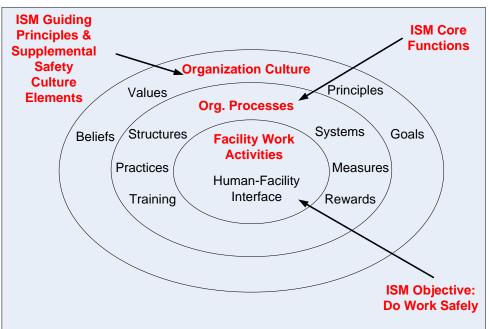


# Results of EFCOG/DOE Safety Culture Pilot Focus Group Assessment

#### **Presenters:**

- •Fred Beranek
- Everett Gray

DOE ISMS Conference August 26-28, 2009 Knoxville, TN





#### Bio for Everett Gray

- During 10 years in the US Army, he was a Nuclear Weapons Maintenance Specialist and Supervisor. He performed oversight, maintenance, surveillance, directed personnel, implemented new procedures involving maintenance, storage, training of nuclear weapons maintenance personnel and nuclear weapons.
- Since 1992, Everett works as a Senior Health Physics Technician at Hanford Nuclear Reservation. Everett
  currently works as a Radiological Work Planner, developing Radiological Work Permits and ALARA Management
  Worksheets. He also is a Health Physics Technician performing radiological work coverage, including dose and
  contamination surveys, surveillance of facility buildings and equipment, radiological training of new facility personnel.
  He is a Radiological Hazards Communicator on the Facility Emergency Response Organization. For the past 2
  years, he has also been the 222-S Laboratory Voluntary Protection Program Champions Team Co-Chair.

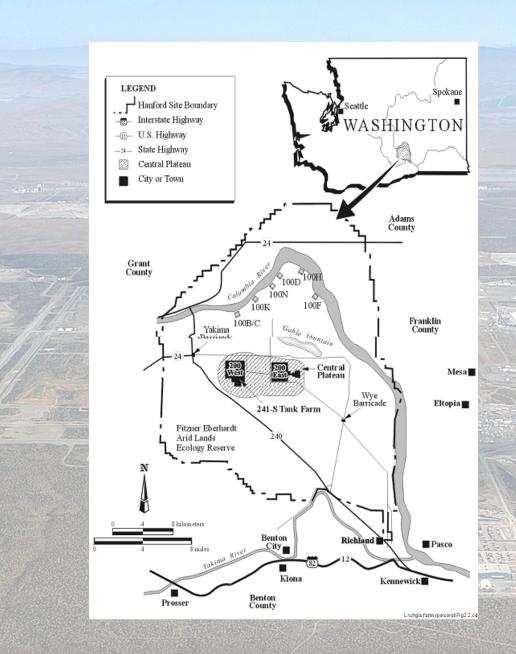
#### • Bio for Dr. Fred Beranek

Dr. Beranek has over 30 years of DOE experience, including 25 years managing multi-faceted ESHQ programs, including ISMS. Fred is currently the ESHQ manager for Washington River Protection Solutions, LLC at Hanford. Fred has held positions as the Site Chief Engineer at SRS, as ES&H manager and environmental and nuclear safety manager for the \$12 B WTP project, Director of Operations for WSMS, and various other positions related to nuclear operations and safety.

# **Tank Farm Background/History**

- Managed by the Department of Energy's (DOE) Office of River Protection (ORP)
- WRPS is the prime contractor for tank farm operations
- Mission includes storage, retrieval, and disposal of highlevel radioactive waste currently stored in 177 underground tanks
- 1940s to 1980s Construction and operation in support of production of nuclear weapons
- 1989 Environmental cleanup began

#### **Hanford Tank Farms Location**





#### Hazards













HARD HAT AREA

Over 1600 Chemicals and Vapors



High levels of nuclear radiation



 Natural Elements- Wind, Rain, Heat, Fire, Insects, Terrain

Standard Industrial



# **Tank Farms Safety Culture History**

- 2004 Tank farms began active safety culture improvement activities
- 2004 to 2007 Several all-employee culture surveys
- 2006 Achieved VPP STAR for double shell tank operations
- FY 2009
  - Contract change
  - Acceptance of existing safety culture program
  - Participation in EFCOG pilot
  - ISMS verification



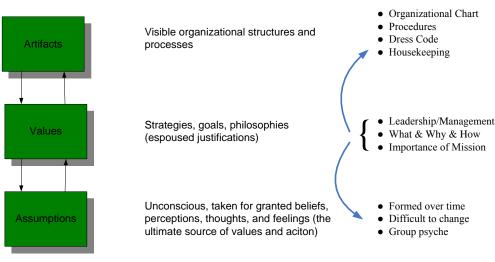


# **Safety Culture Assessment Methodology**

- WRPS undergoing ISMS re-verification during FY 2009
- Safety culture safety management program (SMP) needed to be assessed as part of ISMS verification
- Various safety culture assessment methods were considered
- EFCOG documents were reviewed for safety culture

assessment options

 One method alone would not provide accurate assessment



Schein's organizational model



# **Safety Culture Assessment Methodology**

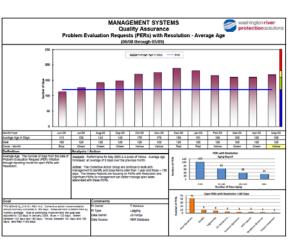
- The focus group option was one of several methods chosen because:
  - Relatively short exposure time between management and workers from contract change
  - An efficient process was needed
    - Multiple concurrent and high visibility, resource intensive activities such as ISMS verification, ARRA, Conduct of Ops improvement, and EMS upgrade
  - Ability to target and probe certain issues that needed
    - immediate attention developed from employee input
  - Opportunity for constructive dialogue and team building between new management and existing employees





#### **Other Culture Assessment Methods Used**

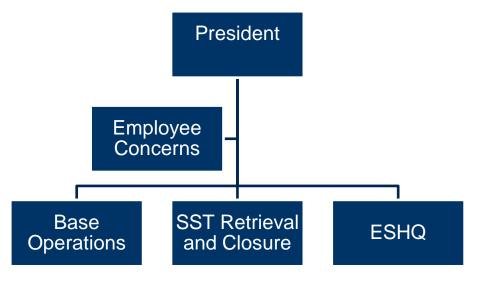
- Multiple independent assessment methods were used during ISMS verification (triangulation)
  - Performance indicators
  - Document reviews such as management assessments and problem reports
  - Employee/management forums
  - Feedback from Employee Concerns Program
  - Interviews
  - Observations





### **Focus Group Team Selection**

- Pre-meetings with union safety representatives/workers
- Group discussion on type of candidates that would be best
  - Worker opinion leaders
  - Stewards
  - Safety representatives
  - Supervisors
  - Mid level manager
  - Senior sponsor
  - Employee concerns
  - Outside facilitator



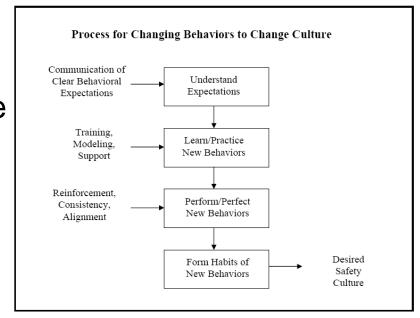


#### **Assessment Conclusions**

- Good management and workers support of the process
- Positive step in understanding culture, both good and bad, and then taking actions to influence the culture in positive ways
- The safety culture has many positive characteristics that

are considered to be healthy.

- There are characteristics that need additional focus to improve
- Follow up actions and communication of actions and results to the workforce is an important part of this process





# **Results - Strengths**

- Demonstrated safety leadership
- Worker participation in work planning
- Workers mindful of hazards and
- Effective employee hiring, training, development, and retention activities



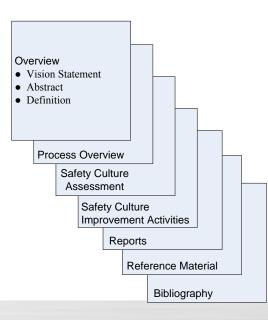
# **Results - Opportunities**

- Clear expectations and accountability
- Management engagement and time in field
- Open communication
- Trust, Teamwork and Mutual Respect
- Effective problem resolution



# Feedback on EFCOG Safety Culture Documents

- EFCOG documents were useful
- Triangulation and assessment
- ISMS attributes correlated with safety culture attributes included in documents was useful
  - These were then correlated with ISMS CRADs





### Resulting impact to the organization

- The focus group activity, along with other related actions provided useful information to management
  - Smooth ISMS verification process
  - Lessons learned from union dealing with previous contractor management
  - Immediate focus on issues that developed since contract transition
  - Accurate and early identification of issues subsequently noted by independent assessment
  - Safety culture improvement actions are formally tracked

