Office of Enforcement and Oversight

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Assessment of the Nuclear Safety Culture and Management of Nuclear Safety Concerns at the Hanford Waste Treatment and Immobilization Plant – January 2012

Briefing

Scope

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- **Office of River Protection (ORP) Nuclear Safety Culture**
- **Bechtel National, Inc. (BNI) Nuclear Safety Culture**
- **Corrective Actions to the 2010 Office of Health, Safety and Security (HSS) Report**

Safety Culture Assessment

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Method

- **Used Nuclear Regulatory Commission Methodology**
- **Objective and systematic measurement of the organizational behaviors**
  - **Surveys**
  - **Focus groups**
  - **Standard interview protocols**

Method

- **Data Collection Conducted**
  - **Documents**
  - **Structured Focus Group/Individual Interviews**
  - **Behavioral Anchored Rating Scales (BARS)**
  - **Behavioral Observations and Checklists**
  - **Safety Culture Surveys (BNI and ORP)**
- **Data Convergence Evaluated**

Safety Culture Assessment

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Method

- **Evaluate to Nine NRC Safety Culture Traits**
  - **Leadership Safety Values and Actions**
  - **Problem Identification and Resolution**
  - **Personal Accountability**
  - **Work Processes**
  - **Continuous Learning**
  - **Effective Safety Communication**
  - **Environment for Raising Concerns**
  - **Respectful Work Environment**
  - **Questioning Attitude**

Safety Culture Perspectives

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ORP

- **Safety Conscious Work Environment**
  - **No Fear of Retaliation**
  - **Not Conducive to raising concerns**
- **Lack of Senior Management Engagement**
- **Poor communication, coordination and cohesiveness between ORP and DOE-WTP**

Safety Culture Perspectives

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BNI

- **Safety Conscious Work Environment**
  - **Reluctance to raise safety concerns in many groups**
  - **Fear of retaliation in some groups**
- **Inconsistency in the behavior of supervisors and managers**
- **Lost trust with employees and stakeholders**
- **Significant cultural differences between groups**

Safety Culture Perspectives

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- **Tension between E&NS and Engineering**
- **Construction Schedule Pressures**

Safety Culture Perspectives

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BNI HSS 2010 Report Corrective Actions Review

- **Issues Management**
  - **Improvements and remaining concerns**

- **Safety Culture Improvement Efforts**
  - **Communications**
  - **Training**
  - **Broad based effort**

Conclusion

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- **There is a reluctance to raise safety concerns at ORP and BNI.**
- **The approach to safety and safety culture is highly proceduralized across WTP and not yet internalized.**
- **WTP managers do not have a full appreciation for the current culture or the level of effort needed to foster a healthy safety culture.**

Recommendations

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- **Establish Safety Culture Competence**
  - **Core Values**
  - **Accountability**
  - **Employee Engagement**
  - **Behavior Science Expertise**
  - **Monitoring**
  - **Change Management**

Recommendations

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- **Integrated Safety Management Processes**
  - **ORP Responsibilities and Expectations**
  - **Design and Safety Basis Process**
  - **Construction Craft**
  - **BNI Corrective Actions Process**