

Safety Culture Pilot Update

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Background

- ▶ In early 2009, PNNL volunteered to participate in the EFCOG Safety Culture Assessment
- ▶ Over the past 3-5 years, the Laboratory's safety performance has improved significantly, however the lagging indicators of safety performance appear to have reached a plateau and we want to drive to the next level of performance



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Update: EFCOG Culture Assessment Progress

- ▶ Phase 1: The EFCOG Safety Culture Assessment Tools and Guidelines were used to evaluate the completeness of our VPP evaluation process (with regard to addressing the attributes of the three safety culture focus areas). This was accomplished through detailed mapping of data streams, processes and actions and identification of areas for improvement.
Complete
- ▶ Phase 2: Areas for improvement will be evaluated for additional action and actions implemented
Scheduled completion October 2009



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Comparison to VPP Evaluation Assessment Methods

VPP Assessment Data Sources were consistent with EFCOG criteria

- ▶ **Programs and Procedures**

Documented process and procedure reviews

- ▶ **Accident/Injury Statistics**

Accident and injury data was examined for 3 year period.

- ▶ **Staff Interviews**

75-100 staff members

- ▶ **All Staff Safety Survey**

PNNL and VPP partnered with Gallup Consulting



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Detailed Analysis of EFCOG Focus Areas Using VPP Goals and data streams

- ▶ The three focus areas and attributes were matrixed to the 5 tenets of VPP
- ▶ Data sheets were used to capture information, significant observations and conclusions based on interviews with staff and managers, reviews of documented process/program information, an understanding of PNNL operations, and survey results.
- ▶ The data sheets included conclusions and actionable improvements if applicable. The relevant data streams, from which the information has been mined, are also listed as a reference.



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Focus Area: Leadership

Attribute	PNNL Initiatives and Processes
Clear expectations and accountability	<ul style="list-style-type: none"> •R2A2s: Roles, Responsibilities, Authorities, and Accountabilities were flowed down to each staff member through the Staff Development and Review process. •LZAC: Forum for communication to executive management on safety and other operational issues. •DZAC: Environment in which Line Managers share and resolve safety concerns. •Video featuring upper management: Communication delivered to all staff members on error precursors and human performance. •STOP: Safety Training and Observation Program – used to identify trends or areas of risk.
Management engagement and time in field	
Open communication/ raising issues in an environment free from retribution	
Demonstrated safety leadership	
Staff recruitment, selection, retention & development	



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Focus Area: Employee/Worker Engagement

Attribute	PNNL Initiatives and Processes
Personal commitment to everyone's safety	<ul style="list-style-type: none"> •Safety DiaLOG: Forum for staff members to raise any safety issue with confidence that it will be addressed and resolved by appropriate means. •Wellness Challenge: Yearly event in which PNNL offers motivation to staff to increase healthy lifestyle choices. •Safety Sleuth: Instant recognition reward campaign for staff to promote safety awareness. •Health & Safety EXPO: Venue for vendors and organizations to share information, equipment, and supplies in the area of safety and health. •VPP Steering Committee: Opportunity for employees raise safety and health issues, for other safety committees to discuss issues, and for PNNL to mentor other organizations interested in improving safety and health programs.
Teamwork and mutual respect	
Participation in work planning and improvement	
Mindful of hazards and controls	



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Focus Area: Organizational Learning

Attribute	PNNL Initiatives and Processes
Open Communications	<ul style="list-style-type: none"> •HPI Brown bag presentations: Showcase actual events and how they can be prevented using HPI concepts. •<i>Porcelain Press</i>: Monthly newsletter raising safety awareness of VPP and timely safety and health issues. •SafetyNet Spotlight: Opportunity for staff members to tell personal safety related stories and appropriate information and tips. •Lessons Learned: Articles describing events that have occurred and how to prevent them. •Incorporating HPI into Accident Investigation: Examination of events and possible intervention to prevent future similar events.
Reporting errors & problems	
Questioning Attitude	
Effective problem resolution	
Performance monitoring through multiple means	
Use of operational experience	
Trust	



Detailed Analysis of EFCOG Focus Areas Using VPP Goals and data streams

Actionable Improvements

▶ Leadership

- Monitor incidence of slip, trip and fall injuries
- Refine roles of Worker Safety and Health, VPP and DZACs
- Promote use of HPI principles through education
- Continue development of VPP evaluation, description, and charter
- Develop DZAC program description to convey philosophy and elements

▶ Organizational Learning

- Communicate availability and benefits of Ergonomic Evaluations
- Clarify requirements for reporting injuries and receiving medical attention



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Detailed Analysis of EFCOG Focus Areas Using VPP Goals and data streams

▶ Employee Engagement

- Develop forum to share information between DZACs, VPP and LZAC
- Include staff participation in VPP plan
- Continue implementation of HDI to simplify access to SBMS requirements
- Add an Extent of Condition assessment for PPE to WS&H Assessment Plan
- Notify Building Emergency Team when BERO members are relocated
- Continue Wellness Program development to include a Wellness Center
- Provide HPI information for all staff and management



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EFCOG correlation with VPP tenets

- ▶ Overall, the safety culture assessment guidance correlated well with the VPP Tenets and PNNL's evaluation methodology/assessment objectives.



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Results: Use of Gallup Survey Improved Data Analysis

- ▶ PNNL and VPP partnered with Gallup Consulting, to administer an all-staff safety survey in December 2008. Gallup provided validation that the questions, used for previous years' VPP evaluations, were appropriately written to meet the intent of the survey. Survey responses were submitted by respondents directly to the Gallup organization for analysis and generation of a report capturing the results by organization. Areas of interest were identified and could be analyzed further, and defensible, actionable improvement opportunities were identified and captured in the evaluation report.



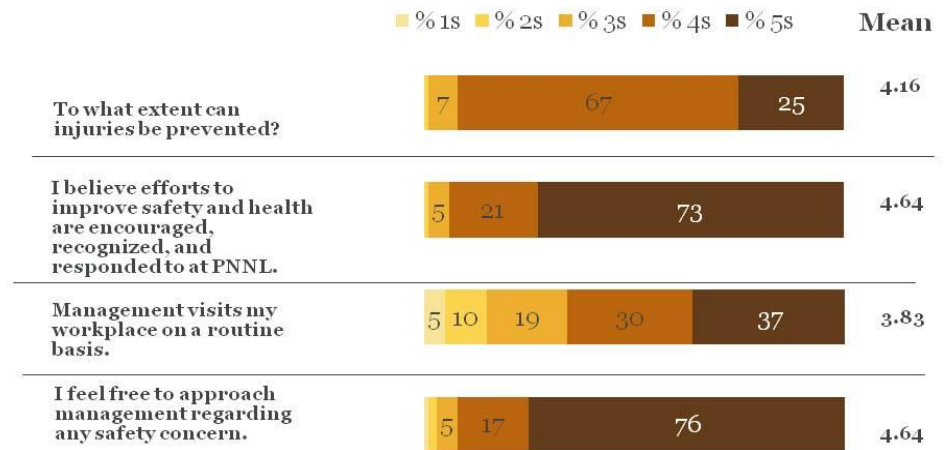
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Results: Gallup Survey showed improvement in all areas

Example: Leadership results indicated that **25%** of staff believe **all** injuries can be prevented, up from 21% last year. Another 67% indicated they believe ‘almost all’ injuries can be prevented compared to 61% last year.

Management Leadership



GALLUP CONSULTING

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Results: Improved Management Commitment to Staff Involvement

- ▶ Directorate Zero Accident Councils (DZAC) have been developed by each of the divisions across the Laboratory, with the full endorsement of the Laboratory Director. Staff participation and representation is encouraged as the cornerstone of successful safety councils. Each of the DZACs are also represented on a lab-level council (LZAC) reporting to the Laboratory Director. This two-tier approach provides each division with an open forum for resolving staff identified concerns at the bench top as well as an avenue for raising larger, cross-cutting issues that may require the attention and support of senior leadership.



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Staying the Course: Actions to Improve Performance

- ▶ Raising staff awareness, via DZAC forums, targeted communications, and application of HPI principles, and reinforcing the value of proactively identifying error precursors associated with all activities, will be critical to the successful achievement of continuous and sustainable improvements in safety performance.



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Preliminary Feedback on the EFCOG Tool

- ▶ Good information for generating ideas.
- ▶ Allows for lots of flexibility in the approach
- ▶ References were helpful
- ▶ Would like to see sharing of contractor specific activities associated with the safety culture attributes



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Areas for further Evaluation: Phase 2

Areas to evaluate for process improvement

- Include direct observation of workplace behavior using results of activity and workplace evaluations
- Expand the use of performance indicators such as construction inspections as an assessment tool
- Review EFCOG HPI Assessment Information for process improvements
- Expand research staff involvement in the assessment to more fully assess the subculture
- Expand assessment methodology to include self assessment results(i.e. IOPS)
- Include specific survey information on visiting scientists and vendors
- Analyze aspects of staff recruitment, selection, retention & development



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