

ARRA Lessons Learned

Track #9

Lessons Learned & Training

Workshop Summary

Susan Stiger/Kevin Kostelnik

September 16, 2010

Safety is our **#1** priority for all EM Recovery Act projects!

“Getting the Job Done

- Over \$5.965 billion obligated to contracts for EM Recovery projects
- Over \$2.7 billion spent on Recovery work
- Over 24,000 workers have benefited in 12 States (12,000 new jobs)
- Over \$3B planned to be spent by end of FY2010
- Over 90% of ARRA to be spent by end of FY2011
- No appreciable rise in TRC or DART rates
- DOE contractors have major emphasis on ARRA worker safety training
- Active engagement with stakeholders and regulators
- Planning for Post-ARRA transition is underway

ARRA Lessons Learned

1. RARE process focused on expanded ARRA work and associated safety responsibilities.
2. Stop Work Pledge
3. Safety culture overlaps into the home environment.
4. Equipment mock-up to ensure proper form, fit, function and familiarity.
5. Use of pictures to show Safe and Unsafe work practices was very effective.
6. Successful partnerships with local technical colleges for Fast-Track training.
7. Site integration teams for contractors proven to be invaluable.
8. Use of Blocked and Blended training to alleviate redundancies.
9. Mentoring/Peer-to-Peer partnerships.
10. Senior Management need to set the expectations.

Track #6 Safety in Design

Jim O'Brien

September 16, 2010



Thanks to

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- Innovative Tools
 - Safety Bases Strategy Transition to Safety Design Strategy
 - Crosswalk 1189 map vs. rewrite of PDSA
 - 3D ergonomic models
 - USQ-like process for configuration management of PDSA

Continuous Improvement Opportunities

- HQ Policy Perspectives
- Field Policy Perspectives
- Organize Based on Topics:
 - Nuclear Safety
 - Chemical Safety
 - Industrial Safety
 - Construction
 - Decommissioning

Lessons Learned

- Integrate Safety in Design
- Information Sharing
- Nuclear Safety
 - Set standard of excellence
- Cost-Effective
 - Safety costs \$; not being safe costs more
 - Conservative inputs/assumptions to minimize brick and mortar impacts later
 - Testing/mockups to identify and correct to prevent an event

Environmental Sustainability

Thomas Traceski

September 16, 2010

Track Gems

- Impressive Exchange between DOE Sites of Information
 - Reproducible benefits and best practices through the use of EMS in Mission Operations
 - Great illustration of the strength of incorporating the six-sigma process in developing EMS programs and controls
 - EMS enables achieving sustainable stewardship goals (DOE O450.1)
- Site Contractors proactive engagement in planning for EO 13514
 - Notice of Intent to develop new sustainability directive approved last week
 - Not a trivial effort and requires integration in ALL aspects of site operations

Lessons Learned

- What Lessons Learned were discussed that could be transferable?
 - Achieve measurable success with small yet beneficial changes
 - Build EMS into ISMS and increase the robust nature of the program
 - Use existing DOE upgrades as proving grounds for National Lab innovations to improve sustainability
 - Integrate sustainability deposits and withdrawals in PLANNING phase of all projects and operational changes
 - Visible Endorsement from Top Leaders is essential
 - Incorporating the suggestions from the workers fosters ownership
 - When business efficiencies are gained improvements in env sustainability are inherent

Issues

- Any critical issues raised?
- We are all facing **SIGNIFICANT COMPLIANCE** challenges
 - Regulations are changing
 - Compliance limits are decreasing in Air and Water regulations
 - Funding is becoming scarce
 - Experienced Staff are leaving the work force

Continuous Improvement Opportunities

- Any continuous improvement ideas to move forward?
 - Share lessons learned across contractor and site boundaries
 - Establish feedback mechanisms in program reporting
 - Increase awareness of the entire work force
 - Use technology now
- “The voyage of discovery lies not in finding new landscapes but in having new eyes.” *Marcel Proust*

Quality Track 4

Alice Doswell

September 16, 2010

Track Outline

General topic of the track was to address risk associated with implementing quality programs with a focus on nuclear.

Three themes for the track (speakers then three panels to further discuss specific topics presented):

- Federal (DOE) perspective from HQ and Field Offices
- Prime Contractors
- Subcontractors/vendors

Track Gems

- Importance of communication
- Importance of implementing requirements using a Graded Approach
- Importance of flowdown of requirements (goes hand-in-hand with Communication)
- Importance of knowledge/awareness and dealing with Suspect/Counterfeit Items
- Difficulty of finding qualified suppliers/vendors/subcontractors

Lessons Learned

- Lessons learned are abundant and we need to take advantage and utilize these to improve quality during all phases of our business

Issues

- Good Communication facilitates the ability for feedback and continuous improvement
- Make sure contracts at all levels include the precise requirements you expect for the organization to deliver otherwise there may be quality, safety and costs that are impacted
- Grading allows for work to be accomplished in a quality manner without having to unnecessarily implement “bells and whistles”
- Examples were given of issues where flow down of requirements had positive and negative impacts to cost, schedule, safety and quality
- Commercial Grade Dedication process is difficult!
- S/CI is much more common in our everyday life and impacts everyone, not just nuclear!
- Prevalence of welding issues and difficulty of qualifying welders
- Training is essential! (Train, explain and reinforce)

Continuous Improvement Opportunities

- Much like Safety, Quality is EVERYONE's responsibility and should be a collaborative effort to ensure that products and work processes satisfy requirements and meet expectations.

The Trajectory of Health, Wellness, and Safety

Pat Smith

September 16 , 2010

Track Gems

- Change the term Wellness to “Health Promotion and Productivity” to more accurately define the program as a crucial component of a safe, productive, and resilient workforce.
- Establish organizational responsibilities for Health Promotion and Productivity beginning at the level of DOE, to Contractor, divisions, work groups, but most importantly to the individual employee’s personal responsibilities for health and safety.
- Organizations must establish definitive goals and maintain fluidity of the goals to meet the future needs of a diverse work force.
- Organizations must provide support in terms of resources and guidelines, defined on paper, and provide resources and senior management support.
- Health Promotion and Productivity is an integral part of the ISM and VPP process by focusing on the individual and what he brings to the job that can affect the ISM process.

Lessons Learned

- Next ISM Workshop: Integrate health/wellness into all ISMS disciplines.
- Have a “Nuts and Bolts Session” for problem solving, idea sharing, and platform to work together in establishing Health Promotion and Productivity across the DOE Complex.

Issues

- All sites are not equal, each having diverse health and productivity needs
- Disparity of resources among DOE Sites
- Aging workforce issues
- Funding

Employee Engagement

Jeff Allison

September 15-16, 2010

The Engagement Hierarchy

The 12 Survey Questions

- Opportunities to learn and grow.
- Progress in last six months.

How can I grow?

Growth

- I have a best friend at work.
- Coworkers committed to quality.
- Mission/Purpose of company.
- At work, my opinions seem to count.

Do I belong?

Teamwork

- Someone at work encourages my development.
- Supervisor/Someone at work cares.
- Recognition last seven days.
- Do what I do best every day.

What do I give?

Management Support

- I have materials and equipment I need to do my work right.
- I know what is expected of me at work.

What do I get?

Basic Needs



Track Gems

- The gap between work imagined and performed must be recognized and dealt with
- Safety program ownership by all workers is paramount
- Feedback from actual work activities will help academia improve curriculum
- New faces on old problems – Continuous improvement is a must
- Managers and supervisors are workers also
- Leading indicators shared and embraced by employees (action is taken) helps increase engagement
- The need for rad techs drove an integrated solution with students, faculty, industry (management and workers), and community

Lessons Learned

- Increased attention to safety may not show immediate positive results (Gap in work imagined and performed)
- About 70% of the employee engagement presentations were from workers: **THIS IS ENGAGEMENT!**
- Must have trust between management and all employees to achieve optimal engagement
- Pre and Post jobs reviews are an excellent way to gauge worker engagement
- All feedback was quickly and effectively incorporated into Rad Tech training program

Issues

- People don't always ask for help when needed (includes PhDs)
- Not following through on issues discourages continuing engagement
- Competition among contractors for limited resources sometimes limits communication among contractors
- Numbers and specific types of safety programs vary by site – but all have the same intent
- Lack of understanding of funding for safety programs
- Getting the right messages to the employees (Management responsible to control extraneous messages, fresh eyes and functional teams also help)

Continuous Improvement Opportunities

- Sharing of site tools is useful Example: CBT for HPI First Line Training Module, new training tools, etc.
- Keeping training fresh improves engagement (increase use of mockups, face-to-face, and videos)
- Aiken Technical College Rad Tech program should be expanded into other disciplines
- Integrate ISM, HPI, and VPP tenets to save employees time

Track 1: ISM and Safety Culture

William White

September 16, 2010

Track Gems

- Significant level of effort associated with measuring safety culture (PTX, HF, PNNL); Important to share lessons learned through EFCOG
- SRS and HF shared keys to managing interfaces at multi-contractor sites:
 - Communication
 - Formal interface organization and processes (ISM Integration Council)
 - Active DOE involvement
- Streamlining and standardizing procedures
 - Unique approach to standardize training
 - Provide certification for procedure writers

Lessons Learned

- Multi-Contractor Sites Organizational Interfaces and R2A2s:
 - Lack of clarity on responsibility for safety hazards
 - Over-reliance on experts executing (“Halo Effect”)
- DOE OR shared challenge of implementing ISM in a public/private partnership
- Sobering presentation from Eastman Chemical on a 1960’s accident reminds us of danger of complacency and the value of lessons learned from legacy events

Issues

- Ensuring workers really feel empowered to STOP work; never become complacent
- Small business concerns working at DOE sites; especially multi contractor sites
- DOE needs to be diligent in ensuring consistent contractor requirements are established at Multi-contractor sites
- USC work highlighted the importance of taking societal risk factors into account when trying to improve safety culture

Continuous Improvement Opportunities

- Implementing new ConOps Order (422.1):
 - Opportunity to relook at ConOps Program and improve integration with ISM and Safety Culture programs
- Opportunities exist to make safety processes more effective and efficient
 - DOE SR streamlining ISM Declarations
 - EISM-EA (Enterprise Integrated Safety Management—Exposure Assessment)