Making the Connections

Ideas for integrating efforts into a cohesive approach to continuous improvement



Quality Management Office Brookhaven National Laboratory

2009 Integrated Safety Management Summit



Bios

Sabine Kessler

- Sabine is currently an editor in the BNL Quality Management Organization, working on special projects. She is a core-team member of the inter-laboratory process modeling initiative.
- She joined BNL almost three years ago with extensive experience in scientific publishing, most recently as the Managing Editor for Conference Proceedings at the American Institute of Physics.

Joseph Labas

- Joe is currently the Project Manager for Human Performance Improvement at BNL. He has held that position for the last two years.
- Prior to that he spent the previous six years as a QA Project Engineer working in the Procurement and Property Management division. Before going to work for BNL, Joe was the Senior Manager of Quality Engineering at Symbol Technologies (now a division of Motorola).
- He is an ASQ Certified Six Sigma Black Belt and teaches courses on Quality for the ASQ's Seifer Institute of Long Island and does training for the Center for Innovation at SUNY-Farmingdale. He holds a Master's degree in Quality and Productivity Management from Polytechnic University and received his Bachelor's of Engineering degree from Manhattan College.

Stasia Ann Scocca

- Stasia is the Project Coordinator for the BNL Process Improvement Project.
- She joined BNL in 2002 as a staff assistant in the Quality Management Organization; assisting with causal analyses and performance analysis, among other duties. She later became the Requirements Management Coordinator, a position held for four years before taking on her current role.
- In September, Stasia will be participating in a Six Sigma Green Belt Certification Program.

Outline



- Initiatives/Activities/Projects
 - BNL Focus
- Project Management Approach
- Opportunity to Better Understand the Connections
- Connections
 - Integration of BNL Initiatives with ISM
 - 3 Levels of ISM
 - Human Performance Advocates (HPAs)
- Dynamic Environment
- Share Experiences
- Q&A



Initiatives/Activities/Projects



BNL focus

Integrated Safety Management (ISM)

Framework to integrate safety into all aspects of work

Helps in protecting the worker, public, and environment

Human Performance Improvement (HPI)

"Human Performance Improvement (HPI) uses knowledge of human behavior to help us understand and better manage the interaction of people, processes, equipment, work environment, and organization to reduce errors and foster continuous improvement." - Sam Aronson, Director, BNL

 $Re + Md \longrightarrow \emptyset E$

Process Improvement Initiative

Foster an on-going process that optimally aligns resources and actions to achieve our strategic goals.

Cross functional teams will apply a systematic approach to analyze problem areas and processes, share best practices & experiences, and meet the user's performance expectations while being compliant with requirements.

Project Management Approach

- Projectizing improvement efforts at the institutional level
 - Adds legitimacy, resources, discipline, focus, a timeframe, and ownership
 - Coordination BNL project leads from same organization
 - Communicate and help each other
- Key success factors
 - Top management involvement and oversight
 - ISM reviews, HPI Steering Committee, Process Improvement Committee
 - Holistic approach consider impact across all organizations
 - Adaptability; dynamic plan
 - Flexibility of each project to respond to outside forces
 - One size does not fit all; allow for flexibility in organizational implementation
 - Communication at all levels
- HPI Project linked to ISM Improvement Project /

Process Improvement Project linked to HPI

"All improvement happens project by project and in no other way."

- Joseph M. Juran

6





There is an opportunity to better understand the connections

- Initiatives and tools taken individually can be useful, but integrating them can maximize their value
 - Efforts may enhance each other's performance
 - Make the most of resources
- Proactive in anticipating and preventing potential issues
 - Initiative overload
 - Not all initiatives are new "programs" may be a process that integrates new thoughts, tools, and actions into already existing programs

"Good is the enemy of great."

(Source: "Good to Great", Jim Collins)







"Understanding the performance and perceptions at each level is essential to the development of integrated organizational, process, and work activity improvements that are likely to be effective and sustaining."



Core Function 2 Identify Hazards

Conduct of the brief in a manner that takes worker input; Could ID additional hazards that are not listed on the JRAS/ESRS

List of standard questions for work order and WPW. i.e., "What is the worst thing that can happen?" "What items of risk might there be that we haven't already covered in the JRAs/ESRs?" This sets parameters for the kinds of tasks that get briefed.

11

Connecting HPI to ISM and the way we do work through Pre-job Briefs (PJB)

PJB

BROOKHAVE NATIONAL LABORATO





Brookhaven Science Associates







Core Function 2 Identify Hazards

"Is the worker experienced in this task?"

17

"What are the potential hazards in this building? Where are the devices located? (consider lighting, trip hazards, height of device)"

"What are the known hazards to working on this device? Are there any institutional requirements for this device?"

> Another Example: Corrective Action Management



Human Performance Advocates (HPAs) Helping to Make the Connections

- As part of the HPI Project the role of HPA was created
- HPAs:
 - Champion the understanding of HPI fundamentals and principles and the application of tools to prevent or mitigate the impact of error and improve performance.
 - Apply HPI into daily work of their department
 - work planning/experimental safety reviews
 - work observations
 - procedure writing and review
 - accident/incident investigations
 - causal analysis
 - corrective action
- 44 HPAs in 23 departments
- Future HPA interface
 - HPA involvement in Process Improvement teams

Dynamic Environment

- We all work in a dynamic environment, change is to be expected
- We want to continue to look for opportunities to make the connections
 - Gathering information what efforts are underway or planned
 - Communicating with those involved in the efforts to see what opportunities exist
 - Develop straw-man proposals and present to management
- Challenge: Preservation of knowledge of initiatives once they are institutionalized and the projects have ended

Building a learning organization



Making the connections – with each other

Some of you may have been working on understanding the connections as well – we are interested in your experiences, advice, and lessons learned

If you are interested in contributing or seeing what others have contributed, please contact us



<u>Contact Information</u>: Sabine Kessler: (631) 344-4340 or <u>skessler@bnl.gov</u> Stasia Ann Scocca: (631) 344-3979 or <u>scocca@bnl.gov</u>







Brookhaven Science Associates