaluation data from Sandia. Sandia did not provide the requested information, so the safety group decided to test the FIST independently. They developed a testing plan and submitted it to the NSTec group for comments. The original plan called for testing for lead, noise, and air quality. CO had not been identified as a concern. However, the NSTec employee brought a 5-channel gas meter that included CO in addition to the diatomic oxygen (O<sub>2</sub>) level. When tested, it was recognized that the Immediately Dangerous to Life or Health (IDLH) level for CO was reached inside the enclosure in less than a minute.

A contributing factor to the CO off-gassing is the Engagement Simulation System (ESS) modifications to the weapons. The modifications add to the gas collection at the magazine and shooter rather than at the barrel. The modifications include porting holes drilled into the stock to alleviate the gas buildup and release, and barrel plugging.

As a result of the high CO levels experienced in the FIST testing, the WSI-NV safety group decided to research if they had any other situations where either live fire or ESS weapons were being utilized in enclosed spaces. Their research led them to the DAF drop down towers, and when tests were performed, CO was determined to not be an issue but lead contamination swipe levels were measured at levels beyond 1400 micro grams per 100cm<sup>2</sup>. In addition, one SPO

using a M-60 machine gun was lapel monitored for lead and his monitor peaked at the permissible exposure limit of 50 micrograms for lead during the exercise.

WSI-NV's position to independently test the FIST to ensure its safe operation was correct. However, the CO issue and the resulting lead contamination issue at the DAF tower indicate a potential vulnerability in their hazard analysis program (see management section for Opportunity for Improvement). The contamination at the DAF towers has been accumulating since exercises began as far back as 1991. The testing of the FIST did not identify nor did it intend to measure CO readings in the scope or hazard analysis. The availability of NSTec's services is adequate; however, WSI-NV personnel's ability to know when they need a particular expertise from NSTec may continue to be a vulnerability in their hazard analysis.

A medical program is available to all employees and includes access to a licensed physician. In addition, the WSI-NV SPO's are all first aid and CPR trained.

The WSI-NV range instructors are automatically enrolled in the site lead testing program due to their frequent exposure to the firing range activities. WSI-NV safety currently has a plan awaiting approval from NSO to address lead and CO issues at the DAF drop down towers in order to address and properly determine the exposure levels to be expected during force-on-force exercises.

Emergency response procedures and personnel training address the appropriate emergency responses for WSI-NV personnel. Site emergency preparedness activities are the primary driver for alarm testing and emergency drills. Site-wide alarm tests are conducted regularly and drills are conducted based on DOE order requirements and to support Site Safeguards Security Plan (SSSP). Drills may include evacuation, attacks on site in various pathways, and use of different force multipliers. All security personnel that are scheduled will participate in the drills. Drills and exercises are performed by the performance testing department. The number of exercises varies based on the site requirements. Drills also include Limited Scope Performance Testing (LSPT).

WSI-NV maintains a safety group for day-to-day assessments and hazard control. However, when a particular expertise is required that is not represented in the safety group, WSI-NV personnel have access to the site services contractor, NSTec. NSTec's expertise includes certified industrial hygienists (IH), safety engineers, and fire protection engineers. NSTec also provides the expertise for the on-site medical and exposure programs as well.

WSI-NV preventive (and corrective) maintenance is performed by NSTec through contractual agreement. Facility and vehicle preventive maintenance are scheduled based on life cycle evaluations and corrective maintenance is submitted through authorized WSI-NV representatives and an NSTec liaison. Requests are submitted verbally to the NSTec liaison, who then develops the work order and submits it to work management for authorization. All work is typically prioritized initially as a three out of five in the Maximo system. WSI-NV work requesters then have the opportunity to negotiate a higher prioritization based on operational or mission critical needs. Review of the WSI-NV work request forms demonstrated a simple description of the work requested, requestors name and location. WSI-NV's lead work requestor and the NSTec liaison conduct daily phone discussions regarding work progress and meet for bi-weekly meetings to discuss any actions pending. However, the process WSI-NV is utilizing does not

provide a formal system for tracking of completed or pending work orders and relies heavily on the informal discussions of select individuals to assure work is completed.

**WSI-NV should improve tracking of maintenance requests submitted to NSTec to include regular reports to WSI- NV regarding current backlog, priority, and scheduling of work requests. Make these reports available to the supervisors, and encourage supervisors to share them with individual employees. Ensure work orders open longer than 90 days are clearly identified, and decisions to either increase the priority or drop the request are documented and communicated.**

## **Conclusion**

WSI-NV is effective in controlling recognized hazards, particularly those hazards related to security and firearms training and qualification. Recent efforts to eliminate or control the lead and CO hazards are notable, and WSI-NV has taken a leadership role in helping these hazards be addressed throughout the DOE complex.

## VII. SAFETY AND HEALTH TRAINING

Training is necessary to implement management's commitment to prevent exposure to hazards. Managers, supervisors, and employees must know and understand the policies, rules, and procedures established to prevent exposure to hazards. WSI-NV's training process for SPO's is comprehensive and tailored to the skills that the SPOs are required to have in order to safely and proficiently do their job.

Employees interviewed believed that top managers understood their safety and health responsibilities. Supervisors interviewed indicated that they received leadership training, knew that they had responsibilities for providing a safe workplace for employees, but indicated that they could use more focused training on management responsibilities, accident/injury investigation, and completing appropriate paperwork. This training should also include accident prevention, case management, and development of effective corrective actions.

**WSI-NV should provide training to field supervisors on proper investigation and documentation of accidents and injuries to ensure essential information is captured and preserved.**

All supervisors interviewed were able to discuss the hazards that are associated with the jobs under their supervision related to the SPOs; however, they did not recognize the hazards related to administrative jobs. They also were able to relate the potential adverse effects of the hazards that were associated with the SPO job. The majority of employees interviewed felt that their supervisors know and understand their safety and health duties.

The emergency response process and procedures were very well known and explained by all interviewed. The majority of employees interviewed were very well trained in security response procedures. They reported that if they did not know the appropriate response, they would report the situation to their supervisor for direction.

Training documents review indicated that all required SPO training was being conducted. Annual training is conducted as well as the semi-annual required training. While the majority of hourly workers interviewed did not remember specific VPP training, most did have their VPP card. Employees interviewed did state that they had received training on using the buddy system and looking out for each other. They also could explain most of the hazards associated with their jobs and how they were mitigated.

One significant training deficiency was identified in that a large percentage of the SPOs' respirator fit test was overdue. There are a number of contributing causes for this problem occurring, but its fundamental cause was the failure of supervisors and managers to recognize and act on changes that occurred in the protective force annual training and from the NSTec relocation of the respirator fit test facility. At the close of this inspection, WSI-NV was performing respirator fit testing as expeditiously as possible, and expected to have all respirator qualifications up-to-date by the end of April.

Several musters were observed. These were done very professionally and assignments for the shifts were provided. Musters can provide an excellent opportunity to reinforce/refresh specific safety topics and training. For example, one muster observed by the HSS Team included a brief

presentation by an NSTec IH which discussed the status of the DAF tower lead abatement activities and any further actions still to be performed. This practice not only would provide refresher information to the SPOs, put reinforce management commitment to safety.

**WSI-NV should provide additional dedicated safety topics during muster, daily briefings, or other training venues, as appropriate. Dedicate sufficient time (e.g. 10-15 minutes at a single muster each week) to specific topics that reinforce basic safety training. Topics to consider for regular review include basic radiological controls, the purpose for wearing dosimeters and the expected doses to workers, lead awareness and controls, carbon monoxide, respirator use and effectiveness, vehicle safety, heat and cold stress management, vehicle placards, emergency response expectations (e.g. leaking vehicle) and other topics that might be raised by individual employee questions.**

Administrative employees interviewed felt the training they received when starting work for WSI-NV was adequate, however when asked questions about hazards in their workplace, VPP, mitigation of hazards and ergonomics, it was clear that a refresher would be beneficial. Administrative employees should be provided the information discussed above as well. A written form of all safety topics discussed, along with a name and phone number for additional information, should be made available to all employees for their review. This could be done by email, briefing notebooks, required reads, etc.

**WSI-NV should provide a structured, written briefing for all guard mounts, including safety topics, and keep those written briefings in notebooks at all posts. Encourage individual employees to review the guard mount briefings from all guard mounts since their previous duty.**

During interviews and observations, it was very evident that there is a gap between the safety culture of senior force members and new force members. A review of incidents in the past two years indicated that newer force members were more likely to be involved in unauthorized discharges, vehicular accidents, or other safety incidents. A formal mentoring process to integrate the new members with the senior force member would help to bridge this gap. Appropriate safe behaviors while performing duties can then be taught by example and will improve the integration of the new members into the ranks. Senior force members that volunteer for this mentoring process should have the right attitude and commitment to make this effective.

**WSI-NV and IGAN should cooperate to establish a formal mentoring process between senior protective force members and new members. Mentors should be selected from volunteers that exhibit the necessary commitment and attitude to teach new members of the protective force appropriate safe behaviors while performing their duties, as well as improve integration of new employees into the ranks.**

## **Conclusion**

WSI-NV is committed to a strong safety and health training program for WSI-NV managers, supervisors, and the employees. Reinforcement of that commitment with the employees needs to happen on a more frequent basis. Managers, supervisors, and employees know and understand the policies, rules, and procedures established to help prevent unnecessary exposure to the hazards associated with WSI-NV's mission.

## VIII. CONCLUSIONS

In the three years since WSI-NV's last VPP recertification, they have experienced significant organizational stresses that have had a detrimental impact on their program. Although managers and employees alike remain committed to VPP, their leadership and participation have not been sufficient to maintain their performance at the Star level. Accident and injury statistics have been on the rise, and the 2006 TRC and the three year average DART case rates are above the comparison industry statistics. WSI-NV has not sufficiently analyzed these trends, or provided sufficient management leadership in addressing or reversing these trends. New employees have not been adequately introduced to or trained on VPP. Management systems, processes, and overall ES&H support staffing have not been reviewed or revised to adjust to the increased size of the company. The lack of professional industrial hygiene and safety experience has limited WSI-NV's ability to adequately analyze their workplaces and ensure, with the exception of firearms training, that all required controls are in place.

WSI-NV has some significant areas where improvement needs to be made in order to remain a DOE-VPP Star site. Consequently, the team is recommending that WSI-NV be awarded a Conditional Star rating. This recommendation requires that WSI-NV address the opportunities for improvement addressed in this report, and after 12 months, HSS will conduct another review. Based upon that review, WSI-NV will either be recommended for Star status, or will have to determine whether they want to continue in the VPP. HSS will provide whatever assistance it can to help WSI-NV make the necessary improvements.

**Appendix A**1  
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4**Onsite VPP Audit Team Roster**

<b>Name</b>	<b>Affiliation/ Phone</b>	<b>Project/Review element</b>
Bradley Davy	DOE/HSS 301-903- 2473	Team Lead Management Leadership
Michael Gilroy	DOE/HSS 301-903-5326	Worksite Analysis, Hazard Prevention and Control
Bonnie Anderson	CH2M-WG Idaho, LLC.	Worksite Analysis, Safety and Health Training
Carl Ellis	Bechtel SAIC Corporation	Employee Involvement
Bobby Beatty	Protection Strategies, Inc	Safety and Health Training, Hazard Prevention and Control, Safety/Security Interface

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