
Implementing American Recovery and Reinvestment Act Work Safely

Sam Easterling
ES&H Projects Specialist
ES&H
B&W Y-12

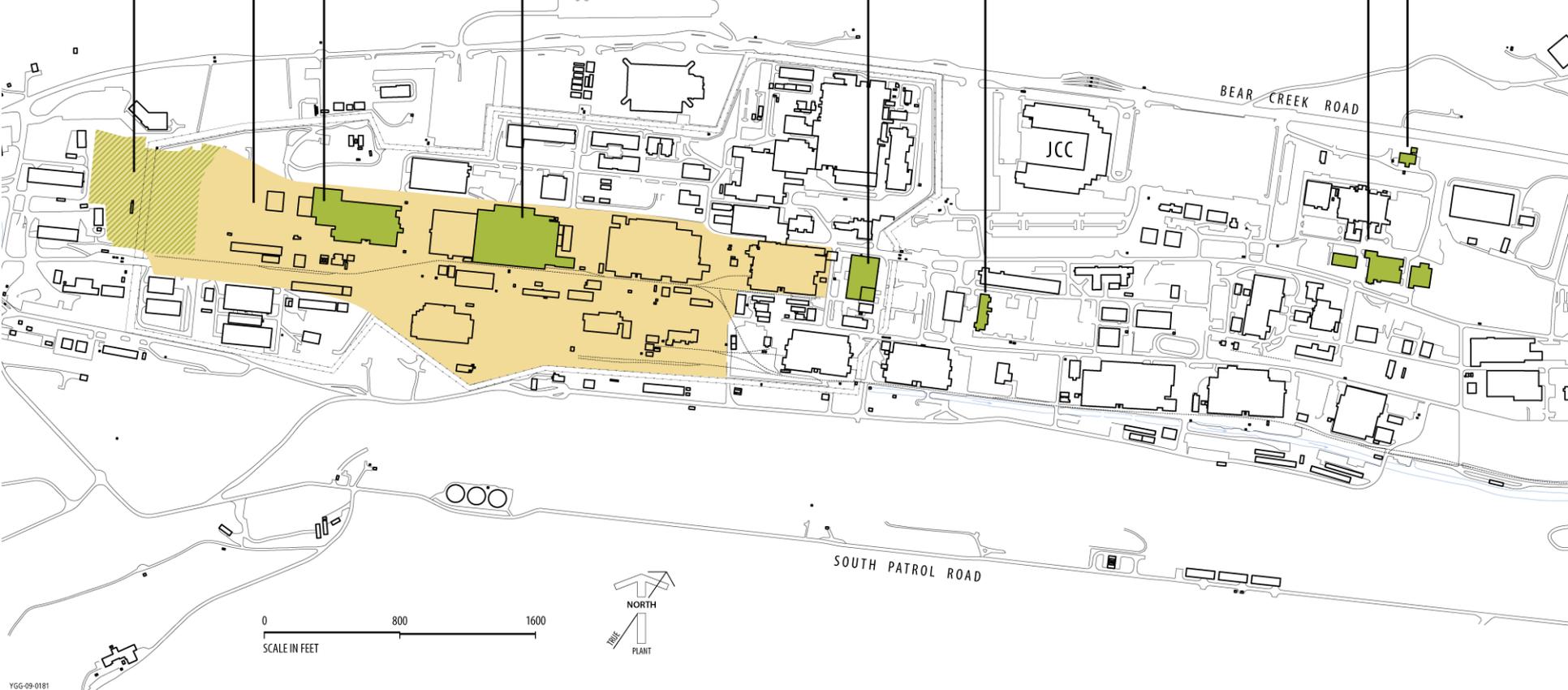
Sam Easterling - Background

- Bachelor of Science Degree in Environmental Health
East Tennessee State University
- More than 30 years experience in the Environmental, Safety and Health field including;
 - Ten years service improving DOE/NNSA Projects through ES&H Support
 - Twenty years of ES&H service to the Y-12 National Security Complex supporting Environmental Monitoring, Environmental Compliance, and Safety Management functions
 - Environmental Health regulatory experience with three states (Florida, Commonwealth of Virginia and Tennessee)

Committed to ES&H Continuous Improvement through Involvement

Y-12 ARRA Projects

- Old Salvage Yard Cleanup
- West End Mercury Area Storm Sewers
- Beta 4 Legacy Material Removal
- Alpha 5 Legacy Material Removal
- Bldg. 9206 Filter House Demolition
- Bldg. 9735 Demolition
- Biology Complex Demolitions
- Bldg. 9769 Demolition



YGG-09-0181

Implementing ARRA Work Safely

- Safety is the number one B&W Y-12 Core Value



- ✓ I am responsible for my safety and the safety of others.
- ✓ I am committed to an incident-free and injury-free workplace.
- ✓ I acknowledge that even the best people make mistakes.
- ✓ I will actively participate in key safety programs.
- ✓ I will help remove barriers to safe work and reduce worker exposure to hazards.
- ✓ I will not perform or permit an at-risk behavior or unsafe act.
- ✓ I have the authority and responsibility to suspend unsafe work.
- ✓ I will encourage and reinforce the safe behavior of others.
- ✓ I will think ahead, anticipate and plan accordingly.
- ✓ I will be flexible and keep an open mind while adapting to change.
- ✓ I will make these commitments part of my everyday life at work, home and play.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

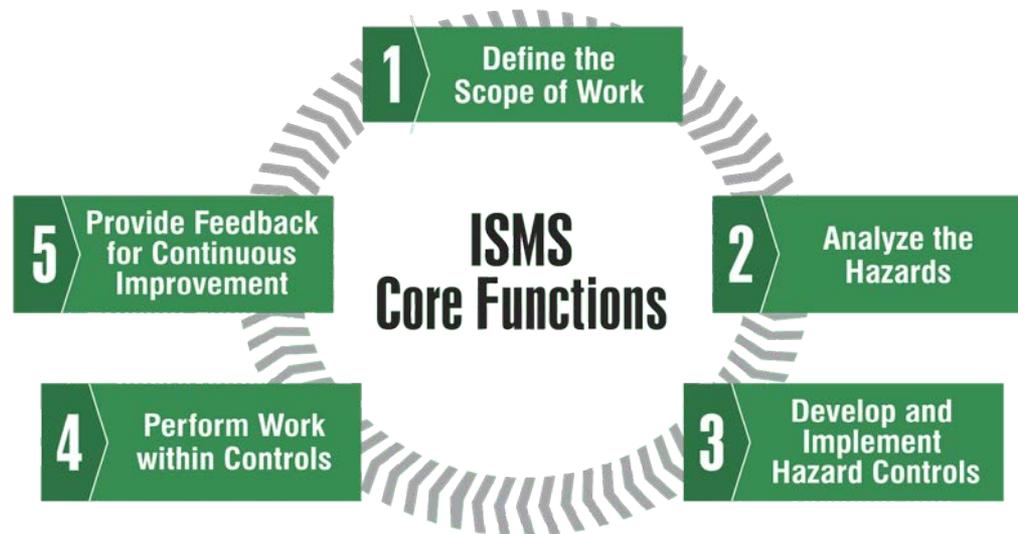


Implementing ARRA Work Safely

- B&W Y-12 expects ALL work to be performed in a manner that:
 - provides safe working conditions
 - protects worker health
 - minimizes potential risk
 - protects the public and environment
 - complies with applicable regulations
 - continuously seeks opportunity to improve performance
 - provides for Stop Work Responsibility/Stop Work Authority

Implementing ARRA Work Safely

- The Integrated Safety Management System is the process implemented to ensure work is performed safely and securely.
 - Includes Integrated Safeguards and Security Management and Environmental Management System
 - ARRA work scope has a project manager and core project team



Implementing ARRA Work Safely

B&W Y-12 Project Team

- Define the Scope of Work
 - Determine work scope, prioritize, and obtain authorization for work to be performed
 - Work scope definition includes overview of significant hazards
 - Initiate work requests through appropriate work control process (Operations, Maintenance, Construction, or Procurement/ Subcontractor)

Subcontractor

- Define the Scope of Work
 - Participate in the procurement process (Review Request For Proposal and participate in pre-bid meetings and walk downs)
 - Develop technical approach and prepare pre-award submittals including historical safety performance (Experience Modification Rates and OSHA 300 Logs)

Implementing ARRA Work Safely

B&W Y-12 Project Team

- Analyze Hazards
 - Use a graded approach to evaluate hazards and risks
 - Review safety basis documentation
 - Prepare security evaluation
 - Conduct nuclear criticality safety evaluation
 - Review environmental and waste management aspects
 - Review existing facility condition
 - Conduct walk downs
 - Perform job hazards analysis (JHA) based on the work control process

Subcontractor

- Analyze Hazards
 - Conduct follow-up walk downs post contract award
 - Determine Activity Hazards Analysis (AHA) needed (number and structure based on work scope)
 - Perform AHA/JHA
 - Begin development of Site Safety and Health (ES&H) plan and other plans

Implementing ARRA Work Safely

B&W Y-12 Project Team

- Develop and Implement Controls
 - Develop work instructions based on the work control process (plans, JHA, permits, work packages, and/or procedures)
 - Line management ensures work instructions are appropriately reviewed and approved according to the work control process
- Graded approach per work control process, activity hazard and B&W Y-12 ISMS requirements (Operational Safety Boards and/or Management Review Board)

Subcontractor

- Develop and Implement Controls
 - Develop work instructions (programs, plans, and AHAs)
 - Provide submittals for review and approval in accordance with the subcontract
 - Demonstrate to B&W Y-12 readiness to obtain Notice To Proceed
 - Implement controls

Implementing ARRA Work Safely

B&W Y-12 Project Team

- Perform Work within Controls
 - Schedule work coordinating with site organizations and facilities
 - Work is placed on the Plan of the Day
 - Pre-job briefing is performed
 - Obtain work-start approval
 - Perform work implementing controls

Subcontractor

- Perform Work within Controls
 - Schedule work coordinating with Subcontract Technical Representative
 - Work is placed on the Plan of the Day
 - Pre-job briefing is performed
 - Obtain work-start approval
 - Perform work implementing controls

Implementing ARRA Work Safely

B&W Y-12 Project Team

- Feedback and Continuous Improvement
 - Utilize feedback and improvement mechanisms
 - Behavior-based Safety
 - Lessons Learned
 - Pre- and post-job briefings
 - B&W Y-12 assessments, inspections and observations
 - DOE NNSA oversight
 - Safety meetings
 - Performance metrics
 - B&W Y-12 feedback and improvement reports
 - Inspector General oversight

Subcontractor

- Feedback and Continuous Improvement
 - Utilize feedback and improvement mechanisms
 - Implement feedback mechanisms as specified in the subcontractor's ISMS
 - Lessons Learned
 - Worker feedback
 - Subcontractor ES&H representative oversight
 - Subcontractor management oversight
 - B&W Y-12 oversight and monthly subcontractor Lessons Learned meeting
 - DOE NNSA oversight
 - Inspector General oversight

Implementing ARRA Work Safely

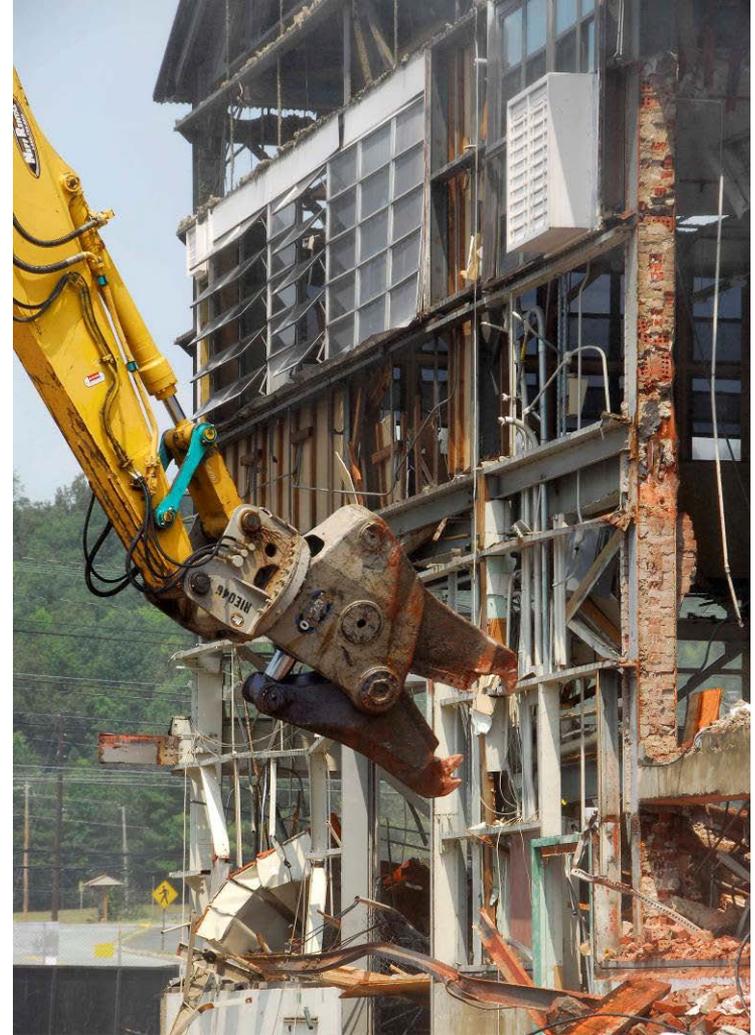
- ALL new employees and subcontractors receive general worker training including an overview of:
 - hazards present at Y-12,
 - means used to identify hazardous areas,
 - site emergency procedures and alarms,
 - site safety, site security, and quality assurance programs, and
 - site procedures and instructions applicable to all employees.
- In addition, ALL employees learn about:
 - Stop Work Responsibility/Stop Work Authority,
 - Integrated Safety Management System,
 - Behavior-Based Safety observations,
 - Lessons Learned, and
 - reporting employee concerns.

Implementing ARRA Work Safely

- Ensuring workers are qualified (specific worker training)
 - Jobs and tasks are analyzed for training needs
 - Compliance training matrix identifies training requirements
 - Job tasks are analyzed to determine specific training needs
 - Work control documents specify training requirements
 - Training requirements are assigned to individuals in SAP
 - Qualifications are verified
 - Supervisors use SAP to verify workers, including staff augmented subcontractors, are qualified prior to work assignments
 - Task-based subcontractor training requirements and implementation are incorporated into subcontract requirements and subcontractor work control documents

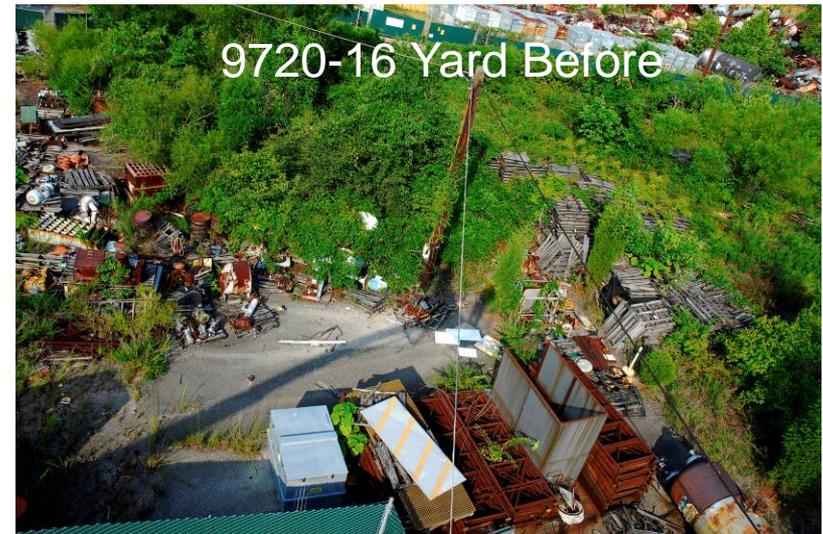
Implementing ARRA Work Safely

- There is nothing in the Recovery Act scope for B&W Y-12 that we haven't done before
 - Legacy waste disposition (legacy pool projects)
 - Scrap yard cleanup (9720-16 scrap yard cleanup)
 - Building D&D (1.2 M square feet under the Infrastructure Reduction Program)
 - Process deactivation (Development foundry deactivation, beryllium-contaminated, is under way)



Implementing ARRA Work Safely

- Legacy waste disposition has included:
 - Reduced legacy low-level waste by 93% (including the disposition of more than 5,000 chemicals)
 - Removed more than 120 excess vehicles, 120 transformers, one locomotive, and two '50s-era DOD railcars
- Cleanup of the 9720-16 scrap yard is complete
 - 1,700 containers and 45 Sealand containers of debris



Implementing ARRA Work Safely

- B&W Y-12 expects ALL work to be performed in a safe manner
 - Recognize changing conditions and take appropriate action
 - Stop work as needed for safety
 - Execute effective management, technical support and worker roles and responsibilities
 - Share lessons learned
 - Integrate self evaluation, feedback and oversight for continuous improvement
 - Recognize safe work practices

ZERO ACCIDENTS IS OUR EXPECTATION

DISCLAIMER

This work of authorship and those incorporated herein were prepared by Contractor as accounts of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor Contractor, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, use made, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency or Contractor thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency or Contractor thereof.