

# Planning to Work Safely - Doing it Right the First Time

*Safe Performance for the Recovery Act Project*

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# The Oak Ridge TRU Waste Processing Center (TWPC)

- **Decades of work at the Oak Ridge National Laboratory and by other DOE activities generated a massive inventory of radioactive waste that must be treated, packaged, and safely disposed**
- **The TWPC packages, characterizes, and ships Transuranic Waste (TRU), MLLW, and LLW for disposal to protect public health and the environment**



# TWPC Overview



- Established in 2002
- 184 Employees on April 1, 2009
- FY-09 Budget \$43M
- Completed Supernate Processing
- Processing Contact Handled Debris
- Processing Remote Handled Debris
- Preparing to Process RH Sludge
- Planned Completion by 2018



# TWPC Culture Promotes Safety

- Exemplary safety record (7 yrs without lost time accident)
- VPP Merit Site (Recommended for Star Status)
- Safety Culture/Management Culture promotes communication, openness, worker involvement, participation, feedback, and ownership
- Continuous Improvement tools include SCWE and HPI
- Management Systems support Continual Improvement, Issues Mgmt, Lessons Learned



# The ARRA Project Represents Significant Change for TWPC

- **Accelerated Processing of Debris Waste**
  - Creates 130 new jobs (70% increase for TWPC)
  - Implements multiple shifts to increase throughput
  - Shortens project schedule by one year – reduces lifecycle cost
- **The impact of these changes for culture and performance can not be underestimated**
- **No significant changes in facility systems, structures, or components**
  - No changes in Processes or Management Systems
  - No changes to existing safety basis necessary



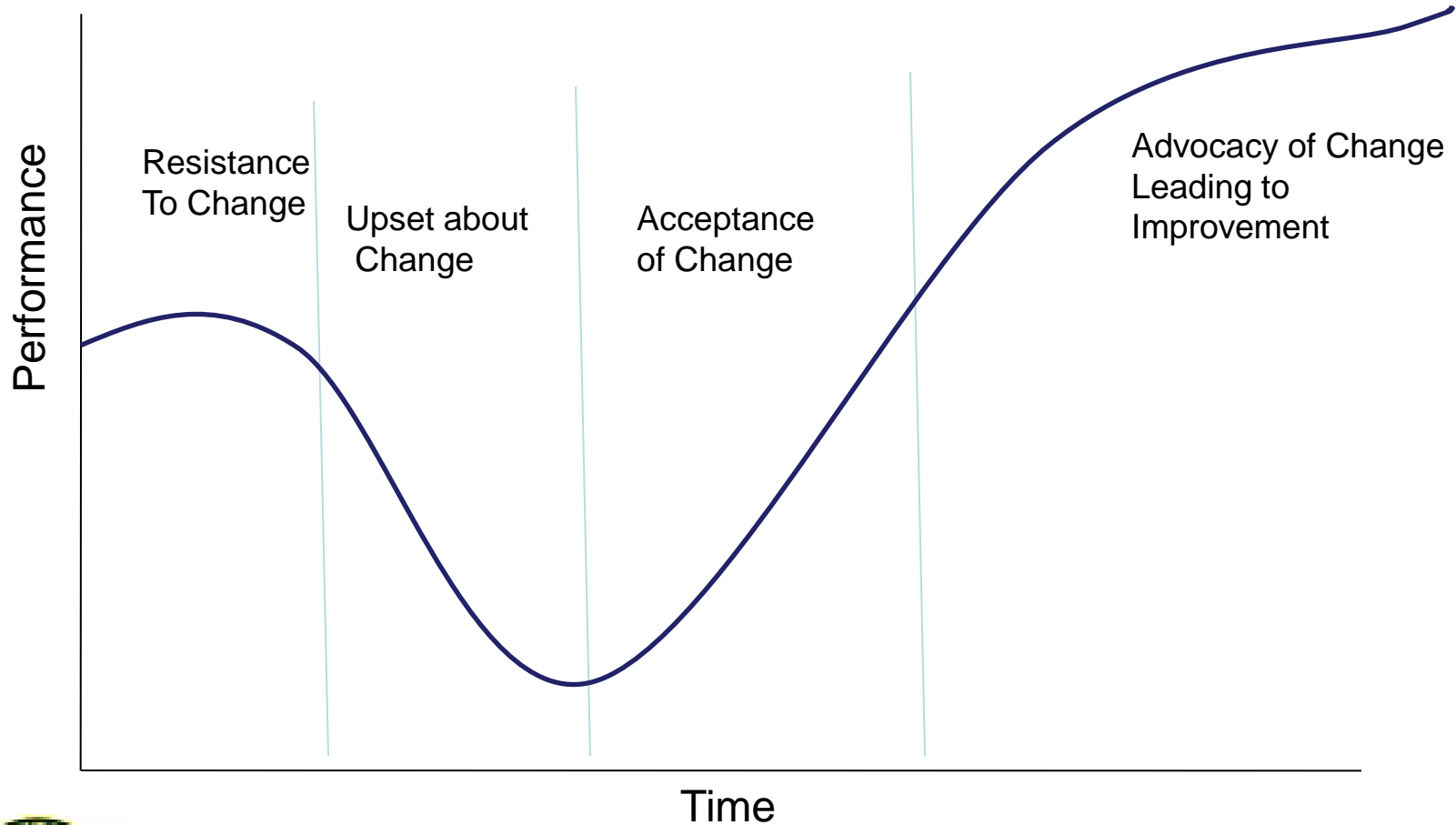
# ***The Challenge:***

**Maintain and Enhance our  
Safety and Performance**



# Organizational Response to Change

Change - new personnel and increased work pace – can impact all aspects of performance



# Preparing the Workforce for Change

- **Objectives:**

- “Do Work Safely”
- Minimize magnitude of impact on high performing team
- Fully integrate new team members
- Minimize time to reach sustained new performance level

- **Actions:**

- Involve current workers in developing training for new workers
- Engage current workers in delivering training and qualification
- Establish veteran mentoring of new workers
- Continue to promote VPP and SCWE
- Share assessment results with workforce to demonstrate we are ready for multiple shifts





***We care about our workers***

***We protect the public and the environment***

New workers will not be introduced to the production floor until they have demonstrated understanding of our safety culture and are prepared to perform work safely



# Training Plan for Indoctrination and Introduction of New Workers

- **Conduct of Operations**
  - Safety Culture
  - Systems, Structures, and Components
  - Process flow sequences
  - Position-specific qualifications
- **Management Leadership**
  - Senior Mgmt involved in training
  - Senior Mgmt visibility on worksite
  - Active Mgmt Assessments
  - Support worker leadership of work planning and post job feedback
  - Continued reinforcement of our Safety Conscious Work Environment
- **Worker Involvement**
  - Mentoring
  - Training
  - Continual Improvement
  - Training on mock-ups prior to On the Job Training
- **Subject Matter Experts**
  - Support and oversight to assure safe efficient and transparent operations



# Training Plan for Indoctrination and Introduction of New Workers (cont)

- **Off Site Facility for substantial classroom and mock up training**
  - minimize impact to TWPC operations
- **Populate work-shifts with a mix of new workers and experienced workers**
  - Anticipate 50:50 mix
- **Phased introduction into hazardous or complex operations**
  - Crawl, Walk, Run



# TWPC Training Facility



# Results

- Training Facility and Training Modules were in place for May 4<sup>th</sup> start
- Initial hires started training May 4<sup>th</sup>
- Second group of hires started training May 18<sup>th</sup>
- First 85 hires on board
- Non-Operations workers completed initial training and released to site after two weeks



# Tracking, Trending, and Reporting

- **Tracking and Trending**
  - Existing Assessment Plans and Oversight
  - Metrics for production, safety, training effectiveness, etc.
  - Capturing data for use in lessons learned and opportunities for improvement
- **Reporting**
  - ARRA reporting



# Bottom Line

- A large number of new workers and an increased work pace represents a significant challenge for continued safe and reliable performance
- Management commitment and worker involvement promote an attitude to do it right and do it safely the first time
- We rely on careful planning and training coupled with an organizational behavior based approach
- Free flow of information, open communication, and transparency establish the conditions and culture that promotes safe performance
- Safe performance is promoted by the same factors that promote a well functioning high performance organization

